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Preface

The Chinese economic reform has initiated a major transformation from the planned economy to market economy. Subsequently, along with economic growth, the Chinese society is experiencing new social challenges. The concern of managing the transformation effectively is shared equally among the people of insight and government officials. One such challenge at hand is to achieve the conversion of Chinese government’s management style while retaining its innovation. Improving staff performance and refining talent structure in the public sector is a more specific aspect of the same challenge. In this context, the academia is contributing by taking the advisory responsibility of analyzing issues and offering implementable solutions to identified problems.

Under the approval and support of Chinese Ministry of Education, the International Conference on Public Human Resource Management and Innovation (PHRMI 2013) was held at Zhejiang University, in October 2013. The purpose of the conference was to stimulate international competitiveness in Chinese HR professionals, to meet the actual demand of enterprises and government organizations, and to explore the strategic development of human resource in the 21st century. PHRMI 2013 provided an important platform for discussions to analyze the function of the Chinese government at its turning point.

Around the theme of "promoting the international competitiveness of public human resource management and innovation", participants conducted in-depth exchange of ideas on pressing issues such as HR management under the background of globalization, public personnel management problems and measures under the social transition, college teachers' job burnout, job satisfaction, and subjective well-being, etc. Impact of the current shortage of public personnel management was analyzed, and suggestions about staff development were combed out for Chinese public sectors at the conference. Attendant experts and scholars had a consensus to continue to expand and deepen international communication and cooperation on the field of public personnel management.

More than two hundred scholars and experts from China and abroad gathered to make valuable contributions to the discussion. They also explored the most beautiful city of Hangzhou in China for three days to gain real life perspectives. An unprecedented number of research papers were submitted and the Academic Committee had to make a difficult decision of selecting 40 inspiring papers for the conference proceedings that represent the main topics of conference.

On behalf of the Chairman of Organizing Committee—Professor Mowei Shen, the Co-Chairman—Mr. Neil Reichenberg, and Co-Chairman of the Academic Committee—Professor Ikek Ajzen, I would like to thank the Social Psychology Association of Zhejiang Province, the Department of Psychology of Wuhan University, the Management Institute of Beijing Academy of Social Sciences, the International Public Management Association for Human Resources of America, the College of Education at University of South Florida, the College of Arts and Sciences at Jacksonville state university, the American Scholars Press, and the Chinese Social Sciences Today (online) for their great assistance and warm support. Your encouragement is our impetus to explore constantly!

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**Keynote Address I**

**Why Interventions Fail: The Reasoned Action Approach to Changing Human Behavior**

**Professor Icek Ajzen**  
*Department of Psychology, University of Massachusetts, Amherst, USA*

**Abstract**

Most behavior change interventions either try to convey general knowledge in the behavioral domain or to change broad attitudes deemed relevant for the behavior of interest. These efforts often fail because the knowledge conveyed is mostly irrelevant for the behavior and broad attitudes are poor predictors of behavior. The theory of planned behavior (TPB), a reasoned action approach, focuses instead on the determinants of the specific behavior that is to be changed. Behavioral, normative, and control beliefs are assumed, respectively, to determine attitudes toward the behavior, subjective norms, and perceptions of control. These three factors lead to the formation of a behavioral intention on which people act when the opportunity arises. Although various factors can, potentially, prevent people from carrying out their intentions, the TPB has been shown to have a high degree of predictive validity and to provide a useful framework for designed effective behavior change interventions.

**Biography**

Dr. Icek Ajzen is Professor and Head, Division of Personality & Social Psychology, University of Massachusetts at Amherst and the founder of *Theory of Planned Behavior*, a model of human action that can be used to explain and predict human behavior in a variety of settings. As a well-known scholar in social psychology, his research deals with the concept of attitudes and, in particular, the relation between verbal attitudes and overt behavior. In addition to continuing his work on the theory of planned behavior, he is currently interested in three main issues. 1) Relation between Intentions and Actions, 2) Automatic/Habitual versus Reasoned Behavior, 3) Information Accuracy or Knowledge.

Dr. Ajzen wrote several important books in addition to many journal articles and keynote addresses. The books written and published include: *Fishbein, M., & Ajzen, I. (2010). Predicting and changing behavior: The reasoned action approach. New York: Psychology Press (Taylor & Francis).*  

Dr. Ajzen is a Fellow of the American Psychological Society and a member to the Society for Personality and Social Psychology, Member and the Society of Experimental Social Psychology. He has served as Associate Editor of the Journal of Personality and Social Psychology and is a Consulting Editor for the Journal of Applied Social Psychology and Basic and Applied Social Psychology. Dr. Ajzen won many awards. He is listed in *Who's Who in Social Sciences Higher Education* and in *Marquis Who's Who in America* and he has been identified as a Highly Cited Researcher in ISI Web of Knowledge.
Dr. Ajzen’s teaching interests focus on attitudes, persuasion, and research methods in personality and social psychology.

**Brief Description of the Theory of Planned Behavior**

According to the theory, human behavior is guided by three kinds of considerations: beliefs about the likely consequences of the behavior (behavioral beliefs), beliefs about the normative expectations of others (normative beliefs), and beliefs about the presence of factors that may facilitate or impede performance of the behavior (control beliefs). In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior; normative beliefs result in perceived social pressure or subjective norm; and control beliefs give rise to perceived behavioral control. In combination, attitude toward the behavior, subjective norm, and perception of behavioral control lead to the formation of a behavioral intention. As a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person’s intention to perform the behavior in question. Finally, given a sufficient degree of actual control over the behavior, people are expected to carry out their intentions when the opportunity arises. Intention is thus assumed to be the immediate antecedent of behavior. However, because many behaviors pose difficulties of execution that may limit volitional control, it is useful to consider perceived behavioral control in addition to intention. To the extent that perceived behavioral control is veridical, it can serve as a proxy for actual control and contribute to the prediction of the behavior in question. The following figure is a schematic representation of the theory.

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Keynote Address II

Comparative Study of Women Leaders in Mainland China and Hong Kong

Dr. Kathleen P. King, Ed.D
Professor and Department Chair, University of South Florida, Tampa, FL, USA
Email: Kathleenking@USF.edu

Introduction

Many countries, including China, have experienced higher education enrollments that see women out numbering men. Yet, why do we not see a comparable rise of women in leadership positions? And what do the successful women leaders do which facilitate their careers? At a 2011 British Council special conference, Mary Stiasny, associate director of the Institute of Education at the University of London indicated that many things had changed for women. Furthermore, the conference discussed how "... in Britain, Australia, the United States and many developing nations, women are the majority of university students and outperform men academically as well. But why... are only 10 percent of the vice chancellors of British universities (the presidential equivalent) women?" (Jaschik, 2011, p. 1)

Regarding the situation in China, the media referred to comments by Su-Mei Thompson, chief executive officer of the Women's Foundation of Hong Kong, "described what she called 'a paradox' for women here. Women make up 54 percent of higher education enrollments, and outperform men academically from elementary school through university level education. 'But who runs Hong Kong?' she asked. 'Not women.' She said that in academe, women hold 14 percent of senior positions and not a single presidency or vice chancellorship" (Jaschik, 2011, p. 1).

Research Focus

This research study addresses the career paths and turning points of women higher education leaders in eastern-central Mainland China and Hong Kong. When I proposed the study, a Chinese national order suggested I include both areas in order to achieve a more representative, diverse view of women leaders’ experiences in the People’s Republic of China (PRC). This research is part of an extended study which has been investigating the experiences of women leaders across several nations (King, 2012).

A particularly interesting aspect of examining women leaders in higher education across the People’s Republic of China is the need to better align women’s talent and needs to organizational and national human resource skills. This principle was in part popularized by Jim Collins (2013) when he stated, that effective leadership includes "getting the right people in the right place."

Su-Mei Thompson’s statement about Hong Kong reveals the need for such alignment of career demands across gender lines. She states that the limited success of women in higher education is evidence that in Hong Kong “the battle of the sexes is [perceived as being] over” and it is only by “personal choice” (the choice to stay home with children) that women leave gaps in advanced leadership. Her comments reveal new ways of looking at the challenges women face in continuing their careers. For instance, when a study was recently published about the shortage of doctors in specific fields in Hong Kong's hospitals, some public sectors asked why coveted medical school slots were awarded to women who might leave their careers to have children. Thompson states that instead the question should be how jobs might be crafted to encourage women with children to continue their careers (Jaschik, 2011).
Certainly, such statements reveal a range of readiness to embrace new gender and social roles among professionals in the People’s Republic of China.

**Background**

Another compelling issue for examining women’s leadership development in higher education is based on the population enrolled in higher education. Figure 1 reveals that the People’s Republic of China is following the overall increasing growth of women students in higher education. Presently, the PRC has postsecondary student enrollments of 50% women and men (NCES, 2012; UNESCO, 2008). However, this number will most likely continue its increasing trend as many western countries have seen women students outnumber men in recent years.

![Figure 1. Women enrolled in higher education China and USA Data sources: National Council of Educational Statistics (NCES), 2012 and UNESCO, 2008](image)

These data are important for at least two reasons. First, in order for the PRC to take advantage of their most talented human resources, the increased numbers of highly educated women should be reflected in leadership as well. Second, communities respond best to leaders which represent themselves (Kezar, & Lester, 2011). Since there are such greater numbers of women students on PRC college campuses now than 30 years ago, it would be beneficial to increase women’s representation in college leadership.

**Literature Background**

Transformative learning and higher education leadership provide the literature and theoretical bases for this research. Transformative learning is an adult learning theory which describes the dramatic changes which adults experience as they encounter “disorienting dilemmas,” reflect on their values and beliefs, consider new understandings and navigate the journey to new perspectives (Mezirow, 1990). In this study the transformative learning theory is used as the frame for considering the professional journeys of female higher education leaders (King, 2012). The expectation is that the interviewees may have encountered some dramatic changes in their career development which transformative learning effectively frames.

The field of higher education reveals that leaders are promoted from within the ranks of faculty with little formal training in administration or leadership (Bataille, & Brown, 2006). From assistant, to associate, full professor, and department chair, a budding administrator may advance to the Dean’s office and finally to university level administration. The pathways which men take through the ranks often tend to be linear, progressing across their years sequentially. However, for women, the journey is more often one of starts and stops, sudden advances, or missed opportunities (Alexander, Jorissen, Tonnsen, &
Higher education in many nations has not been particularly gender inclusive, as many countries have not adopted the ability to “stop the tenure clock” for childbirth, shared positions, or flexible work hours. Such innovative tenure, promotion and human resource policies do not penalize women’s careers when they have family or eldercare responsibilities.

**Research Method**

This research was conducted using qualitative research methods in order to examine the extensive, deep, and detailed experiences of women leaders in the People’s Republic of China (Creswell, 2003). The primary data gathering method was face-to-face interviews in English, with a translator as needed. This method was chosen in order to afford fullest communication through verbal and nonverbal modes (Creswell; Ware, & Warschauer, 2012). As the investigator, I was able to use such cues to determine if topics were uncomfortable or welcomed, how much to focus on different topics, and when to move to the next topic. Although I am not Chinese, I have been working with Chinese nationals for over eight years and been to China five times. My familiarity with Chinese professionals’ culture and common communication modes certainly was helpful in the interviews to create a welcoming and comfortable dialogue of respect and appreciation.

My higher education colleagues in Mainland China asked professors and administrators if they would like to participate in the interviews. In addition, once I began the interviews on the mainland and people learned more about the topic, more women administrators volunteered for interviews. For the Hong Kong interviews, I contacted potential participants by email. I chose two major universities based on my ability to visit both in one trip and searched their web sites for likely participants. Sending an invitation describing the research and the participants’ commitment, along with my curricula vitae, resulted in a surprisingly significant number of welcoming responses.

Once identified, I asked participants where they would like to be interviewed, and all chose their place of work. Not only did I take handwritten notes during the interview, but also I audio recorded the dialogue for later transcription and member-checking. The transcripts were analyzed using constant comparison for emergent themes. They were analyzed several times until all themes were identified and saturation was reached (Creswell, 2003).

In addition to the interviews, other data gathering techniques used in this study include: historical research, observations and supplementary/informal interviews with informants beyond participants. Historical research was conducted before and after the interviews, both to understand the historical and lived context of the individuals, and to learn more about events, dynamics and historical figures mentioned in the interviews. Observation opportunities included not only in conjunction with the interviews, but also as I participated in professional conferences with the participants, ate meals, visited participants’ offices, etc.

Finally, supplementary interviews proved helpful in several dimensions of the research preparation and analysis. One person interviewed was a gender expert in Hong Kong and provided a strong foundation for understanding the current context and historical development of equity on the island. Another interview was of a young male Chinese professor who works at one of the universities and whom I know well. We were able to discuss questions I had about some of the preliminary findings and his perspective about future change in Mainland China. These multiple methods of data gathering were
indispensable in developing a more “complete” picture of the context and interpretation of the interview data.

Participants
The participants in this study were five women in Mainland China, and eight women in Hong Kong. In Tables 1 and 2, their pseudonyms are provided and several demographic characteristics are listed. Abbreviations used in the tables include PRC for Peoples Republic of China, HK for Hong Kong, UK for United Kingdom, A for administrator, and F for faculty.

Table 1. Participants Interviewed in Mainland China

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Admin (A)/ Faculty (F)</th>
<th>Place of Origin</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yow</td>
<td>A</td>
<td>PRC</td>
<td>PRC</td>
</tr>
<tr>
<td>2 Yan</td>
<td>F</td>
<td>PRC</td>
<td>PRC</td>
</tr>
<tr>
<td>3 Yi</td>
<td>F</td>
<td>PRC</td>
<td>PRC</td>
</tr>
<tr>
<td>4 Yuke</td>
<td>F</td>
<td>PRC</td>
<td>PRC</td>
</tr>
<tr>
<td>5 Yu</td>
<td>F</td>
<td>PRC</td>
<td>PRC</td>
</tr>
</tbody>
</table>

Table 2. Participants Interviewed in Hong Kong

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Admin (A)/ Faculty (F)</th>
<th>Place of Origin</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lichao</td>
<td>F</td>
<td>HK</td>
<td>HK</td>
</tr>
<tr>
<td>2 Lan</td>
<td>F</td>
<td>Singapore</td>
<td>Singapore, USA</td>
</tr>
<tr>
<td>3 Le</td>
<td>A</td>
<td>Taiwan</td>
<td>Taiwan, USA</td>
</tr>
<tr>
<td>4 Liu</td>
<td>F</td>
<td>HK</td>
<td>HK, USA</td>
</tr>
<tr>
<td>5 Ling</td>
<td>F</td>
<td>Malaysia</td>
<td>Malaysia, Australia, USA</td>
</tr>
<tr>
<td>6 Lian</td>
<td>A</td>
<td>HK</td>
<td>HK, UK</td>
</tr>
<tr>
<td>7 Lee</td>
<td>F</td>
<td>China</td>
<td>HK, UK</td>
</tr>
<tr>
<td>8 Lien</td>
<td>A</td>
<td>HK</td>
<td>HK</td>
</tr>
</tbody>
</table>

Tables 1 and 2 reveal that while Mainland China participants have had all their professional and educational experience within the PRC, this is not the case with the Hong Kong participants. Instead Hong Kong participants were from five different Asian countries (HK (part of the UK then), mainland China, Taiwan, Singapore, and Malaysia) and had worked in universities across seven countries (prior list, plus USA, Australia, and UK). Moreover, the Hong Kong women leaders had worked in one to three countries, with the majority (5 of 8) having served in two. From these data, one recognizes immediately the wider international experience of the Hong Kong women professionals, compared to their Mainland China counterparts.

Findings and Discussion
Immediate observations from the data, which contrast Hong Kong from Mainland China, are the region’s and participants’ more Western culture and orientation. The participants described these differences several times. Following are two examples.

“In Hong Kong, we are very much Anglicized. Alright put it this way. I was born and brought up in HK. I was educated here. And of course ethnic wise we are Chinese and the way of doing things.”

“But I would say [our way in Hong Kong] would be very different from the ways of doing things in China.”
Specifically, considering participation of women as faculty in higher education, the numbers tell the story of this difference. Figure 2 illustrates the percentage of women faculty in higher education in USA, Hong Kong and China from the 1960s to 2010. While Hong Kong and the USA have closely parallel curves on the chart, Mainland China has a steeper curve, because larger numbers of female faculty are a more recent phenomena.

![Figure 2. Women Faculty in Higher Education China, Hong Kong, and USA. Data sources: National Council of Educational Statistics (NCES), 2012 and UNESCO, 2008](chart)

The greater traditional roots of gender roles and positions of Hong Kong and Mainland China, are however starkly revealed in Figure 3. In this chart, it is evident that neither Hong Kong nor Mainland China, have women appointed as Chancellors, Presidents or CEOs of their universities. While in the USA, 28% of these appointments are women in 2010. This observation confirms trends revealed in the interviews that while Hong Kong is more progressive in gender equality than Mainland China, it is not yet at the same point as some Western nations. Placed on a continuum, Mainland China’s universities appear to support more traditional Chinese roles than evidenced in Hong Kong.

**Similarities Among Hong Kong and Mainland China Interviews**

Amidst the many differences revealed in the interviews a few trends of similarities emerged across several areas. These similarities are described as they stand in the interviews without comparison to Western culture. That is, they are presented descriptively and not comparatively to other nations’ norms. The first similarity is that both sets of interviews revealed that the higher education workplace (colleagues and supervisors) expects women faculty and administrators to bear the responsibility of family in silence. It is assumed that women will be the sole caretaker of children, household and elders and that they will fulfill those responsibilities completely in addition to their professional ones. In addition, the women interviewed shared that it was made clear to them that no one wanted to hear about their other responsibilities. No allowances, substitutions, or variations are made for the extra challenges they face which their male peers do not have. The women also understood that if they could not successfully manage these complex conditions, then higher education likely was not a good fit for them.
Figure 3. Women Presidents/Chancellors in Higher Education China, Hong Kong, & USA. Data sources: National Council of Educational Statistics (NCES), 2012 and UNESCO, 2008.

Other similarities between the Hong Kong and Mainland China data are the need for and prominence of connections among women leaders. Because their circumstances of working in higher education was so different from that of their male counterparts, these women had a great need to connect with other women leaders, but there were fewer opportunities in mainland China. In addition, as suggested by Levinson and other literature, these women in higher education seldom had a mentor or guide. Although the Hong Kong women were familiar with the concept, few had experienced such guidance or support. Indeed, the interviewer had great difficulty communicating mentor concept to the Mainland Chinese participants. Although Chinese culture is collective, many people shared with me that to seek such support might demonstrate their need or weakness. Therefore, although they had great needs, they could not seek out such a guide.

The two sets of interviewees both described frequent confusion of expected gender norms and actual experience, but in different ways. In Mainland China, the difficulties at least partially stemmed from the inability to enforce legal requirements for gender equity in the workplace. This situation was discussed in depth with several participants. They describe how gender equity is the law, but that is “foolish” to believe it will be enforced. In comparison in Hong Kong they experienced more opportunity in the workplace, but still faced a significant ceiling of flexibility or advancement. While the Hong Kong participants had more linear professional paths, still they had significant challenges because of lack of accommodations for child bearing, childcare, eldercare, etc. For the most part, instead the Mainland China participants did not experience much advancement beyond faculty ranks while also not having support for family responsibilities.

Differences Among Hong Kong and Mainland China Interviews

Even with all the similarities described above, many differences emerged among the interviews in Hong Kong and Mainland China. In the different locations of the PRC these women professionals had to address different specifics of how gender social norms expectations. They all had to cope, but the specifics varied based on whether they were in Hong Kong or Mainland China. Indeed, one of the salient emergent trends is that the women in Mainland China had to demonstrate even greater perseverance than the women did in Hong Kong. When gender equity is espoused as the norm and legalized, it might be considered frustrating to face such obstacles daily in the professional workplace. The participants provided many examples of gender inequality in practice, but the degree and frequency varied. These interviews reveal that Hong Kong certainly has greater equality compared to Mainland China, but the overall situation creates many experiences of confusion related to the stated gender norms and reality.
Other differences revealed in the interviews included issues related to mandatory retirement. Under British rule, Hong Kong had an older retirement age for women; however, once the 1997 return of the island to PRC occurred, the retirement age changed to 55. This relatively recent change affected many of the women in the interviews. The mandatory retirement age of women in PRC is 55, while it is 60 for men. There are workarounds for this statute in that if the college or university demonstrated great need for the professional to continue in their role for a few additional years, it could be approved annually. Nonetheless, the workplace clearly favors longevity of men’s careers over women’s.

One of the major differences faced by the participants across locations were the availability of different solutions to cope with family responsibilities. Due to the different history of Hong Kong, under British Rule, more immigration from other Asian nations had occurred in the 20th and 21st centuries. One of the results of this immigration was that it became popular for Hong Kong female professionals to hire Filipino maids for childcare, eldercare, and house cleaning services. Indeed, this arrangement has become a socially approved, cultural expectation. Therefore, women professionals in Hong Kong have a socially acceptable way to cope with their responsibility for childcare, eldercare and household duties. In Mainland China, such relief is not available. While some grandparents may provide relief for childcare needs, interviewees described how this arrangement includes limitations, drawbacks, conflict and mother’s guilt. Based on the interviews, the Hong Kong situation also has limitations when the hired help is unreliable and responsibility for interviewing, hiring, and supervising falls to the woman of the home.

**Differences in Social Norm Expectations**

One of the major reasons for differences listed in the section above is that Hong Kong and Mainland China have different social norm expectations related to gender, which continue, into the professional workplace. In Figure 3, these differences are listed.

**Career Paths Among Hong Kong and Mainland China Interviews**

**Hong Kong.** Regarding their pursuit of their higher education study, 75% of the interviewees in Hong Kong had pursued international education. In addition, most of the participants had served at more than one university in a professional capacity, had opportunities to study or teach abroad, traveled to conferences abroad and moved up through different levels of leadership. The majority of the Hong Kong interviewees’ career journeys reveal a truly international scope and organizational advancement to the Deans level.

<table>
<thead>
<tr>
<th>China: Traditional Role Assumptions</th>
<th>Hong Kong: Unique Cultural Blend</th>
</tr>
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<tbody>
<tr>
<td>- Women will be distracted by family responsibilities</td>
<td>- Women still need to work harder than men</td>
</tr>
<tr>
<td>- Women cannot be as dedicated to their work</td>
<td>- More women in middle leadership positions</td>
</tr>
<tr>
<td>- Fewer women in middle leadership</td>
<td>- Less of an exception women in leadership</td>
</tr>
<tr>
<td></td>
<td>- Many women chairs of departments</td>
</tr>
<tr>
<td></td>
<td>- Many women Deans</td>
</tr>
</tbody>
</table>

**Figure 3. Differences in Social Norm Expectations of Gender**

**Mainland China.** In contrast, among the Mainland China participants, all of them were educated entirely in the PRC. Several of the middle-aged women interviewed spoke about the likely damage to their marriage if they pursued their doctorate overseas. One described how her husband, also a professor, threatened her with divorce if she went to Canada to study. Others described several of their female friends who pursued international doctorates and either during their studies, or at the completion, they were divorced. The mainland China participants had only served at one university, most experienced slow
career development (to department chair or Dean) without a guide or mentor, they had no opportunities to study or teach abroad, and few had participated in conferences abroad. The restriction of their educational and career experiences solely to the PRC certainly restricts the scope of professional experiences among these women, but also reduces their exposure to women higher education leaders as role models. Only one of the women interviewed in PRC had advanced to an administrative position of Dean.

Limitations
This study provides an initial comparison between women in higher education in two parts of the PRC, which have very different histories, and cultures. However, future studies have great opportunities to reveal the variances among the many different subcultures and regions of Mainland China as well. This small qualitative study necessarily has limitations and cannot be generalized beyond the scope of the sample. In particular, in a country as populous as mainland China, sampling one urban area is a limitation also.

Conclusion
The challenge of increasing enrollments of women in higher education and not leadership is a conundrum that has been well documented. As stated by The World Atlas of Gender Equity in Education published by UNESCO in 2012,

It must also be noted that over-representation of women in higher education has yet to translate into proportional representation in the labour market, especially in leadership and decision-making positions. Even though many women have started to benefit from their countries’ improved education systems, they face barriers to the same work opportunities available to men. Women continue to confront discrimination in jobs, disparities in power, voice and political representation and the laws that are prejudicial on the basis of their gender. As a result, well-educated women often end up in jobs where they do not use their full potential and skills. (UNESCO, 2012, p. 84)

This paper reveals that the conditions and experiences of women leaders in higher education in Hong Kong and Mainland China have many similarities and differences. The study delineates these characteristics and trends based on data gathered from 13 participant interviews, three supplementary interviews, historical research and observations. While Hong Kong has experienced greater international exposure and gender equity for women in this field, a great deal of this difference is due to Hong Kong’s unique recent history. One may expect that Hong Kong’s current experience with cultural blending, and increased opportunities for women, will be mirrored in Mainland China as it continues to welcome international exchange. Continued research across the mainland is very much needed presently and will be valuable across future decades.

References
Keynote Address III

The Study of the Government Major Decision-making Performance Evaluation System

Jiang-tao Li
Beijing Academy of Social Sciences, Beijing, China
Email: ljt1108@163.com

Jian-yue Ji and Ping-ping Wang
Ocean University of China, Qingdao, China

[Abstract] With China’s economic and social development, government decision-making is growing larger and more complex. It is important to evaluate the major decisions of the government performance evaluation. This article focuses on the concepts, the present situation, and existing problems of the government decision-making performance evaluation, and establishes a set of relatively scientific and perfect evaluation system for major policy decisions, which strives to provide a reference for our government performance evaluation of major decisions, promotes the progress of the performance evaluation of major decisions, and provides theoretical and data support for the making and adjustment of decisions.

[Keywords] government; decision-making performance; evaluation system

Related Notions on Government Major Decision-Making Performance

Government
So far, the concept of the government has not been completely defined. In general, there is a narrow and a broad sense. In the narrow sense of the government, it only refers to the “Administrative organ of the state power institutions is the administrative organ which can exercise the state power”. In contemporary China, the government includes “the State Council and the local people’s governments at various levels” (Wei & Wu, 2002). In the broad sense of the government, it refers to “All organs which can exercise state power and includes legislative organs, administrative organs and judicial organs and the head of state” (Zhang, 2003).

Here, on the basis of the government’s four basic functions in comprehensively promoting the implementation of the outline of the administration according to law issued by the State Council in 2004 and combining with the government’s definition by Huo Linlin (2010), this paper argues that “the government is the administrative organ which use the state power to make economic regulation, market supervision, social management and provide public service, all behaviors of which are beneficial to development of the country” (Huo, 2010).

Major Decisions
Decision-making is to make a choice for a manager among various kinds of options in order to achieve a certain goal or in dealing with the practical problems. In short, decision-making is to make a decision before the impending activities. It is the strategic decision about goal and development direction of the organization, maybe a tactical choice about dealing with some concrete methods and measures, and it may be also about organizing principles and procedure rules, etc. (Zhang, 1998).

According to different standards, we divide decisions into different classifications. According to the difference in decision’s degree of influence and importance, it can be divided into strategic decisions and
tactical decisions. According to the different decision-makers, it can be divided into personal decisions and collective decisions; according to the frequency of the problem, it can be divided into the programmed decision and non-programmed decision. According to the understanding degree of the decision results, it can be divided into completely-known decision-making, risk decision, and incompletely-known decision.

Major decisions are the decisions about common people’s vital interests, concerning issues that are wide-ranged, influential, multi-factored, complex and highly-risky. They will affect all aspects of politics, economy and society (Yuan, 2005).

Government major decision-making refers to the process in order to solve a major problem or achieve a certain goal; the national administrative organs put forward and implemented the method to solve the problem by using national rights and scientific theories and methods to objectively analyze the realistic conditions. It is mainly shown as laws, regulations, and policies with a general binding force, etc.

**Performance**

Performance, namely achievement or efficiency, refers to the government achieving goals by the investment of human, material and financial resources in formulating and implementing a series of decisions. Government decision-making performance can be evaluated through the indicators such as the ratio of the final output, economic growth rate, improvement degree of residents' happiness, and the degree of impact on the environment in the process of decision-making and implementation of decisions.

This paper evaluates the government major decision-making performance, that is, the decisions made by the government’s senior management on national development direction and version, which relate to the overall, long-term and directional development of the country and major national economy and people's livelihood performance evaluation.

**The Situation and Problems of Government Major Decision-Making Performance Evaluation**

The study of government decision-making performance evaluation in China started late and began in the 1980s. The early stage of decision-making performance evaluation was mainly around “target responsibility system”; after the mid 1990s, the government decision-making performance evaluation was no longer a single index, adding a level of service to the society and the public review status, etc. As a result, both width and depth of government decision-making performance evaluation had been promoted greatly. In early 1999, Administration Management Society of China and the relevant departments set up a joint team to study international practice, characteristics and development trend of the public sector (government) decision-making performance evaluation. It also summarized the current situation of the development of our country government performance management (Xing, 2012). Xiannan Ma (2008) constructed the decision-making of local government performance evaluation system and carried on an empirical study on Ningbo government decision-making performance through the system. The results showed that Ningbo government decision-making performance was relatively high (Ma, 2008, p. 99).

So far, the performance evaluation of our country’s government decision-making has been nearly 30 years. After years of development, the content of the government performance evaluation has become wider and wider, and the result of evaluation is closer and closer to reality. But the current performance evaluation of decision-making still exist the following problems:
Relatively Single Index Evaluation System Focused on Economy

Under the environment of taking economic development as the central task and building a well-off society in an all-round way, the GDP has become an absolutely important assessment index when our government builds a major decision-making performance evaluation system, while the evaluation index of social development, ecological environment protection and management, and people’s own development lacks or is far less than it should be. As a measure of final goods and services on the value of money in a country or region over a period of time, the GDP is undoubtedly one of the important indexes for evaluation of economic development. It reflects economic development results brought by one decision, but the growth of GDP does not represent the increase of people’s welfare, the growth of social wealth and the reducing of gap between the rich and the poor, etc. If GDP growth is on the basis of consuming large amounts of natural resources and destroying the ecological environment, then even if a decision brings rapid growth of GDP, it also cannot say the decision is very successful. On the contrary, it is unsuccessful.

With the continuous development of society, people pay attention to not only economic development but also the protection of the ecological environment, the gap between rich and poor, people’s education degree and the education fairness and so on. When the governments design the major decision-making performance evaluation index, they should consider various factors to ensure that people can enjoy social welfare to a great extent of the decisions rather than a single economic indicator evaluation system.

A Part of the Evaluation Index is Difficult to Quantify and Lacks Authenticity

Because both the decision makers and the implementers are the government, on the one hand, most of the government’s output is the invisible service, which determines the government decision-making performance evaluation index is difficult to quantify. To get the most of these data to evaluate, we must carry on the questionnaire survey, while the results of the questionnaire are given by people according to their own subjective evaluation, lack of uniform evaluation standards. The results of the questionnaire have subjective arbitrariness and may make the results of the assessment biased. On the other hand, the implementation of the government major decision-making often does not happen overnight, and it takes a long time. Due to the continuity and correlation of government behavior, the government’s output and contribution is difficult to measure in a short period of time. Even some indexes can be measured in a short period but they are not identical to the actual data. At last, the evaluation data is obtained by the local government that carried on the preliminary statistics through the existing evaluation system and then reported to the central government layer upon layer. However, it is possible that local government officials may artificially exaggerate achievements, weaken people’s dissatisfaction and forge the performance evaluation data for their own careers, consequently, making major decisions of the performance evaluation of data unreal and the evaluation results different from the facts.

To make the performance evaluation of major decisions perfect, we need to improve channels and technology in the collection of performance evaluation of government decision-making data, reduce the loss of the right information, enhance the impartiality of the evaluation of the indicators difficult to quantify, and make the government performance evaluation of major policy decisions achieve the expected purposes.

The Attention Paid to the Performance Evaluation of Government Decision-Making is Not Enough

Nowadays, both government and the public pay less attention to the performance evaluation of government decision-making. It mainly shows that the organ to evaluate the government decision-making
institution is still a government department rather than an independence third party, so it is quite possible for them to evaluate themselves perfunctorily or better than the fact. They think the decision-making performance evaluation is done for show, showing for the social public and superior leadership; In the process of establishing the evaluation system, personnel engaged in are mostly from government departments, which will eventually make the evaluation results maximize certain single benefit. When the government gives the public questionnaires for data collection, the public tends to think that the government is done for show, taking the questionnaire not serious enough and writing optionally, even if they have to hide their own true feelings and beautify government’s action under the pressure of local government, etc. Therefore, when the results of the performance evaluation of government decision-making are shown to the public, the public will be indifferent to this, and some even don't know its function.

The government and the public’s insufficient attention to decision-making performance evaluation makes the evaluation process too formal and it loses its real meaning. The government and the public should strengthen the understanding and attention degree to the decision-making performance evaluation system, rely on independent agency to build reasonable index system of government's decision-making performance and make real decision performance evaluation and manage decision-making performance scientifically and canonically.

The Operating Mechanism of Results of the Government Decision-Making Performance Evaluation is Not Sound

The purpose of government performance evaluation is to make decisions perfect and maximize the social welfare. The current performance evaluation of government decision-making is just for evaluation’s sake. When related institutions made decision-making performance evaluation, the relevant government authorities didn’t analyze the evaluation results carefully, not to mention they would improve in the implementation according to the problems reflected by evaluation results. It is the biggest problem of the performance evaluation mechanism that how to connect the evaluation results with decision-making practice, treat evaluation results as one of the important basis of decision-making, fully exercise decision-making performance evaluation’s function.

The Performance Evaluation Results Lack Comparability

“Now the public sector management takes target as primary purpose, and the others are playing second fiddle” (Hughes, 2003), which fully shows the importance that government departments should set goals. However, at present, our government lacks decision-making goal setting before the implementation of all the big decisions; that is, the government does not set a reasonable value for all indicators after implementation. This makes the final score of the government major decision-making performance evaluation become an absolute number under the existing evaluation system rather than a relative number after comparing the existing decision-making results with the preset goal. Such an absolute number makes major decision-making performance evaluation results short of comparability and can’t play a guidance role for decision adjustment.

The Construction of Government Major Decision-Making Performance Evaluation System

After studying the operating situation and problems of the existing performance evaluation system of the major decisions, this paper tries to improve the shortcomings of the existing system. According to the current reality of politics, economy, society and life, on the basis of further study in the rather successful evaluation system of foreign government decision-making performance, this paper built a set of a
relatively scientific and perfect decision-making performance evaluation system tallying with China’s national conditions to promote our government decision-making performance evaluation work and provide quantifiable indicators for the implementation and adjustment of decisions.

**Setting a Re-Set Target System for Major Decisions**

To ensure major decisions are more scientific, the government should make a thorough analysis of the effect of the major decisions on the economy, society and environment when making major decisions and then set the target system for major policy decisions. It not only provides guidance for the implementation of major decision function, but also provides a basis for major decision evaluation. The government’s major decision-making target system should be set respectively from three aspects – economy, society and environment.

**Economic indicator.** Economic indicators reflect a decision’s degree of contribution to a country or a region’s comprehensive economic power. It is an important embodiment of promoting economic development, and an important aspect of the government decision-making objectives and government decision-making performance evaluation. Economic indicators of decision-making re-set target should be chosen from four aspects: the contribution degree of economic scale, economic efficiency, the improvement degree of economic structure, and the exploration of economic potential.

**Social indicator.** Social indicator reflects how much a decision makes a contribution to the overall situation of social development, and it is also an important aspect of the decision goal. The setting of social aspects of decision expected goal could be selected from two aspects: the contribution degree of social security and social life, which can reflect the decisions’ impact on society more comprehensively.

**Environmental indicator.** Environmental indicator mainly reflects how much a major policy decisions influence the ecological environment, and it is one of the decision-making targets concerned by modern government. The environmental indicators mainly reflect three aspects: the pollution, governance to environment, and the consumption of traditional resources.

**Setting an Evaluation Indicator System**

To evaluate the performance of major decisions better, the government needs to set up an evaluation indicator system on the basis of progress towards their goals.

**The setting of indicators.** According to the performance target system, select the appropriate indicators including:

On the economic front, GDP’s added value brought by electing decisions can measure the contribution degree of economic scale; the input-output ratio of decisions can measure economic efficiency; added value of other industries spurred by decisions can weigh the improvement degree of the economic structure; foreign investment or capitals beyond localization attracted by the decision and the amount of enterprises can measure the excavation degree of economic potential.

On the social front, the amount of working positions provided by the selected decision (that is, the degree of reducing unemployment) can measure the safety degree of society, the improvement degree of people’s living condition caused by the decision can measure the social life.

On the environmental front, the increased emissions of air pollutant, sewage water, solid wastes and noise pollution brought by the decision as indicators for evaluation of environmental pollution; the increase of green areas as indicators of environmental governance; the increase of traditional natural resources consumption as the traditional energy consumption indicators.
**Indicator assignment.** First of all, we classify the above 13 secondary indicators, and each indicator is divided into grades from one to five – a total of five grades, and then defines them. Here, we set the decision-making re-set target at 95% - 105% – this range is level three – the anticipated goal; set four, or five is over fulfillment of the expected goals; primary or secondary grade means it does not achieve the expected goal. For example, if GDP’s added value is 105% - 110% of the re-set target, then set it to Level 4; if it’s more than 110%, set it to Level 5. This paper will define the unquantized index by detailed description, as shown in Table 1 – the index of improvement degree of people's living conditions. Finally, we make point collocation to five ranks, level 3 as the standard weight, an on this basis, we respectively set weights for one, two, four, and five grades.

**Table 1. The Grade and Definition of “Improvement Degree of People’s Living Conditions”**

<table>
<thead>
<tr>
<th>Elements</th>
<th>Definition</th>
<th>Grade</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement degree of People’s living conditions</td>
<td>The decision make the transportation more convenient, enhance consumption level, people more harmonious, &amp; happiness index increase, etc</td>
<td>1</td>
<td>Extremely dissatisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>Satisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Pleased</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Proud</td>
</tr>
</tbody>
</table>

**Establish an evaluation table.** This text has been argued by the experts, and obtained the weight of each index by using expert investigation weighting method and made the performance evaluation table. Table 2 lists the government major decision-making performance evaluation indicator system; Table 3 lists the government major decision-making performance evaluation indicator table.

**Table 2. Government Major Decision-Making Performance Evaluation Indicator System**

<table>
<thead>
<tr>
<th>Government major decision-making performance evaluation indicator system</th>
<th>First-grade index</th>
<th>Proportion</th>
<th>Second-grade Index</th>
<th>Index symbol</th>
<th>Proportion</th>
<th>Final weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic index</td>
<td>0.40</td>
<td>GDP added value</td>
<td>A1</td>
<td>0.39</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Input-output ratio</td>
<td>A2</td>
<td>0.28</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The added value of other industries</td>
<td>A3</td>
<td>0.16</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount of capital attracted</td>
<td>A4</td>
<td>0.17</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Social index</td>
<td>0.30</td>
<td>Amount of added jobs</td>
<td>B1</td>
<td>0.50</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improvement degree of living condition</td>
<td>B2</td>
<td>0.50</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Environmental index</td>
<td>0.30</td>
<td>Increased emissions of Air pollutant</td>
<td>C1</td>
<td>0.17</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased emissions of wastewater</td>
<td>C2</td>
<td>0.16</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased emissions of solid waste</td>
<td>C3</td>
<td>0.17</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increasing amount of noise pollution</td>
<td>C4</td>
<td>0.16</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increasing amount of Green area</td>
<td>C5</td>
<td>0.17</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increasing amount of traditional energy consumption</td>
<td>C6</td>
<td>0.17</td>
<td>0.05</td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Government Major Decision-Making Performance Evaluation Indicator

<table>
<thead>
<tr>
<th>Index</th>
<th>First-grade index</th>
<th>Second-grade index</th>
<th>Third-grade index (re-set target)</th>
<th>Fourth-grade index</th>
<th>Fifth-grade index</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>&lt;90%</td>
<td>90% - 95%</td>
<td>95% - 105%</td>
<td>105% - 110%</td>
<td>&gt;110%</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>A2</td>
<td>&lt;90%</td>
<td>90% - 95%</td>
<td>95% - 105%</td>
<td>105% - 110%</td>
<td>&gt;110%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>A3</td>
<td>&lt;85%</td>
<td>85% - 95%</td>
<td>95% - 105%</td>
<td>105% - 115%</td>
<td>&gt;115%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>A4</td>
<td>&lt;85%</td>
<td>85% - 95%</td>
<td>95% - 105%</td>
<td>105% - 110%</td>
<td>&gt;110%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>B1</td>
<td>&lt;90%</td>
<td>90% - 95%</td>
<td>95% - 105%</td>
<td>105% - 110%</td>
<td>&gt;110%</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>13</td>
<td>15</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>B2</td>
<td>&lt;85%</td>
<td>85% - 95%</td>
<td>95% - 105%</td>
<td>105% - 115%</td>
<td>&gt;115%</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>13</td>
<td>15</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>C1</td>
<td>&gt;115%</td>
<td>105% - 115%</td>
<td>95% - 105%</td>
<td>85% - 95%</td>
<td>&lt;85%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C2</td>
<td>&gt;115%</td>
<td>105% - 115%</td>
<td>95% - 105%</td>
<td>85% - 95%</td>
<td>&lt;85%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C3</td>
<td>&gt;115%</td>
<td>105% - 115%</td>
<td>95% - 105%</td>
<td>85% - 95%</td>
<td>&lt;85%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C4</td>
<td>&gt;115%</td>
<td>105% - 115%</td>
<td>95% - 105%</td>
<td>85% - 95%</td>
<td>&lt;85%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C5</td>
<td>&lt;85%</td>
<td>85% - 95%</td>
<td>95% - 105%</td>
<td>105% - 115%</td>
<td>&gt;115%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>C6</td>
<td>&gt;115%</td>
<td>105% - 115%</td>
<td>95% - 105%</td>
<td>85% - 95%</td>
<td>&lt;85%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: A1, A2…all these indicators are the same as those in Table 2.

**Evaluation and Improvement**

The implementation of every decision can be divided into different stages, and each stage has different goals. In the implementation of decisions, comparing the data obtained in each stage with Table 3, we will be able to calculate the grade and score of each index, and then add each index’s score to calculate the total score of decision-making performance. If the total score is 100 points, there is no deviation between the final result and expected result; if there is more than 100 points, the end result surpassed the expected goals, and it means the decision has been successfully implemented and promotes the economic, social and environmental construction; if there is less than 100 points, the decision did not achieve the expected goals, and this would require the relevant personnel to find out the problems arising from the implementation process through various index scores and take corresponding measures to make a timely adjustment and improvement.

**Conclusion**

A government major decision-making performance evaluation system is a multi-level and multi-index compound system. On the basis of following certain value standards, this paper theoretically constructs a set of complete government major decision-making performance evaluation system. Besides, through the experts’ argumentation, the selection of indicators on the basis of party and government organs staff conducting questionnaire survey, this paper finally formed a scientific system with three aspects and 13
relatively easily quantified indicators to try to and provide a reference for our government performance evaluation of major decisions, promote the progress of the performance evaluation of major decisions, and provide theoretical and data support for decision’s making and adjustment. The government should take the force of law to promote the implementation of the government major decision-making performance evaluation system, establish a decision-making performance management system to track and guide the decision-making performance and make major policy decisions tangibly beneficial to the people’s fundamental interests.

References
My Honored Guests, Ladies and Gentlemen:
I am delighted to be invited standing here, representing the Department of Psychology, and Philosophy School of Wuhan University to communicate with you. Just now, some professors and scholars talked about specific questions in public human resource management, which inspired me a lot. As a philosophy professor, I want to share my points of view on two different ways of managing problem that could be applied into public human resource management.

Traditional View on Problem Management
The traditional view on problem management treats problem management as management by problem (MBP). MBP is a particular perspective of understanding management. We can divide the macro perspectives of management into four different kinds, which is illustrated in Figure 1. From Figure 1, besides MBP, the other three theoretical perspectives on management are humanistic management, scientific management and, goal management. These four perspectives focused differently. The topside one is humanistic management, which is person-centered. The task-centered perspective is scientific management, which locates at the bottom of the figure. Person and task is opposite, so they are the first axis. Well, the goal and problem is the second axis, since the two are always opposite. The goal management focuses on the future, and is idealism oriented. In contrast, MBP is realism oriented, and its focus is the present.

![Figure 1. The Theoretical Perspectives of Management](image)

MBP provides a unique perspective, and brings the problem solving view into the understanding of management, so one can think upon the whole management affairs from the view of problem solving theories. MBP is just like a bridge, which links management and problem solving theory together.
However, MBP cannot answer all questions related with problems in the management process. First, MBP only concerns the solving stage of problem management. However, where does the problem come from? How can the problem be evaluated? And which problem is worthy of being solved at present? These are not answered by MBP.

Second, MBP confuses the management of problems and management by problem. MBP only considers the exact process of management by problem. But how does one manage or control his or her problem solving process? And if the problem is so tricky that one cannot solve by him/herself, in what way one can require or organize other people to help him or her? Third, MBP treats the management one by one, sequentially. However, the real problem is happening within a particular context. And usually there is no single problem, but sets of problems. So, the comprehensive arrangement of problem management is needed. Considering the above pitfalls of traditional Management by problem perspective, we constructs a new theoretical way of viewing problem management, a broadened view of problem management.

**What’s New in the New Way?**
The broadened view of problem management could be called Problem Management in a Broad(er) Sense, or Generalized Problem Management (GPM). GPM refers to the management of the full process of the general problem, which is a new way of understanding problem management. Generalized problem management could cover the shortage of the traditional MBP, and at the same time, brings us a lot of inspirations. When facing a grand problem, what a problem manager needs to manage is not only the comprehensive process of detecting, evaluating, choosing and, solving the problem, but also the coordination or organization of other people for handling the four aspects of generalized problem solving (Zhang, 2005). As shown in Figure 2, the problem solving process includes four basic processes: problem detecting, evaluating, choosing, and solving which corresponds to problem detecting, evaluating, choosing, and solving management, respectively.

![Figure 2. The Process of Generalized Problem Management](image)

When the problems are viewed as a complex system, one needs to manage the processes of the problem-solving in a broad sense, and make classified management of the problems in the organization. Then the managers could be called the Generalized Problem Managers.
**Generalized Problem Management and Public Human Resource Management**

Now, I would introduce the relationship between generalized problem management and public human resource management. Since the public problems usually happen in the whole society, rather than in a single company, or a single organization, more people and resources are required to handle the problems in public human resource management. Therefore, if the public affairs were treated as one by one singly, just like the traditional MBP does, then management would not be resolved effectively and efficiently. By introducing the generalized problem management, the public manager can be reminded his/her dual role of generalized problem solver and manager.

The big difference between problem management and other management is that it is built upon the problem-solving activities and processes. There are four types of problems that could be solved by the generalized problem management, namely goal integration problems, dynamic integration problems, communication problems, and system integration problems. If the four kinds of problems are well solved, it would make the team integrate and function well without the habitually defended or suffering from multiple problems. A good team of management of innovation can usually solve these problems well.

Today, I introduced the new view for public human resource management, namely the Generalized Problem Management. Expecting the further communication from the professors and scholars.

May the conference be successful! Thank you!

**Acknowledgement**

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Who Would be the Student Leaders? – Those With Excellent Academic Performance or Good Behavior?

Junsheng Hu, and Zhangran Zhang
Department of Psychology, Wuhan University, Wuhan, China
Email: junshenghu@sina.com; sq19532004@aliyun.com

[Abstract] The purpose of this study was to explore the determinant factors to be a student leader in China through comparing the self-worth of student leaders with other middle school students’. Seven hundreds Ninety-nine middle school students from seventh grade to twelfth grade completed the Adolescent Domain Self-worth Scale (ADSW; Hu, et al., 2013). The results indicated that the Ability self-worth of student leaders was significantly higher than other adolescents’ while for domain-specific self-worth of Interpersonal Behavior, Appearance, Family Socioeconomic Status (FSES) and Family Relations, there were no significant differences; and the self-appraisal academic performance of student leaders was also better than other ordinary students’. The results of logistic regression analysis indicated that the self-appraisal academic performance and the domain-specific self-worth of Ability would positively and significantly predict the adolescents who would be the student leaders; however, the predictive effect of self-worth of Interpersonal Behavior was negative. It appears that in China, the determinant factor to be a student leader is not the good behavior but the excellent academic performance.

[Keywords] self-worth; academic performance; student leader; adolescent; China

Introduction

It has been always a significant issue about how to select executives. The selection of qualified executives is an important task not only to a nation, but also to an organization. In Chinese middle schools, class is a comparatively stable and important organization (Yang, Zou, Yu, et al., 2011), therefore class management is one of important tasks in school education. It will make a difference to the performance, even the health of students, due to the effect of class management. Generally, the principals in class management are head teachers, who in fact will manage students with the help of student leaders. Student leaders are those students with some influential positions in a class, whose duties are to assist teachers coordinating students’ ideology, study and daily life and eventually make the whole class as a cohesive group, under the leadership of teachers (Zhang, 2006).

Student leaders exist as a characteristic under the background of Chinese education, who actually are organizers and administrators in the class (Yang, Zou, Yu, et al., 2011). As a result, it has become a significant issue in middle school management about how to select student leaders. Generally, most of student leaders are occupied by those with good virtue and excellent academic (She, 1994; Yang, Zou, Yu, et al., 2011), and are appointed directly by head teachers. Before 1970s, it was required in student leader selection to be outstanding and respectable, which more precisely is to be with excellent academic. Since 1980s, the selection of student leaders has been developed into different styles, such as appointment style in which head teachers would directly appoint student leaders, recommendation and democratic selection (Xiao, 2007). The criteria of selection is not only the academic performance (Zhang, 2006; Xiao, 2007), but the organizing ability (Xiao, 2007) and individual specialties (Zhang, 2006). Nowadays, more and more selections have been performed with democratic selection and recommendation.

Some researchers showed that democratic selection accounts to 21% in tenth Grade, but accounts to 66% in eleventh Grade (Zhang, 2006). Consequently, those who are popular in class will be more likely to be selected as student leaders by other students. It has been indicated that in these three requirements of
student leaders, students choosing excellent academic, strong ability and good behavior (i.e. Those with good virtue, excellent academic, strong ability, and popularity in students and teachers, are the perfect student leaders) account to 43.4%, 85.3% and 83.8%, respectively (Liu, 2007).

Self-worth is the individual appraisal for themselves, as well as the attitude and feeling after self-appraising (Huang, Yang, 1998). Those with higher self-worth have higher self-efficiency (Zheng, Liu, Mo, 2004) and higher self-esteem (Hu, Zhang, Wang, et al., 2013), and those with higher self-esteem have higher self-confidence (Coudevylle, Gernigon, Ginis, 2011). Consequently, those with higher self-confidence will be more proactive in participation of selection, and be more likely to be selected by other students. Hu et al. (Hu, Zhang, Wang, 2013) suggested the self-worth of Chinese middle school students would include five domain-specific self-worth: the self-worth of Ability, the self-worth of Interpersonal Behavior, the self-worth of Appearance, the self-worth of Family Socioeconomic Status (FSES) and the self-worth of Family Relations.

As the self-worth of Ability and Interpersonal Behavior reflects adolescents’ appraisal in ability, academic performance, personality and interpersonal behavior, we can confer those students with higher scores in the domains of Ability and Interpersonal Behavior, would be more likely to be selected as student leaders. By means of comparing the self-worth of student leaders with other students, this study is aimed to discuss the selection standard of student leaders, and eventually explore the selection criteria of Chinese executives. Since academic performance has been a vital requirement in student leaders’ selection for a long time, this study will compare the academic performance of student leaders with non-student leaders.

Methods

Participants
Participants are 799 Chinese middle school students from seventh grade to twelfth grade (aged 11-21, mean=15.71, SD=1.89); among which there are 198 student leaders and 601 non-student leaders, 419 males and 364 females showed their gender with other 16 no response, and there are 107, 81, 120, 191, 150 and 147 students from seventh grade to twelfth grade respectively showing their grade with other 3 no response.

Measures
The Adolescent Domain Self-worth Scale (ADSW) developed by Hu et al. (Hu, Zhang, Wang, et al., 2013) was used to assess the level of domain self-worth on five domains: Ability (Ability SW), Interpersonal Behavior (IB SW), Appearance (Appearance SW), Family Socioeconomic Status (FSES SW) and Family Relations (FR SW). Participants responded on a 5-point Likert scale (from “strongly disagree” = 1 to “strongly agree” = 5). The higher average score in a domain indicates that the level of self-worth in that domain is higher. The questionnaire has a good validity and reliability (Hu, Zhang, Wang, et al., 2013).

We measured self-appraisal academic performance by using a single item. “In sum, how would you describe your academic performance?” The answers were coded as 1= mostly poor, 2= some poor, 3= quite plain, 4= some excellent, 5= mostly excellent.
Results

Comparison of Self-appraisal Academic Performance and Domain Self-worth between Student Leaders and Non-Student Leaders

By comparing scores of self-appraisal academic performance and domain self-worth between student leaders and non-student leaders, it found that there was a significant difference only in self-appraisal academic performance and Ability self-worth. See Table 1.

Table 1. The Means and Standard Deviation (SD) of Student Leaders and Non-student Leaders

<table>
<thead>
<tr>
<th></th>
<th>Student leaders</th>
<th>Non-student leaders</th>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Self-appraisal Academic Performance</td>
<td>3.36</td>
<td>1.16</td>
<td>2.76</td>
<td>1.04</td>
</tr>
<tr>
<td>Ability SW</td>
<td>3.27</td>
<td>.71</td>
<td>2.93</td>
<td>.68</td>
</tr>
<tr>
<td>IB SW</td>
<td>3.50</td>
<td>.72</td>
<td>3.52</td>
<td>.63</td>
</tr>
<tr>
<td>Appearance SW</td>
<td>3.07</td>
<td>.71</td>
<td>3.00</td>
<td>.72</td>
</tr>
<tr>
<td>FSES SW</td>
<td>3.31</td>
<td>.71</td>
<td>3.22</td>
<td>.66</td>
</tr>
<tr>
<td>FR SW</td>
<td>3.63</td>
<td>.77</td>
<td>3.53</td>
<td>.80</td>
</tr>
</tbody>
</table>

Logistic Regression Analysis for Variables Predicting “Whether Student Leaders or not”

Regression analysis was used to investigate the predictive effects of self-worth on “whether student leaders or not” (Whether student leaders or not was coded 0 for yes and 1 for not). In step 1 of the regression, self-appraisal academic performance should be added to the predictor of the regression equation; in step 2, we simultaneously added the five domains self-worth to the list of predictors to see these variables significantly predicted “whether student leaders or not” while controlling for the self-appraisal academic performance in step 1, and the method of variables entered was Forward LR. The results showed that the Nagelkerke $R^2$ were 0.084 and 0.118 on step 1 and step 2 respectively, and the Ability SW and IB SW were the significant predictors. See Table 2.

Table 2. Summary of Logistic Regression Analysis for Variables Predicting “Whether Student Leaders or not”

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>S. E.</th>
<th>Wals</th>
<th>df</th>
<th>P</th>
<th>Exp (B)</th>
<th>EXP(B) 95% C.I.</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Self-appraisal Academic</td>
<td>-.394</td>
<td>.090</td>
<td>19.153</td>
<td>1</td>
<td>.000</td>
<td>.675</td>
<td>.565</td>
</tr>
<tr>
<td>Performance</td>
<td>Ability SW</td>
<td>-.645</td>
<td>.158</td>
<td>16.662</td>
<td>1</td>
<td>.000</td>
<td>.525</td>
</tr>
<tr>
<td>IB SW</td>
<td>.445</td>
<td>.152</td>
<td>8.632</td>
<td>1</td>
<td>.003</td>
<td>1.561</td>
<td>1.160</td>
</tr>
<tr>
<td>Constant</td>
<td>2.754</td>
<td>.530</td>
<td>26.994</td>
<td>1</td>
<td>.000</td>
<td>15.704</td>
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Discussions

The results of our research showed that the levels in self-appraisal academic performance and Ability self-worth of student leaders were higher than non-student leaders; moreover, self-worth of Ability and Interpersonal Behavior can significantly predict whether adolescents are student leaders or not. But it is of interest to note that those with better academic performance and higher Ability self-worth would be more likely to be selected as student leaders, while those with higher self-worth of Interpersonal Behavior would be less likely.
The results in this study that adolescents with higher scores in academic performance and Ability self-worth would be more likely to be student leaders, are consistent with other studies. Previous researches showed that student leaders were better in academic performance (She, 1994; Zhang, 2006; Xiao, 2007) and in ability (Yang, Zou, Yu, et al., 2011) than other ordinary students. It indicated that academic performance is not the only standard in the selection of student leaders. Meanwhile, this study found that adolescents with higher scores in self-worth of Interpersonal Behavior would be less likely to be student leaders, seemed different from the standard of good virtue and excellent academic (She, 1994; Yang, Zou, Yu, et al., 2011).

Self-worth of Interpersonal behavior reflects individuals’ self-appraisal in personality, temperament and interpersonal relation, which could indicate individuals’ morality level. We take this result of great significance. In fact, good virtue is supposed to be a special standard for a leader in Chinese culture (Xu, Chen, Wang, et al., 1985; Ling, Chen, Wang, 1987), which is also emphasized in student leaders’ selection. It seems different from the result in this study. However, we consider this result to be the reflection of Chinese situation. Though quality education has been always promoted by either schools or the whole society, in which students’ all-around development should also be emphasized, except for academic performance. In reality, academic performance is still the vital factor to distinguish whether adolescents are good or bad students. As a Chinese saying goes, “Score, score, score, students’ God” which is a full reflection of reality. Under the background of Chinese traditional culture, students have been pressured with their study, from their parents, teachers, relatives and partners, who pay much attention to the academic performance of students (Chen et al., 1995, p. 939).

Consequently, though both good virtue and excellent academic have been emphasized all the time, only academic success is actually valued by schools, teachers and parents. Meanwhile, there has been always an inconsistence between selection standard and selection process in Chinese tradition. It is recorded that both ability and virtue should have been tested in the selection of government officials in Chinese ancient times (Wang, Cui, 2006). But a Chinese saying of “individuals with excellent academic should be government officials,” is a reflection of valuing ability but ignoring virtue. Form this point of view, reform should be prompted in the student leaders’ selection in middle school, if we want to change the style of government officials’ selection. After all, those adolescents are the future of China.

Obviously, our research is a correlation study. It seems far more serious to discuss the selection criteria of student leaders, as the result only shows the difference of academic performance and self-worth between student leaders and non-student leaders. As we known, those, as student leaders have more chance to improve their academic performance as well as ability (She, 1994; Yang, Zou, Yu, et al., 2011). In fact, most student leaders have been occupied by those with good virtue and excellent academic, which explains why student leaders are more excellent than non-student leaders (She, 1994). Most of student leaders appointed by teachers are outstanding in academic performance. Moreover, most student leaders from democratic selection are those good students with excellent academic, relative experience, high authority and energetic contribution to the class (Liu, 2007). Therefore, most students contended that only those with excellent academic or high ability have the chance to be student leaders (Zhong, 2011). In this regard, this study could reflect the situation of student leaders’ selection in middle schools, as well as of executives’ selection in China. But it is only a preliminary and exploratory research, which should be further explored in future.
Acknowledgement

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References


The Comparison Analysis of Information Literacy between College Advisors and Undergraduates

Zhang Xiaoyang and Jiao Haixia
Science Technology Information Institute of Jiangsu University, Zhenjiang, China
Email: jiaohaixia2011@163.com

[Abstract] The differences in information literacy of college advisors and undergraduates of Jiangsu University based on questionnaire investigation and statistics analysis have been analyzed comparatively. The results show that information awareness, the capability of accessing information, and the information morality of advisors is significantly higher than undergraduates’. However, the ability to communicate information of the undergraduates is obviously higher than advisors’. The information analysis and evaluation capacity, and the information management ability between advisors and undergraduates are not obviously different and they are all in need of being improved. The reasons are analyzed and countermeasures to improve the information literacy of advisors and undergraduates are proposed.

[Keywords] advisors; undergraduates; information literacy; comparison analysis

Introduction
College advisors are the organizers, implementers and conductors of the undergraduates’ ideological and political education, and their daily management work. They shoulder the responsibility of the ideological and political education, guidance of the college students’ development and management of affairs management (Ministry of Education of the People's Republic of China, 2006). Undergraduates have the most contact with advisors. Advisors and undergraduates not only have a general teacher/student relationship in common, but they also have their own characteristics (Peng & Cai, 2012). The relationship between them will affect the college students, to a great extent, in their school experience and also affect the development of their qualities, skills and other aspects (Luo, 2011). With the coming of the informatization society, college advisors have done a good job to have higher information literacy, in addition to having political, ideological, knowledge and professional qualities (Cui, 2008). At the same time, cultivating college students' understanding of the information, the use of the information, the independent acquisition of new knowledge, their self-development abilities and ensuring the students have higher information literacy, advisors have been very big promoters regarding their structure of knowledge update in future work (Yue, J., 2008).

But the reality is that the situation of information literacy of college advisors is not ideal. Their awareness of access to information is not strong, their sensitivity of information is not enough, their capability and effective use of information to solve problems is low and their use of channels of information is single (Zheng, Chen, & Ye, 2010). At the same time, the information literacy level of undergraduates is not high, their comprehensive ability of information is low and their effectiveness of information literacy education is not significant (Xie, & Zhao, 2012). Because of this, a more targeted information literacy education and training in light of the two groups ought to be carried out. Unfortunately, the existing research doesn’t seem to form an effective support of the process. The authors’ studies find that although the research of information literacy in undergraduates is vast and the studies of information literacy is college advisors is also increasing, the literature is still rare for the comparison of the information literacy in college advisors and students. There isn’t a clear understanding of the difference in information literacy between the college advisors and students. Based on the above,
this paper takes Jiangsu University as an example, and based on a survey of information literacy of college advisors and students, tries to analyze the differences in order to provide a basis to more effectively carry out information literacy education and training in college advisors and students.

**Materials and Methods**

**Investigation Objects and Content**
The investigation objects were 87 college counselors and 300 college students that were randomly selected. They came from the colleges of mechanics, materials, automobile, science, medicine and others in Jiangsu University. The investigation content was designed to revolve around the three dimensions of information literacy: information consciousness, information ability, and information morality, and they were combined with the existing information resources of Jiangsu University.

**Method of Investigation and Data Analysis**
The respondents were selected randomly and the questionnaire was also granted randomly. The survey topic was explained in detail. Because it was based on the completely voluntary cooperation of respondents, the impact of emotional factors during the process of investigation was reduced to a low level. At the same time, with the college advisors and students using the same questionnaire, it enhanced the contrast. In the process of investigation, the questionnaire was completed anonymously and was collected on the spot so the data is accurate and reliable. Statistical analysis of the survey data used related software so the analysis has a scientific and high reliability.

**Results and Analysis**

**Comparative Analysis of Information Consciousness between College Advisors and Students**
Information consciousness refers to the subjective reaction degree of the human brain to information, including the clear degree of their information needs and the familiar degree of distribution of information sources. These decide the degree of consciousness that determines the capture and use of information. Through the investigation of “access way to information” and “objective of information retrieval”, we can judge the information awareness. The survey results are shown in Figures 1 and 2.

![Figure 1. Comparison of access way to information between college advisors and students](image-url)

From Figure 1, we can see that both the college advisors and students use of search engines accounted for more than 77%; it has become a common way to obtain information for them. Compared with college students, college advisors use the way of “library electronic resources” and “Internet portal” more than the college students. Advisors use of library electronic resources accounted for 94%; this means the instructors use of professional resources to study consciousness has reached a higher level. The
“ask around to borrow” method as a traditional information sources is declining, in spite of college advisors using it more than the college students, shows that advisors still retain a certain degree of attention on information communication.

From Figure 2, we can see that the purpose of university students’ information demand is mainly concentrated in “thesis writing” and to “understand the latest progress on the subject”. The purpose of college advisors’ information demand is mainly concentrated in “thesis writing” and “opening novelty”. In general, the information needs of teachers and students are utilitarian in a way and mainly for writing papers. Some important objectives of information retrieval, such as “topic tracking”, “fund application”, and “opening novelty” were not enough to pay enough attention to them. Interestingly, the advisors’ sustained attention to the subject study is not high and they think highly of the results of novelty. It shows that many advisors have not yet formed a stable research direction. The undergraduates pay more and more attention to the subject application and the latest research trends, which may be related to the plan to broaden the students’ scientific research, and they pay attention to the quality of graduation design.

![Figure 2. Comparison of objective information retrieval between college advisors and students](image)

The difference test finds that the access way and demand of information between college advisors and students have significant differences. The information consciousness of college advisors is higher than the students’. The author thinks that the possible causes for this result is the students still rely mainly on classroom teaching to grasp related knowledge and most time of the students is spent on understanding the knowledge of the classroom. Their consciousness for obtaining new knowledge initiatively is weak. But the college advisors, as a young group, needs to supplement the knowledge; they need to improve their ability to solve problems in the work. The “pressure” lets the advisors can always pay attention to knowledge and information they need.

**Comparative Analysis of Information Ability between College Advisors and Students**

Information ability mainly refers to rapid, accurate, comprehensive access to the required information by using the effective methods, the information can be analyzed and evaluated correctly, the valuable information can be used effectively by effectively communicate and finally the information can make to better work and study. In the article, information ability was measured by the ability to obtain information, the ability of analysis and evaluation of information, the ability of transmission and communication of information and the ability of information utilization.
Comparative Analysis the Ability to Obtain Information between College Advisors and Students

The ability to obtain information mainly depends on the selection mode of information retrieval and access frequency of domestic and foreign languages professional database. The survey results are shown in Figures 3, 4 and 5.

Figure 3. Comparison of retrieval model of information between college advisors and students

Figure 3 shows that the methods of information retrieval of the college advisors are mainly concentrated in the “one keyword” and “two keywords matching”. College students use the main “one keyword” search mode and it is matched with their access way to information. At the same time, Figure 3 also shows that college advisors and students other retrieval methods’ use frequency, such as “classification retrieval”, “author names”, “citation index” and “journal navigation”, is not very high. The main reason is that they are not familiar with or understand the methods and these retrieval techniques are required in the introduction in document retrieval lesson.

Figure 4. Comparison of Chinese database accesses between college advisors and students

It can be seen from Figure 4, e-books and e-journals have a relatively high usage for college advisors and students; for special literature, such as conference papers and patent documents, they are used less. As for e-books, students use them more than advisors’ and for e-journals, it is quite the contrary. Thus, college students mainly used electronic resources to deepen, and expand their knowledge and college advisors mainly used them for the latest information for scientific research.
Figure 5. Comparison of foreign database accesses between college advisors and students

It can be seen from Figure 5 that the proportion of college advisors and students access to various database is not high – no more than 50%. In particular, the proportion of access to the EBSCO database is only 5%-8%. This shows that the ability to obtain and use foreign language information for college advisors and students is weak and their likelihood of the ability to use a foreign language is not high.

The difference analysis using the above three aspects survey data shows that there are significant differences in the ability of obtaining information of college advisors and students.

Comparison of the Ability of Information Analysis and Evaluation between College Advisors and Students

The ability of analysis and evaluation of information refers to the ability to get needed information by analysis, screening, refining and screening relevant or irrelevant information. The survey content on the ability of analysis and evaluation of information in the questionnaire was designed through the some “difficulty in the retrieval process”. The results are shown in Figure 6.

It can be seen from Figure 6 that the main problems encountered by the college advisors and students in the information retrieval process are “keyword extraction”, “retrieval results too much”, “don’t know how to choose the related literature” and “don’t know how to download”. The difference test shows that the ability of information analysis and evaluation of college advisors and students have no significant difference and ought to be improved. This shows that the information retrieval skills training aimed at college advisors and students should be strengthened.

Figure 6: Comparison of the ability of information analysis and evaluation between college advisors and students
Comparison of the Ability of Information Transmission and Communication between Advisors and Students

The ability of information communication refers to the ability of enriching knowledge and improving information understanding through knowledge transfer, emotional contact and exchange of ideas.

As shown in Figure 7, college advisors and students commonly use “QQ”, “Email”, and “Renren.com” to exchange information and “face to face” still occupies a certain position. Compared to other methods, advisors and students prefer the “QQ”; the proportion has reached more than 80%. Compared to advisors, college students are more likely to use instant communication, such as “QQ”, “face to face” and so on.

Comparative Analysis of the Ability of Information Utilization between College Advisors and Students

Here, the degree of familiarity of college advisors and students to the search, analysis and management function of Web of Science (WOS) was used to indicate their ability of information utilization. The results are shown in Figure 8.

In general, the main aim of advisors and students using WOS is to understand the progress and trends of research, and find relevant hot articles. Few other functions of WOS were used. The difference test shows that the ability of information utilization of college advisors and students has no significant difference and all are low. Comprehensive analysis of the above four aspects of difference test shows that the ability of information of advisors is higher than the students’.
Comparative Analysis of Information Morality between College Advisors and Students

Information morality refers to the attitudes, beliefs, behavior and discipline about information and mainly includes consciously observing academic norms and having the awareness of academic integrity. The survey results on information morality are shown in Figure 9.

Figure 9. Comparison of the ability of information morality between college advisors and students

As shown in Figure 9, nearly half of all college students found the plagiarism phenomenon around them, and for advisors, this ratio is only 18%. At the same time, more than 80% of the advisors can consciously cite references, while only 54% of the students can do the same. The differences test indicates that the advisors information morality level was significantly higher than that of college students.

Conclusion and Suggestions

Comparing the advisors and students' information literacy shows that the advisors’ information consciousness, information acquisition ability, information morality level is higher obviously than college students’ and college students’ information communication and transmission capacity is higher than that of advisors. At the same time, their ability of information analysis and evaluation and information use is not significant. Based on the conclusion, according to the different needs of different groups, more effective education and training ought to be carried out.

Ameliorating the Mechanism to Enhance the Information Literacy of College Advisors

Information literacy is an important guarantee of college advisors’ work that has scientific, effective and authoritative requirements. The college advisors who have the good information literacy not only are very sensitive to the information of education theory, but they also have better insight into social events and information of the psychological demand of college students. Thereby, “on-demand teaching” can be realized. A training system should be established in order to ensure that advisors have the opportunity to learn the skills of utilizing the information. The network platforms, such as websites, BBS, blogs, micro-blogs and micro-messages ought to be built actively to promote the development of practice of political education through the network. The funding of advisors scientific research ought to be strengthened and guide the advisors in the use of domestic and foreign information sources to devote to their research. College advisors should also be absorbed in studying the strategies of information retrieval, tracking the research dynamic and changing the work-oriented to research-oriented in order to improve their level of the ideological and political education.

Developing Information Literacy of Undergraduates based on Innovation-oriented

Undergraduates should not only learn and inherit the knowledge, but also participate in the process of knowledge innovation. Currently, students’ scientific research projects, competition and innovation training programs have been set up in many universities. College students should actively be involved in these projects and programs in order to exercise their abilities of identification, acquisition and utilization
of information and to cultivate the innovative consciousness. College students should treat the thesis seriously; it is not only the process of information retrieval and processing, but also the basic means of scientific research training and knowledge innovation. They should also pay more attention to academic integrity. The knowledge innovation may not be copied in other academic misconduct.

Deepening the Function of Information Literacy Education in the Library

The mechanism of information literacy education ought to be built into the library by combining the points with the lines. First, personalized platform of information consultation, such as QQ, micro-blogs, and mobile libraries should be opened in order to understand the information demands of teachers and students, and to recommend high quality information and answer questions about information use. Second, “information retrieval” ought to be extended to the course of “information literacy” and developed as a variety of forms of education. Third, professional trainings, such as introductions to the information resources of the ideological and political education, information retrieval strategies, research topic options, document management and writing knowledge and the techniques of information analysis, should be carried out for teachers and students.

References


Study on the Factors Affecting Employee Contextual Performance

Zhang Ying Feng¹, Jin Dong Mei¹, Lu Yue¹, Liu Jing Jing¹, and Wen Zhi Yi²

¹Beijing Technology and Business University, China
²Ministry of Human Resources and Social Security, Beijing, China

Email: jin_dm@163.com

[Abstract] A questionnaire was used to analyze and discuss the differences of employee contextual performance between individual and organizational factors. The results show that the contextual performance of employees is not a significant difference on gender, level of education, working time in current organization, position, type of organization, organizational scale, industry type and other factors; while factors such as age, years of work and employee sectors varied significantly. In management practices, employees under age 30 have a lower level of job dedication, and employees who have served 1-5 years for organization have a lower level of interpersonal facilitation, while employees in R&D and technology, integrated management and administration, as well as marketing departments show a higher level of contextual performance. Organizations need to pay more attention to employees’ contextual performance, and also to those who have served only 1-5 years in organization or in a department with a lower level of contextual performance.

[Keywords] contextual performance; individual factor; interpersonal facilitation; job dedication; organizational factor

Introduction

In 1993, Borman and Motowidlo divided performance into task performance and contextual performance, based on different performance behaviors and contributions to organizational goals. Contextual performance does not directly contribute to an organization’s core technology. It is neither concluded in the formal specification of job description, nor covered by the rewards and punishment system of the organization. It maintains the technical core activities by updating and service, then plays a role in the organizational, social and psychological environment. It includes: persistent enthusiasm and extraordinary efforts in order to complete the work effectively; taking responsibility for tasks that are not their works; helping others, as well as cooperating with others; compliance with organizational rules and procedures; recognizing, supporting and maintaining organization's goals. Van Scotter and Motowidlo (1996) divided contextual performance into two dimensions: interpersonal facilitation and job dedication. Interpersonal facilitation is a interpersonal tendency behavior to better reach the organization’s goals, improving staff morale, encouraging cooperation, and creating a situation of task performance. Job dedication is the motivation of work performance, containing a lot of motivation factors driving staff to enhance the organization's performance. It is based on self-discipline, such as hard-work, complying with the rules, and the spirit of innovation. Job dedication also includes many will factors, such as fulfilling one’s duty, adhering to the goal, expectation of success, and strict observance of regulations.

For enterprises, contextual performance has great significance. Contextual performance is beyond the formal appraisal system of the organization, however it can provide motivation and support for the completion and improvement of other performance. Also, it can enhance the cohesion of the organization and create a greater sense of employee’s loyalty. So far, research of factors that influence contextual performance have focused on individual personality variables. Only a few discuss the employee’s personal characteristics (such as age, and gender, etc.) and organizational environment (such as size, and type, etc.). The purpose of this study is to explore the differences of contextual performance between
individual and organizational factors, and to find effective methods to improve the level of employee's contextual performance.

**The Research Methods**

**Surveying**
The method of questionnaire was used in this study. The questionnaire was issued to the informant via three ways: paper questionnaire (directed recovery), electronic version of the questionnaire (mail delivery recovery), and electronic questionnaires paid on professional website. The above three ways received a total of 312 valid questionnaires, and the effective rate was 96.9%.

**Measurement Tools**
This study used the “Contextual Performance Questionnaire” focused on general staff, which was improved by Van Scotter and Motowidlo in 1996. While compiling, the Chinese version of the questionnaire translated by Wang Hui (2003), through standard translation and over-translation process, was used in this study. The scale used Likert 5 evaluation method, and scores from one to five represented “totally inconsistent” to “totally consistent”. The questionnaire involved two dimensions and had 16 questions in total. The internal consistency coefficient was 0.95. Interpersonal facilitation had seven questions and job dedication had nine questions. Their internal consistency coefficients were 0.89 and 0.94, which are higher than 0.85.

**Methods of Data Analysis**
The input data were examined through a reliability test, T test and F test, using SPSS18.0 software.

**The Results and Analysis**

**Differences of Employee’s Contextual Performance on Individual Factors**
The individual factors that influence staff’s contextual performances are as follows: gender, age, education, work experience and job title.

**Gender factor.** Independent-Samples T Test was used on each dimension of contextual performance for different genders. The results are shown in Table 1.

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Gender</th>
<th></th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>Male</td>
<td>(4.14±0.53)</td>
<td>-0.067</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>(4.14±0.44)</td>
<td></td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>Male</td>
<td>(3.83±0.60)</td>
<td>-0.638</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>(3.88±0.54)</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that there does not exist significant statistical difference between dimensions of contextual performance for different genders. The interpersonal facilitation is \( T = -0.067, P = 0.947 > 0.05 \) and job dedication is \( T = -0.638, P = 0.524 > 0.05 \). P values of interpersonal facilitation and job dedication are higher than the .05 level of significance. From the mean value point of view, males and females have the same mean (M = 4.14) of interpersonal facilitation, and the mean of the job dedication is nearly equal (Male = 3.83, Female = 3.88).

**The age factor.** F Test is used on each dimension of contextual performance for different ages. The results are shown in Table 2.
### Table 2. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Age Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Younger than 20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>Older 50</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(3.81±1.70)</td>
<td>(4.10±0.50)</td>
<td>(4.27±0.41)</td>
<td>(4.46±0.41)</td>
<td>(4.43±0.81)</td>
<td>2.254</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(2.78±1.30)</td>
<td>(3.82±0.56)</td>
<td>(4.00±0.56)</td>
<td>(4.11±0.74)</td>
<td>(4.50±0.71)</td>
<td>3.328</td>
</tr>
</tbody>
</table>

Statistical results show that employees of different ages do not exist significant differences (F = 2.254, P = 0.063 > 0.05) on the interpersonal facilitation dimension, but different in the job dedication dimension (F = 3.328, P = 0.01 ≤ 0.01), and shows a tendency of increasing with the growing of age.

**Level of education factor.** F Test is used on each dimension of contextual performance for different educational status. The results are shown in Table 3.

### Table 3. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Level of Education Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Junior College and Lower</th>
<th>Undergraduate</th>
<th>Master</th>
<th>Doctor and Above</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.2±0.40)</td>
<td>(4.12±0.44)</td>
<td>(4.14±0.59)</td>
<td>U4.43±0.44)</td>
<td>0.452</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.86±0.51)</td>
<td>(3.84±0.51)</td>
<td>(3.87±0.67)</td>
<td>(4.00±0.38)</td>
<td>0.093</td>
</tr>
</tbody>
</table>

According to the results, the staff of the different levels of education does not exist significant differences in the dimension of contextual performance, which the interpersonal facilitation is F = 0.452, P = 0.716 > 0.05 and job dedication is F = 0.093, P = 0.964 > 0.05. To some extent, the results show that contextual performance is different from task performance and adaptive performance. The latter two have close connection with employees’ cognitive ability (such as level of education, and skill level, etc.). And employee’s contextual performance has close contact with personality factors. Usually employees will not produce a large difference due to the level of education and skills.

**Work experience factor.** F Test is used on each dimension of contextual performance for different work experiences. The results are shown in Table 4.

### Table 4. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Work Experience Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Less than 1 Year</th>
<th>1-3 Years</th>
<th>5-10 Years</th>
<th>10 Years and Above</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.23±0.38)</td>
<td>(4.02±0.55)</td>
<td>(4.26±0.45)</td>
<td>(4.40±0.39)</td>
<td>3.607</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.91±0.47)</td>
<td>(3.80±0.62)</td>
<td>(3.77±0.50)</td>
<td>(4.11±0.68)</td>
<td>1.846</td>
</tr>
</tbody>
</table>

Comment: **p<0.01, *p<0.05**

Statistical results shows that staff with different working years do not have significant differences in the job dedication dimension (F = 1.846, P = 0.12 > 0.05), while in the interpersonal facilitation dimension there exists a significant difference (F = 3.607, P = 0.007 < 0.01), Staff whose tenure is less than one year or over five years have a higher level of interpersonal facilitation, compared to those of 1-5 years. This is probably because working for a long period of time in the same organization (over five years) shows that the employee is satisfied with the organization, working environment and has a harmonious interpersonal relationship with others. Also they have established deep feelings, and therefore, they are more willing to make interpersonal promoting behaviors such as initiative to help and care for others, and to treat their colleagues with encouragement, praise and justice. New employees (less than one year), in order to adapt to the environment as soon as possible and leave a good impression to
others, may consciously handle relations with colleagues and take initiative in helping others to show friendliness.

**Position factor.** F Test is used on each dimension of contextual performance for different positions. The results are shown in Table 5.

### Table 5. The Compare and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Position Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Position</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Staff</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.13±0.49)</td>
<td></td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.81±0.57)</td>
<td></td>
</tr>
<tr>
<td>Executive (Vice) Director</td>
<td>(4.16±0.44)</td>
<td></td>
</tr>
<tr>
<td>Middle Management</td>
<td>(4.19±0.58)</td>
<td></td>
</tr>
<tr>
<td>Senior Management</td>
<td>(4.16±0.37)</td>
<td></td>
</tr>
</tbody>
</table>

The results show that the contextual performance of employees in various positions does not have significant differences between interpersonal facilitation and the job dedication dimension. This result is consistent with the conclusion by Van Scotter and Motowidlo (1999). The contextual performance of employees is stable and similar between various positions, which is one of the characteristics for contextual performance that different from task performance.

### Differences of Employee’s Contextual Performance on Organizational Factors

The individual factors that influence staff’s contextual performance are as follows: department, size of the organization, type of organization and industry type.

**Departments factor.** F Test is used on each dimension of contextual performance for different departments. The results are shown in Table 6.

### Table 6. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Departments Factors

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Departments</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manufacture/Purchase</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.02±0.74)</td>
<td>2.345*</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.62±0.74)</td>
<td>2.433*</td>
</tr>
<tr>
<td>R&amp;D/Technical</td>
<td>(4.24±0.39)</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>(4.05±0.38)</td>
<td></td>
</tr>
<tr>
<td>Sales/Marketing</td>
<td>(4.11±0.46)</td>
<td></td>
</tr>
<tr>
<td>General Management Administration</td>
<td>(4.19±0.40)</td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td>(3.78±0.43)</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>(4.09±0.53)</td>
<td></td>
</tr>
</tbody>
</table>

*Comments: **p<0.01, *p<0.05*

The results show that the contextual performance of employees in different departments has significant differences between interpersonal facilitation and the job dedication dimension. It shows that interpersonal facilitation F = 2.345, P = 0.031 < 0.05, and job dedication F = 2.433, P = 0.026 <0.05. On the interpersonal facilitation dimension, research and development/technology management/administrative and sales/marketing have higher levels of interpersonal facilitation. For the positions of sales and management, there is a close connection with the property of the work. The content of their work requires that employees often deal with people, and be able to handle colleagues and clients harmoniously. On the job dedication dimension, the R & D/technology and integrated management/administration have higher levels of job dedication. In real corporations, research and development positions have large amount of tasks, and they often take the initiative to work overtime in order to complete their tasks on time. While integrated management/administration, as the support of the
entire enterprise and service departments, need to maintain a lasting passion to solve the various difficulties and problems encountered by other departments and employees. The level of interpersonal facilitation and job dedication of the engineering department staff is the lowest on average. It may be relative with characteristics of engineering working properties, which is where the project is, and where the staff is. The course of their work with the overall company and humanistic environment is out serious relatively, in that it rarely affects and constrains by the organizational norms system. It should be noted that the level of interpersonal facilitation of R & D/technical staff is the highest instead of lowest. To some extent, it shows that the R & D personnel is no longer generally considered the “research fool”, and their skills in interpersonal facilitation and communication have increased gradually.

**Organization scale factor.** F Test is used on each dimension of contextual performance for different scale of organization. The results are shown in Table 7.

**Table 7. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Organization Scale Factor**

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Organization Scale</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 100</td>
<td>100-500</td>
</tr>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.12±0.42)</td>
<td>(4.09±0.54)</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.82±0.48)</td>
<td>(3.84±0.62)</td>
</tr>
</tbody>
</table>

The results show that employees in different scales of the organization do not have significant differences on interpersonal facilitation and job dedication dimensions. This indicates that the requirements of contextual performance are consistent in different scales of organizational enterprises.

**The type of organization factor.** F Test is used on each dimension of contextual performance for different types of organization. The results are shown in Table 8.

**Table 8. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Type of Organization Factor**

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>State-owned unit/state holding enterprise</th>
<th>Privately operated/privately-owned</th>
<th>Exclusively foreign-owned enterprise</th>
<th>Sino-foreign joint venture</th>
<th>Others</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td>(4.13±0.52)</td>
<td>(4.14±0.45)</td>
<td>(4.17±0.40)</td>
<td>(4.29±0.39)</td>
<td>(3.89±0.55)</td>
<td>0.792</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td>(3.84±0.56)</td>
<td>(3.90±0.58)</td>
<td>(3.75±0.53)</td>
<td>(4.15±0.49)</td>
<td>(3.5±0.44)</td>
<td>1.945</td>
</tr>
</tbody>
</table>

The results show that employees in the different types of organizations do not have significant differences on interpersonal facilitation and job dedication dimensions. It shows that the contextual performance is not only stable and similar between the various positions, but also on different types of organization.

**The type of industry factor.** F Test is used on each dimension of contextual performance for different types of industry. The results are shown in Table 9.
Table 9. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Type of Industry Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Type of Industry</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Manufacture</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Facilitation</td>
<td>(4.12±0.62)</td>
<td></td>
</tr>
<tr>
<td>Job Dedication</td>
<td>(3.75±0.67)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade &amp; Business</td>
<td>(3.94±0.32)</td>
</tr>
<tr>
<td></td>
<td>(4.09±0.51)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service (including Advertising)</td>
<td>(4.22±0.43)</td>
</tr>
<tr>
<td></td>
<td>(4.07±0.56)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High &amp; New Technology Industry</td>
<td>(3.97±0.31)</td>
</tr>
<tr>
<td></td>
<td>Financial Industry</td>
<td>(4.20±0.41)</td>
</tr>
<tr>
<td></td>
<td>Real Estate Industry</td>
<td>(3.97±0.31)</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>(4.20±0.41)</td>
</tr>
<tr>
<td></td>
<td>(3.97±0.31)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.20±0.41)</td>
<td></td>
</tr>
</tbody>
</table>

The results show that employees in the different types of industries do not have significant differences on interpersonal facilitation and job dedication dimensions. This indicates that the contextual performance is stable and similar between the different types of industry, and the requirements of different types of industry to contextual performance is consistent.

Discussion

Through the analysis of the differences between staff’s contextual performance on individual and organizational factors, we believe that:

**The Contextual Performance of Employees has Strong Consistency**

In the present study, contextual performance of the employees is significantly affected by age, length of service, and staff departments, etc. and not affected by other individual and organizational factors, such as gender, level of education, duties, organization size, type of organization, and industry type, etc. So an overall study of employees can be used in the study of contextual performance, needless to divide them into categories. When managing staff in the aspect of contextual performance, unified management can be used for all employees in the organization.

**Organizations Need to Pay More Attention to the Contextual Performance Level of Employees under the Age of 30**

Employees who are under the age of 30 have lower level of job dedication than those over 30 years of age. They are relatively younger and more vigorous. In fact, they have more “resources” to dedicate, so the organization should give them more opportunities and offer them more help and support in their early careers, to make them skillful and have more energy and ability to do extra work. Affirmation and encouragement should be given in time to enhance their organizational commitment and to persuade them to make greater contribution.

**Organizations Need to be More Concerned About the Level of Contextual Performance of the Employees who has Worked 1 to 5 Years**

For staff with work experience from 1 to 5 years has a relatively lower level of interpersonal facilitation; the organization needs to maintain clear and frequent communication with them, and try to strengthen their emotional commitment to the organization, to enhance their sense of belonging. Then they are willing to produce more interpersonal facilitation behavior, thereby increasing the level of contextual performance.
Organizations Need to be More Concerned About the Contextual Performance of the Employees in the Engineering Department

Engineering department employees have the lowest level of contextual performance, and in addition, the three categories of R & D/technology, integrated management/administrative and sales/market sector, the employees’ contextual performance in these other departments is also lower than average. In order to let employees with low contextual performance improve interpersonal promoting behaviors and work dedication behavior, more department building activities should be added, so staff in different departments can communicate with each other well. Cultural constructions in departments that have low contextual performance should be taken seriously, and open training courses should be held to enhance the sense of belonging to improve their job dedication. At the same time, appropriate adjustments to job content and assessment standards such as increasing their external communication and expression opportunities, can inspire employees to a higher level of contextual performance.

Conclusion

Employees’ individual factors such as gender, age, education degree, the current organization of work time, duties and other individual factors have little influence on their contextual performance level. There are significant differences in job dedication dimension of employees’ contextual performance including different ages, and the same happens in the interpersonal facilitation dimension of staff with different working years. The organization needs to pay more attention to the job dedication of employees who are under 30 years and to the interpersonal facilitation of those who have been working 1-5 years.

Employees’ organizational factors such as organization type, organization size, industry type, have little impact on their contextual performance level; the departments to which the employees belong to have great influence to contextual performance. Three kinds of departments: R & D/technology, integrated management/administrative and sales/marketing show a higher level of contextual performance. Organizations need to pay more concern to the contextual performance of other departments, especially the engineering sector.

However, the amount of sampling is a bit small, which affects the external validity of the study. Whether the results are representative in a wider range or not will be proved in further study. In research methods, this study uses the questionnaire survey, which is too unitary, and could be better assisted by other research methods such as interviews. Contextual performance measurement in the questionnaire is just based on the employee’s own answers, which does not take the evaluation of superiors, colleagues or subordinates into consideration, so the results may be higher than the actual contextual performance. What’s more, there are many individual factors affecting the contextual performance of employees, and one important factor is personality. Due to the limitation of questions in the study, it has no description of personality test.

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The Source of Execution in Management

Chen Peiran
Nanjing Normal University, Nanjing, China; Nantong Ten Construction Group Co. Ltd., Nantong, China
Email: peiran_chen@foxmail.com

Wang Qin
Suqian College, Suqian, China; Northeast Normal University, Changchun, China
Email: wangq221@126.com

[Abstract] Based on the question, what is the execution, this article expands interlocking questioning and reflections on the source of execution in management. This article explores the development of execution from the aspect of improving the potentials of individual behavior, improving the objective effectiveness of the organizations, improving the production efficiency of operation, and some shallow considerations about where the execution will go from the overall effectiveness of strategy, for the peer and researchers as reference.

[Keywords] execution; source; questioning; reflection

Introduction

What’s the source of execution in management? This is an interesting and brand-new topic. The passage tries to deal with some thoughts and inquiries. Before the discussion about this topic, I would like to cite a paragraph about arguments about the necessity and possibility in execution in management said by Fayol (2007), a generation master in management. I try to start this meaningful topic, not necessarily correct, having no wild wishes to succeed, but I’m sure my fellow researchers can abstract the thread of the development of execution better and appropriately help the enterprises create more values in management.

The inquiries about the source of execution in management can start with these three questions: What is execution? Where does it come from? Where will it go? This passage mainly discusses the former two questions and tries to state some beneficial considerations about the last question.

What is Execution?

To be exact, the concept of execution was supposed to be first put forward by Ram Charan, a contemporary famous Management consultant, a professor in the Business College at Harvard University. Execution was first explicitly put forward as a concept in the book ‘Execution: The Discipline of Getting Things Done,’ collaborated by Ram Charan and Larry Bossidy. Execution is defined as a missing part between targets and results. Charan and Bossidy emphasize in the book that, execution, is not a simple strategy, but a system of realizing the targets by raising questions, analyzing questions and taking actions; execution is the knowledge to realize predetermined targets by combining strategy and reality, personnel and procedures. This paper answers what is execution by pondering on the definition of execution and combining the view of Charan. The answer involves the following four aspects: to improve the potentials of individual behavior, to improve the objective effectiveness of the organizations, to improve the production efficiency of operation, and to improve the overall effectiveness of strategy.
Execution does not have a long history, but it has a lengthy past. The passage below expands interlocking questioning on the source of execution in management based on this definition.

**Execution is to Improve the Potentials of Individual Behavior**

There is one thing that necessarily can’t be overcome, and that is the understanding that execution is based on each personnel’s individual level. As an enterprise, it is essentially thought to be an investment in its personnel, whether it is to supervise the recruit of new personnel well, or to develop them by training, or it is consistent tests and the performance of the guidance, or it is to motivate them by payment. With such investments, the enterprises hope to improve the personnel’s potentials to get higher production levels.

Then, if we follow along this train of thought, there is a question we naturally think of. What’s the source of the management concept of investment in human capital? The answer given in this passage is *Investment in Human Capital*, which was delivered at the American Economics Association Annual Meeting for 1960 by Theodore Schultz, a famous American economist, the winner 1979 Nobel Prize for Economics, and a professor in Iowa State College. Schultz pointed out that human capital is the enterprise’s capital reflecting on the personnel in numbers and qualities. The expertise, the technical levels and labor skills determine the different execution level of the personnel, and it leads to the differences in the productive functions. Finally, it leads to the differences in the growing levels of the economic benefits.

Now that Schultz takes human resources of an enterprise to be a kind of scarce resource comparative to its material resource. Then, naturally, the next question we get is when was the concept of human resource started? There is not supposed to be much argument about its answer. It is universally acknowledged in the research of management that the first man to come up with the concept of human resource is undoubtedly Peter F. Drucker, the creator and the representative of the Empirical Management School. Drucker is praised as the Guru’s Guru, and the gainer of the Blue Ribbon, the Presidential Medal of Freedom. Each of his works set up a landmark for management and consolidated his position of the most immortal master of management thought in the modern world. In his representative works, *The Practice of Management*, Drucker put forward the concept of human resource first. Drucker holds the point that management is managing the enterprise, managing the manager, managing the personnel and their work. To a great extent, this original and incisive judgment distinguishes the definition of management given by the Management Process School represented by Fayol and Koontz. The definition given by Drucker protrudes more about the function of man and his Subject status. Drucker emphasizes that human resource is the most important resource of an enterprise, and its importance exceeds such resources as gold, land, factories and so on. Since Drucker emphasized the importance of man in management activities of the enterprise, the core of modern management has focused on human resource management. However, in real-life enterprises, human resource has the lowest utilization coefficient, and it is the short slab to make the barrel of the enterprise, and the bottleneck to restrict the development of the enterprise. And then Drucker then pointed out that the biggest opportunity to improve competitive ability of the enterprise is to tap the value of human resource, which is the problem about the execution of the personnel emphasized by Charan.

If we go on along such a pondering, then the following question is supposed to be: When did management start to underline the question of man? Obviously, it started from the famous Hawthorne test in Hawthorne Factory done by George Elton Mayo, an American professor. Mayo shouted out in the
abstract of the book, *The Human Problems of an Industrial Civilization*, which was published in 1945, that the invention of the atomic bomb reflected not only American’s success, but also its failure. America mastered the skill of destroying thousands of lives in a moment, however, it could do nothing to make an efficient social coordination or construct modern civilization together by unifying all the power of solidarity. The atomic bomb could change the world but it couldn’t spread civilization. If a civilized society can’t pull together in the times of trouble to achieve goals of social cooperation, it may destroy itself. Indeed, in the 19th Century Victorian Era, with the rapid economic development in the Coolidge boom people had no doubt about the social progress made during that time. *Nineteenth Century*, published in 1890, stated proudly that for a century, humans had achieved great success, and they finally became the master of fate. People carried away by the temporary prosperity of the industrial civilization, were unaware of the continuous fermentation crisis after the prosperity. Finally, on October 24, 1929, a big capitalist economic crisis, which had been brewing for a long time broke out, sweeping across the globe. Under such historical background, advanced bourgeois scholars and the managers of factories and factories started to rethink the economic thought of the time and the management theory: Does Adam Smith’s Laissez-faire economic theory suit the rapid development of monopoly capitalism? Can Taylor’s scientific management theory still work in managing the workers? Their conclusion was that: In terms of economics, the rise of Keynesianism made out a good prescription for the continuous development of capitalism; and in management, the Hawthorne test led by Mayo was an important approach to the problem of the nature of man, which was a significant symbol of the change of execution from conception to bearing. By doing the welfare test, the interview test, the group test and so on in Hawthorne factory, Mayo came up with the important statements, such as the hypothesis of social man, inspiration of employee’s morale, and the effect of informal organization, laying a sound theoretical basis for the raise of execution after more than 50 years.

**Execution is to Improve the Objective Effectiveness of the Organizations**

Execution involves not only the potentials of individual behavior of the personnel, but also the objective effectiveness of the organizations. What’s the reason? If we continue to inquire according to the former questions, then, what caused the irreconcilable contradictions between the enterprise organization and the individuals of the personnel between the 1920s and the 1930s? In fact, the problem is long-standing, and it was also a history paradox over 160 years ago, put forward in the book, *Organizational Development and Official System of Fate* (1996) by Warren Bennis, a master of modern American outstanding organization theory and leadership theory, and a doctor at the Massachusetts Institute of Technology. It is the antitheses between modern democracy and the modern industrial civilization. The persistent first Industrial Revolution and the second Industrial Revolution brought humans into an age of steam and electricity, and the human productivity got unprecedented development. At the same time, the thought of democracy and freedom was deeply rooted among the people, with the spring wind of medieval and Renaissance spreading from Florence, Italy to all over the entire continental Europe. The progress of technology and the development of the enterprise are encroaching the freedom and emancipation just won. The essence of the contradiction is which is more important: the needs, motivation, aim and growth of the individual, or the objective and profit of the organization? The outstanding father of organization theory, the German sociologist, Marx Webb, answered it as the following: We should design a set of ideal administrative organization systems. We should establish a formal function exercise according to rules of persistent tissues. We should make sure there is a clear division of functions in powers field. We should
organize the administrative organs according to the hierarchy principle. We must specialize training to the relevant personnel and then give them the public service appointments in order to rationally use an agency action guideline. Management personnel must be separated from the ownership of the means of production, and all property of the organization must be completely separated from the private property of officials. The incumbent shall not abuse its authority. Management actions, decisions and rules must be regulated and recorded in the written form. Webb thinks this purely bureaucratic system is the most efficient. This is the execution of the organization.

Contemporary with them, there is the general management theory put forward by Henry Fayol, father of macro-management and a master of French management. Fayol received orders in the face of danger in 1888, and general manager of a mineral company, De Carville, took over the baton. He put the focus of the research in the main technical management needed in positions and administrators. He summarized the all-life practice of the 59-year management experience in De Carville, and turned them into a plan, organization, command, coordination, control and management elements, and division of labor, power and responsibility, discipline, unity of command, individual interest to the general interest, remuneration, concentration, hierarchical chain, order, fairness, stability of workers, principles of management, innovation spirit, and team spirit. The general management of Fayol improved the executive organization at the macro level.

**Execution is to Improve the Production Efficiency of the Operation**

Besides potentials of individual behavior and the objective effectiveness of the organizations, execution also includes the more basic and fundamental production efficiency of the operation. Directly speaking, it is the requirement of the labor productivity of the personnel. Organization is not isolation of the whole, but an organized whole made up of thousands of personnel. To some extent, the labor productivity of the personnel guarantees the objective effectiveness of the organization. Then, what is the source of the labor productivity of the personnel? There is no reason to doubt that we need to thank Frederick Winslow Taylor most, the great father of scientific management and the scientific management theory he presented (2007). The birth of the *Principle of Scientific Management* in 1911 marked the coming of the era of scientific management. The one hundred year management principle started from this moment. Taylor pointed out that we must make out a fair daily workload principle based on researching working hours and movement. We must select the first-class workers for each job. We must make the workers master the standardized operation method, use standardized tools, machines and materials, and standardize the working environment. We must divide the enterprise’s planning function (which is equal to the present managing function) and the execution function (that is the actual operation of the workers), and change the experience approach to a scientific approach. We should carry out a system of functional foremanship and subdivide management. We should make out variant piecework system to encourage workers to work hard. Taylor’s theory effectively promises the labor efficiency of the personnel of the enterprise, that is its production efficiency of the management.

The core idea of Taylor’s scientific management theory is division of labor. If we continue to ask what the source of this idea of division is, I’m afraid we will begin from an ancient Greece philosopher, Socrates’ student, Xenophon. In his work, *Family Management*, he points out three extremely prospective and constructive management thoughts. One is that the standard to check a management level is whether the wealth is increasing. Another one is that the central task of management is to strengthen the
management of the workers. The last one is that division has a positive effect on improving the labor efficiency. This is the foresight of the ancient sages in BC 400 years ago.

We know that any experience is from the conclusion of practical activity. That the ancient people could have such a far-seeing conclusion is closely related to the aforetime production practice. The ancestors of humans in the ancient times lived in an age of the “slash-and-burn” farming. Artificial cultivation of the plant and artificial domestication of the animals marked that man had finished the social division of labor for the first time. The appearance of surplus products and commodity exchange marked that man had finished the social division for the second time. And the appearance of private ownership and class and caste differentiation marked that man had finished the social division for the third time. Each social division has brought a leaping development of human society. Maybe from the primitive time, the first embryo of execution was hidden. If we continue to ask another question down to the bedrock, where is the human from, the fathers of the St John’s college, University of Oxford, will tell us the human ancestors, Adam and Eva were born at sharp nine, March 23rd, 4004 BC. Human society started from that moment. Of course, this is only a myth.

**Execution is to Enhance the Overall Effectiveness of Strategy**

What is the reason to say execution is to enhance the overall effectiveness of strategy? The past should enlighten us in the future. By the above consistent questions about the source of execution, we have joined the past, the present and the future of execution into an uninterrupted stream. When we stand at a point of the long river of execution to look into the past, we can make such conclusions: execution is fundamental a problem to solve the efficiency. We take Taylor’s scientific management to represent a period to solve the problem of maximizing the efficiency of labor, take Fayol and Webb’s general management and scientific management to represent a period to solve the problem of maximizing the organization efficiency, and take Mayo's Hawthorne experiment and the later human resource management and human capital theory to represent a period to solve the problem of maximizing human capital theory. Finally, we take Charan’s execution theory to represent a period to solve the problem of maximizing the overall effectiveness of strategy from the macroscopic angle of the enterprise, by combining and improving the former three periods.

By persistently asking the source of the management in execution, we can feel that the execution research try to constantly solve and surpass the eternal problem in the enterprise’s management, the increase of efficiency. Good configuration and making use of scare resources can fully satisfy the multiplied need of the ever-changing market. Today is different from yesterday, and tomorrow will certainly be different from today. But today is the product of all our yesterday, and tomorrow will certainly be the same. By asking and reflecting the source of execution, we are not only told what happened before, but also taught what we must do for the present and the future of the enterprise. With copper as a mirror, you can dress. With the past as a mirror, you can know the rise and fall. With a person as a mirror, you can know the gains and losses. By questioning execution, the most important voice we mostly hope to be transmitted is as what Shakespeare says: All the past is the prelude.
References


The Mechanisms Underlying an Employee Recognition Program

Changjiang Xu and Chongli Liang
College of Teacher Education, Zhejiang Normal University, Jinhua, China
Email: xucj@zjnu.cn and lix6688@163.com

[Abstract] Employee recognition program (ERP), the practice of motivation theories, has been applied to management fields for decades. Numerous researches and surveys have proved its effect. But why it affects has been discussed very little. First, employee recognition acts as a reinforcement to reinforce an employee’s performance. Second, we take evidence from previous researches and give illustration to ERP’s effectiveness from its relation with employees’ self-esteem, self-efficacy, social worth and job satisfaction. Recommendations for management and suggestions for future research are also discussed.

[Keywords] employee recognition program; mechanism; psychological variables

Introduction

For a manager, the fact happens that awarding bonuses and merit pay are dumbfounded and employees remain unhappy, unappreciative, and unmotivated. How to motivate employees effectively has been regarded as a challenge for managers. Since the 1980s, a new way to motivate employees has been presented – employee recognition. According to research and practices about employee recognition, it has been demonstrated to be effective in reinforcing work attendance (Werner, 1992), reducing employee turnover (ALDamoe, Yazam, & Ahmid, 2012), improving employee performance (Stajkovic & Luthans, 1997) and productivity (Xu, Jayaram, & Xu, 2006).

Employee recognition, also called an employee recognition program, includes two forms, informal and formal. Despite the reality that employee recognition has not been specifically defined (Brun & Dugas, 2008), we still generally figure out what employee recognition is like based on several researcher’s works. Employee recognition includes acknowledging the good or desired performance of employees, approving it and appreciating it sincerely. The recognition can be represented in several forms, such as a thank-you card, a thank-you message, public posting, or engraving the name into the plaque. Sometimes, these ways indicates the social status and respect given to recognized employees by organizations.

Many scholars have come up with forms of formal employee recognition. Public posting of attendance certificates proposed by Werner (1992) has a similar structure with the employee recognition process proposed by London & Higgot (1997). The employee recognition process proposed by London and Higgot (1997) includes specifying categories for awards, nominating, reviewing nominations, recognizing successful nominations, selecting, awarding. These processes are defined as informal employee recognition. Because formal employee recognition is always public, the recognized behavior should also be objective and easily measured. Whether being fairly implemented matters in its effect (Luthans & Stajkovic, 2006). A recent meta-analysis of all studies over the past 20 years that utilized the organizational behavior modification (O.B. Mod.) approach for behavioral management using recognition as the intervention found an average of 15 percent performance improvement in service applications (Stajkovic & Luthans, 1997).

Referring to informal employee recognition, Luthans and Stajkovic (2006) gave some examples of its expression, such as “I overheard your explanation to Mr. Smith about how to obtain, use, and the advantages of a debit card. I’ll bet we will be adding him to our debit card business.” From this examples,
we know that informal recognition is to acknowledge employees’ good performance and appreciate it immediately. Informal recognition is suitable when performance cannot be objectively identified, such as teaching effects or the ordinary performance. This kind of recognition could be wildly used in an organization, and it could enhance employee’s intrinsic motive, which always bring about excellent performance beyond expectations. The effects of informal recognition have gained support from empirical research. Kosfeld and Neckermann (2010) divided workers into two groups – the experiment group and control group. The workers in the experiment group were told that the two who put in the most effort would receive a personal congratulation card signed by the organization, and the workers in the control group were told nothing about this. Then the performance of the two groups of workers was evaluated. The result showed workers in the award treatment outperformed workers in the control treatment by about 12 percent on average.

For employees, the criteria they most expect to be recognized is working quality (81%), then performance (72%), work contribution (66%) and service (65%) (Luthans, 2000). Despite the effectiveness of employee recognition in fostering employees’ positive and productive performance, the psychological mechanism underlying it has been seldom argued. Several researchers have given theoretical illustration for its effectiveness (Hansen, Smith, & Hansen, 2002); we still would like to find out the psychological variables to support its effectiveness. We propose that employee recognition can act as a reinforcement to performance, and boosts their self-esteem, social worth, self-efficacy and satisfaction, and then lead to improvement in performance and the intention to remain in the organization. In order to present the mechanisms more graphically, we depict the relations in Figure 1, as follows.

![Figure 1. Proposed Model of Underlying Mechanisms](image)

**Mechanism Underlying the Effectiveness of Employee Recognition: Perspectives on Reinforcement and Reward**

Luthans and Stajkovic (1999) pointed out that behaviors, which positively affect performance, must be contingently reinforced rather than indiscriminately rewarded. In many research papers, social recognition or employee recognition always appears with a reward. However, employee recognition may have distinct functioning mechanisms in comparison with the reward. Both in the formal employee recognition program and informal employee recognition practice, recognition is always followed with specific desired behaviors. According to the reinforcement theory, social recognition serves as a reinforcement that
strengthens and leads to an increase in the frequency of a behavior, not as a simple reward. A reward is something that is perceived as valuable by the reward giver. Not every reward is a reinforcement, but every reinforcement is a reward (Luthans & Stajkovic, 1999). Only if the reward reinforces contingent consequences, it can take effect (Podsakoff, Podsakoff, & Kuskova, 2010).

With the expression of the supervisor to the employee, “I noticed that you helped out Richard while your equipment was being serviced by the maintenance guys,” the supervisor provides contingent recognition as a positive reinforcement, which comes to strengthen the worker’s behavior and enhance the productivity of the unit (Luthans & Stajkovic, 2006). A large number of studies over the years have verified that recognition is indeed a powerful positive reinforcement for employee behaviors leading to performance improvement in both manufacturing (Luthans, Maciag, & Rosenkrantz, 1983; Welsh, Luthans, & Sommer, 1993) and service (Luthans, Fox, & Davis, 1991) organizations.

Based on the evidence above, it is reasonable to believe that employee recognition can take effect as a positive reinforcement.

**Mechanism Underlying the Effectiveness of Employee Recognition: Possible Mediating Variables**

In the model we proposed above, we assume that self-esteem, self-efficacy, social worth and job satisfaction mediate the effect of employee recognition on performance.

**The Mediating Role of Self-Esteem**

Self-esteem represents the overall value that a person places on himself as a person, and is considered to be the most fundamental manifestation of core self-evaluations (Judge, Locke & Durham, 1997). According to a meta-analysis result, self-esteem could predict positive employees’ performance and job satisfaction (Judge & Bono, 2001), which means high self-esteem will cause high performance and a high level of job satisfaction. Improving employees’ self-esteem may improve his or her performance. As the stable predictor of the performance, self-esteem may mediate the effect of other independent variables on the performance. Strategies that can improve employees’ self-esteem may have an indirect positive effect on their performance. By retrieving methods used to boosting self-esteem, two main types are frequently recommended. First, self-esteem can be enhanced by getting a higher rank than peers. Second, self-esteem can be enhanced by improving one’s belief about his or her ability. A formal employee recognition program, which is implemented publically in terms of standard processes, first gives the recognized employees social status or rank, and secondly, improves the recognized employees’ perception on his ability, and then will ultimately cause improvement in self-esteem. Magnus (1981) also argued that employee recognition would build pride and raise moral. So, we can think employee recognition may cause employee performance improvement according to increasing an employee’s self-esteem.

Fortunately, the mediating role of self-esteem between employee recognition and performance has been partially supported by an empirical research. Hameed, Maqbool, & Ijaz (2013) conducted a research on 274 employees in a private bank, and examined the relation between incentive motivators (including monetary incentives and social cognition), organization-based esteem and performance. Both incentive motivators and organization-based self-esteem could predict positively performance, and organization-based esteem positively relates with incentive motivators and performance. The Structural Equation Model that examines the mediating role of organization-based self-esteem has been proved. Considering that the incentive motivators are not confined to social recognition, the mediating role of social recognition may be confused with or augmented by monetary incentives. But at least, it provides us
partial evidence that self-esteem may mediate the relation between social cognition and performance. Further research should examine directly the mediating role of self-esteem between social cognition and performance.

**Self-Efficacy**

Self-efficacy is the belief in one’s capabilities to organize and execute the courses of action required to produce outcomes in a specific context (Bandura, 1997; Stajkovic & Luthans, 1998), and is also called perceived capability of succeeding (Parker, Bindl, & Strauss, 2010). Self-efficacy has been confirmed to predict several kinds of performance, such as creation (Liao, Liu, & Loi, 2010), proactive customer service performance (Raub & Liao, 2012) and task performance (Betz & Hackett, 1981). Therefore, it is reasonable to assume that social recognition will enhance an employee’s self-efficacy, and then cause improvements in performance. According to Bandura (1997) and Stajkovic & Luthans (1998), the most important input into the development of self-efficacy is mastery of experiences, modeling/vicarious learning, social persuasion and arousal. Social cognition or employee cognition may have direct or at least indirect implications for each of these development dimensions of self-efficacy. For example: (1) recognition would be confirmation of success; (2) seeing others being recognized would be vicariously reinforcing; (3) recognition framed as social persuasion would enhance the receivers’ beliefs about what they can do with what they already have (without requiring new knowledge and skills); and (4) of course recognition would arouse the receivers to stay the course and persist when meeting future obstacles and problems (Luthans & Stajkovic, 2006).

What needs more attention is that there is still no research examining the relation between recognition, self-efficacy and performance. Therefore, to specify the mechanism underlying employee recognition, it is high time to conduct an empirical study to provide solid and direct evidences about this.

**Social Worth**

Psychologists have long argued that individuals have basic motives to feel both personally competent and communal, or connected to and valued by others (Bakan, 1966; McAdams & de St. Aubin, 1992; Wiggins, 1979). Providing acknowledgment and appreciation to one’s good performance is inclined to increase the frequency of the behavior. Expressions of appreciation may enhance employees’ feelings of social worth, which will motivate them to engage in recognized behavior by reducing their feelings of uncertainty about whether their behavior will be valued by managers or supervisors.

Grant and Gino (2010) examined helpers’ motivation toward further assisting behavior. They designed four experiments. In Experiments 1 and 2, the helpers received a brief written expression of gratitude, and more people assisted both the beneficiary and a different beneficiary compared with the helpers who didn’t receive gratitude. Further analysis demonstrated social worth caused by the expression of gratitude mediates the relationship between gratitude and subsequent helping behavior. In Experiment 3, they constructively replicated these effects in a field experiment: A manager’s gratitude expression increased the number of calls made by university fundraisers, which was mediated by social worth. In Experiment 4, a different measure of social worth mediated the effects of an interpersonal gratitude expression. These results support the conclusion: gratitude expressions increase pro-social behavior by enabling individuals to feel socially valued.

According to the research made by Grant and Gino (2010), we suppose that sincere appreciation in a recognition program enables the individuals to feel worthy about the organization, which increases the frequency of employee engaging in recognized, pro-social and organization benefitting behavior. It is
recommended to conduct similar research on the mediating role of social worth in the relation between employee recognition and performance.

**Job Satisfaction**

Oshagbemi (2000) has defined job satisfaction as an “individual’s positive emotional reaction to a particular job”. Job satisfaction has been regarded as one of the most important variables in Industrial & Organizational Psychology. As a work attitude, it has a great effect on employees’ subjective well being (Bowling, Eschleman, & Wang, 2010) and job performance (Judge, Thoresen, Bono, & Patton, 2001). In addition, there are many variables predicting job satisfaction, which includes organization/workplace justice (Fryxell & Gordon, 1989; Nadiri & Tanova, 2010), trust degree (Gill, 2008), work value (Blood, 1969) and so on. As for this paper, we pay more attention to the relation between job satisfaction and performance. According to Judge, et al. (2001), there are seven possible models explaining their relationships. By conducting a meta-analysis, they proved that the reciprocally related model is prior to the others, which is job satisfaction influences performance and vice versa.

Given the reciprocal relation between performance and job satisfaction, employee recognition may improve the job satisfaction and then improve performance, or may improve job satisfaction by improved performance. Social recognition has several factors that could enhance employee’s job satisfaction. First, fairness is incorporated in the execution of employee recognition program and comes to improve employees’ job satisfaction. In the process of employee recognition recommended by London and Higgot (1997), the awards and desired behaviors are specified in detail and the universal nomination are edible for everyone or each team, and the recognition program is operated by a quality committee which consists of eight representatives of each area of the business. Each step of the recognition process is public. These characteristics impart the employee recognition program procedural justice, which ultimately makes employees feel fair. Secondly, as noted above, social worth or the work value is also improved by the recognition. The employees who are acknowledged and appreciated by the supervisor or the organization will have a feeling that what they did are important for others and organizations. Therefore, recognized employees get a high level of job satisfaction.

In addition, empirical researches have indirect evidences that social recognition contributes to employees’ job satisfaction. Social status, which is one consequence of employee recognition program, is found to enhance one’s job satisfaction. Koilias, Tourna and Koukouletos (2012) evaluated job satisfaction of graduates of an institute. The results of their research indicate that the graduates employ a high level of job satisfaction, and it is mainly attributed to the work environment, the security and social status that come with the particular job. Some other researches have found that recognition of performance is associated positively with job satisfaction (Blegen, et al., 1992; Larsen, 1993, Irvine & Evans, 1995, McNees-Smith, 1997).

Hence, based on above researches’ results and the relation between job satisfaction and performance, it is reasonable to believe job satisfaction play certain role in explaining employee cognition predicting job performance.

**Discussion**

Given that the growing body of evidence shows that non-cash recognition has become a widespread human resource management practice in Western firms (Long & Shields, 2010), we need to know how to exactly implement employee recognition to obtain desired effects. Therefore, we need to first examine the relation between concrete implementation actions and effect to get the right practice guidelines, and
secondly, explore the mechanisms underlying its effectiveness. Considering that the positive relationship between employee recognition and performance has been widely proved and several guidelines have been provided, this article explains the reasons why employee recognition has a positive effect on performance. As discussed above, employee recognition can function as a reinforcement for performance, just like Luthans and Stajkovic (1999) stated that paying for performance may not always lead to performance improvement, but reinforcing for performance will always improve performance. Employee recognition may also improve employees’ performance and productivity by boosting their self-esteem, self-efficacy, social worth and job satisfaction. This is maybe the first time attempting to build the explanation to demonstrate the effectiveness of employee recognition using psychological variables. Putting forth the psychological variables that contribute the effectiveness of employee recognition represents a new and easily verified perspective. This structural explanation depicts a clear picture for the relation between employee recognition and performance, and provides a good ground for further researches to examine their relationship.

In addition to its positive effect on performance, employee recognition is the key to preserving and building the identity of individuals, giving their work meaning, promoting their development and contributing to their health and well-being (Grawitch, et al., 2006). It is more than a human management practice. In order to present the comprehensive effects of employee recognition, more research is suggested to obtain the empirical evidence for the relation between employee recognition and employees’ social worth, life meaning, and well being in the workplace.

As to the mechanisms underlying the effectiveness of employee recognition, and the model proposed in the paper, more empirical evidence is strongly needed to verify them. Further researches could verify the mediating role of each psychological variable in explaining the effect of employee recognition on performance. Given the fact found in a similar research (Grant & Gino, 2010) that social worth, not self-efficacy, plays the mediating role between gratitude and pro-social behavior, more attention is needed to find out the real mediating variables between employee recognition and performance.

In contrast to the positive effects of employee recognition, its negative effects have been also discussed to further develop it as a more effective motivational strategy for organizations. A recent research conducted by Feys, Anseel and Wille (2013) reveal the potential negative side effects of employee recognition. Their research denotes that other’s recognition will influence one’s emotion and interpersonal counterproductive behavior and the effects are moderated by their relationship quality. Other’s positive recognition led to the highest amount of negative emotions when the quality of the relationship was low, whereas the highest amount of positive emotions emerged when relationship quality was high. Other’s positive recognition led to the highest amount of CWBI (interpersonally directed counterproductive behavior) when the quality of the relationship was low, whereas the lowest amount of CWBI was found when positive recognition was given to a liked coworker. This research comes to help paint a more complete picture of the effects of employee recognition and give us new research directions to develop it to be a more powerful motivational strategy. Further research is recommended to pay more attention to the negative effects of employee recognition and the ways to avoid or reduce these negative effects.
References


Work Values and Career Choice Intention: An Exploratory Study

Chiyin Chen and Ningyu Tang
Antai College of Economics & Management, Shanghai Jiao Tong University, Shanghai, China
Email: chenchiyin1990@sjtu.edu.cn and nytang@sjtu.edu.cn

[Abstract] This study focuses on work values and career choice intentions through the perspective of generation. It concludes that millennials value variety, associates and achievements more, but less on security of work; they prefer to work in foreign invested companies more than their parents wish them to choose, while more parents wish millennials to work in the government. Further, this study finds that if one values the security of work more, he is less likely to work in foreign invested companies.

[Keywords] work value; career choice intention; millennial; generational difference

Introduction
The millennial generation in China enjoys a much better living condition in a globalized world. They are a unique group whose thoughts and ideas are different than the tradition. Up to now, the first group of “post 90s” participates in work and how to manage them effectively becomes an important question for many organizations. To design an appropriate incentive program for the staff or tap their potential, understanding their values is very important. As a result, learning about the millennial generations’ work values and the generational difference in them may lay the foundation to manage this unique cohort of employees effectively, as well as to find solutions to generational conflict or gap, and at the same time, to further studies in this area.

Literature Review

Defining Generations
In the early times, Mannheim argued that a generation was a cohort of similarly aged people who share a common location in the social historic process (1952). Strauss and Howe divided the American generation as the Silent Generation (1925-1945), Baby Boomer Generation (1946-1964), Generation X (1965-1979) and Generation Y (1980-2004), which is widely accepted (Egri, et al., 2004). Gong raised the well-known word “post 1980s” to identify those young people born in the 1980s (Gao, 2009), which was later used to describe the whole generation in the 1980s. Now, people are used to such a 10-year-division of the generation, like “post 1970s”. The millennial generation in China generationally refers to the group of people born in the 1980s and 1990s (Song, & Chen, 2011), which shares similar historical times with the Generation Y in the west. The Chinese millennial generation lives in a totally different society compared to their former generations. Former generations lived in a planned economy era, which featured a closed society that was highly centralized. The millennial generation lives in the market economy, which offers better living standard and is open to the world. Li (2008) argued that the millennial generation has very strong independence, pragmatic value orientation and open eyesight. Cui (2008) pointed out that millennials were characteristic of willing to express own ideas, early-maturing, rebellious and pragmatic. In conclusion, the millennial generation could hardly be described by traditional Chinese characters.
Generation and Work Values

The research on work values started from the 1970s. Wollack, et al. (1971) defined work values as a person’s attitudes toward work in general, rather than his feelings about a specific job. Super (1980) argued that work values were the descriptions of one’s goals with a work related target. Others view the work values through evaluation. Dose (1997) thought that work values are evaluative standards relating to work or the work environment by which individuals discern what is ‘right’ or assess the importance of preferences. From the above definitions, we can argue that individual’s work values represent one’s self need and preference in the specific work situation, and they influence one’s career choice and certain behaviors or attitudes in the work. Not merely meaningful to the individual, understanding staff’s work values can help organizations satisfy their needs and establish appropriate human resource systems to improve the values consistency between individuals and organizations.

Smola and Sutton (2002) found that people in different generations showed different work values, and compared to the Baby Boomer Generation, Generation X was less loyal to the company and they were more idealistic. They have tried to keep the balance between maximizing personal aims and accomplishing their work. Sullivan, et al. (2009) argued that Generation X sought more work reliability and balance, compared to the Baby Boomer Generation. In Chinese related researches, Egri and Ralston (2004) found that the Consolidation, Cultural Revolution and Social Reform generations were more easily to accept change, paid more attention on self enhancement and were less conservative and less emphasized on self-transcendence than the Republican, and with the organizational change of economic system of China, the new generation were more of an entrepreneur orientation. Wang, Ma and Yao (2003) found that university students in China shared individual values in collectivism, and could consider self-values more comprehensively. Obviously, the millennial generation catches people’s eye worldwide, but the relative research is limited and lacks comparison between generations. This article explores the millennial generation’s work values and compares the generational difference through students and their parents.

Hypotheses

The millennial generation is good at learning and absorbing new information and knowledge. They love change, and hate a boring life, thus they advocate a variety of the work. Nowadays, people can choose their own development ways through their desires and ambitions. As the only child in the family, the young people do not need to consider stable problems because family is their strong backing. Also, the extreme equalitarianism of the planned economy has gone and the competence is fierce, and success orientation is deeply rooted in people’s minds, and as a result, the millennial generation enjoys high achievement motivation. On the other hand, in their daily life, millennials rely on their parents and lack brothers and sisters. As a result, they long for accompaniment, partners and teams, and what’s more, they need identity and recognition. Thus, they pay more attention to harmonious group relations and good associate relations.

Super (1980) used to divide work values into the following three categories: intrinsic rewards, extrinsic rewards and extrinsic concomitants. Intrinsic rewards refer to the characteristics and properties of the work, like Altruism, Independence, Esthetics Intellectual Stimulation, Creativity, Way of Life, and Variety; extrinsic rewards refer to the work-related value standards, like Achievement, Security, Prestige, Economic Returns; extrinsic concomitants refer to other factors except work itself and extrinsic rewards, like Management, Surroundings, Supervisory Relations, and Associates. Work Values
Inventory (WVI) was made through this category. We matched what was discussed in the last paragraph with WVI, and selected appropriate dimensions for the study. Thus, we suggest that the generational differences on work values lay on certain aspects among Variety in intrinsic rewards, Achievement and Security in extrinsic rewards and Associates in extrinsic concomitants. This paper selects a parents sample as the former generation and students as the millennial generation to explore their differences, and the following hypotheses were raised:

- **H1a:** Comparing to their parents, the millennials pay more attention to the variety of the work.
- **H1b:** Comparing to their parents, the millennials have lower security orientation in the work values.
- **H1c:** Comparing to their parents, the millennials more value achievement in the work values.
- **H1d:** Comparing to their parents, the millennials pay more attention on the associates of the work.

As the work values can influence people’s preference of the job, it is obvious that people holding different work values will choose different careers. In China, foreign-invested companies, state-owned companies, public institutions, government and private companies are the main different type organizations for people to choose. Foreign-invested companies and private companies have become highly developed since China entered the market economy. It is generally regarded that work pressure in the foreign-invested companies and private companies is fierce but sometimes they can pay good salaries, while state-owned companies, public institutions and government have less pressure. Because state-owned companies, public institutions and government seldom fire staff and they offer good benefits, people in the early times regarded them as “iron rice bowl”. In the past, working in state-owned companies was most people’s choice, as in the planned economy, the state-owned company was the only form of company in China, but now with the various kinds of jobs and different considerations, people can choose freely, and self employment and freelance are becoming more and more popular. Thus, another hypothesis was raised:

- **H2:** The millennials have different career choice intentions than what their parents want them to do.

What causes the difference of career choice intentions? Work values could influence people’s preferences on their work, and thus, it could also influence people’s choice on what type organizations they want to work. The inner logic behind children and parents’ wish differences on career choice intentions is their different values. Thus, the following hypothesis is raised:

- **H3a:** Work values could influence people’s career choice intention.
- **H3b:** Generational differences on work values will influence the career choice intention.

**Method**

**Sampling Design**

This paper surveyed university students in two universities in Shanghai, China and their parents. Students’ birth years ranged from 1987 to 1994; parents’ birth years ranged from 1950 to 1971. Each sample is 86. 18.6% of students were born in 1980s and 81.4% in 1990s; 33.7% were boys and 66.3% were girls; 14.0% of parents were born in 1950s, 83.7% in 1960s and 2.3% in 1970s; 45.3% were fathers
and 54.7% were mothers. Students’ questionnaires were collected in the classroom and parents’ were collected by mail or email.

**Measurement**

**Work values inventory.** The measurements for work values were adapted from Super’s Work Value Inventory (WVI), which is translated into Chinese by Ning (Kong and Shen, 2009). According to the hypotheses, we selected Variety, Achievement, Security and Associate. Each dimension has four items. We used 5-point Likert scales, where 1 represented entirely unimportant and 5 represented very important. Cronbach’s Alpha is 0.812, and total variance explained variance of 62.43%, and Exploratory Factor Analysis are presented in Table 1.

Table 1. Rotated Factor Matrix

<table>
<thead>
<tr>
<th>Items</th>
<th>Factors 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Items</th>
<th>Factors 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associates 1</td>
<td>0.796</td>
<td>0.143</td>
<td>0.066</td>
<td>0.190</td>
<td>Achievement 1</td>
<td>0.279</td>
<td>0.257</td>
<td>0.726</td>
<td>0.048</td>
</tr>
<tr>
<td>Associates 2</td>
<td>0.785</td>
<td>0.186</td>
<td>0.227</td>
<td>0.149</td>
<td>Achievement 2</td>
<td>0.291</td>
<td>0.106</td>
<td>0.675</td>
<td>0.140</td>
</tr>
<tr>
<td>Associates 3</td>
<td>0.760</td>
<td>-0.009</td>
<td>0.172</td>
<td>0.166</td>
<td>Achievement 3</td>
<td>0.054</td>
<td>-0.014</td>
<td>0.645</td>
<td>0.151</td>
</tr>
<tr>
<td>Associates 4</td>
<td>0.724</td>
<td>0.048</td>
<td>0.307</td>
<td>0.123</td>
<td>Achievement 4</td>
<td>0.180</td>
<td>0.125</td>
<td>0.580</td>
<td>0.222</td>
</tr>
<tr>
<td>Security 1</td>
<td>-0.004</td>
<td>0.813</td>
<td>-0.263</td>
<td>0.010</td>
<td>Variety 1</td>
<td>0.259</td>
<td>-0.031</td>
<td>-0.002</td>
<td>0.841</td>
</tr>
<tr>
<td>Security 2</td>
<td>0.113</td>
<td>0.800</td>
<td>0.197</td>
<td>-0.068</td>
<td>Variety 2</td>
<td>0.327</td>
<td>-0.001</td>
<td>0.174</td>
<td>0.734</td>
</tr>
<tr>
<td>Security 3</td>
<td>0.066</td>
<td>0.763</td>
<td>0.345</td>
<td>-0.118</td>
<td>Variety 3</td>
<td>-0.117</td>
<td>-0.178</td>
<td>0.236</td>
<td>0.643</td>
</tr>
<tr>
<td>Security 4</td>
<td>0.213</td>
<td>0.559</td>
<td>0.317</td>
<td>-0.235</td>
<td>Variety 4</td>
<td>0.301</td>
<td>-0.124</td>
<td>0.197</td>
<td>0.640</td>
</tr>
</tbody>
</table>

**Career choice intention.** One multiple-choice question about career choice intentions was raised: If you are going to work, what kind of organizations will you want to go? (For parents, the questions was changed into “If your child is going to work, what of organizations will you wish he/she go?) Suggested answers included foreign-invested companies, state-owned companies, public institutions, government, private companies and others.

**Results**

**Generational difference on work values.** A t-test was made to analyze the generational differences on work values. The result is shown in Table 2. p<0.05 means there is significance difference between two samples. It could be found that the student sample’s score was significantly higher than the parent sample’s in Variety, Associates and Achievement, and was significantly lower than the parent sample’s in Security. Hypothesis 1 was supported. The student sample got the highest score on Achievement, followed by Associates, Variety, and Security; while the parent sample got the highest score on Achievement, followed by Associates, Security and Variety.

Table 2. T-test on Work Values for Student and Parent Sample

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Category</th>
<th>Mean</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Variety</td>
<td>Student</td>
<td>3.8430</td>
<td>0.958</td>
<td>0.329</td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td>3.4157</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates</td>
<td>Student</td>
<td>4.2180</td>
<td>1.721</td>
<td>0.191</td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td>3.9535</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Student</td>
<td>3.5756</td>
<td>0.967</td>
<td>0.353</td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td>4.0291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>Student</td>
<td>4.3517</td>
<td>0.032</td>
<td>0.858</td>
</tr>
<tr>
<td></td>
<td>Parent</td>
<td>4.1337</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Career choice intention comparison. More students chose to work in foreign-invested companies while more parents wished their children to work in government. Most students chose foreign-invested companies, followed by state-owned companies, public institutions and government, while most parents wished their children work in state-owned companies, followed by government, public institutions and foreign-invested companies. Both of them chose private companies and others very little. A Chi-square test was presented to show the significant differences of students’ career choice intentions and their parents’ career wishes (see Table 3). Still, p<0.05 represent significant difference. The data illustrated that students’ choice and parents’ wishes on children’s career on foreign-invested companies and government were significantly different. Hypothesis 2 was partly supported.

Table 3. Chi-square Test on Career Choice Intention for Student and Parent Sample

<table>
<thead>
<tr>
<th></th>
<th>(N_s^*)</th>
<th>(N_p^*)</th>
<th>Chi-Square</th>
<th>Fisher’s exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Values</td>
<td>df</td>
</tr>
<tr>
<td>Foreign Inc.</td>
<td>48</td>
<td>25</td>
<td>12.590</td>
<td>1</td>
</tr>
<tr>
<td>State-owned</td>
<td>24</td>
<td>33</td>
<td>2.125</td>
<td>1</td>
</tr>
<tr>
<td>Public</td>
<td>20</td>
<td>26</td>
<td>1.068</td>
<td>1</td>
</tr>
<tr>
<td>Government</td>
<td>14</td>
<td>29</td>
<td>6.977</td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>7</td>
<td>3</td>
<td>1.699</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>1</td>
<td>1.893</td>
<td>1</td>
</tr>
</tbody>
</table>

\(N_s^*\): number of students \(N_p^*\): number of parents

Relations between work values and career choice intentions. The above information has shown that generational differences really exists in work values and career choice intentions. A correlation analysis was done to test the relations among work values and two career choice intention, foreign-invested companies and government to explore the reason of difference. In Table 4, Variety and Security in the work values were related to the choice of foreign invested companies, and no relations between government and a certain work value were found. Then a binary logistic regression was done to further explore the relations (see Table 5). In the same way, p<0.05 represent significant difference. In the regression, the data illustrated that Security could negatively forecast the career choice intention on foreign invested company, however the interaction term of generation and Security were not significant which illustrate the generational difference was not significant; for the Variety, no relations were supported. H3a was supported but H3b was not supported.

Table 4. Correlations Among Work Values and Career Choice Intention

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety</td>
<td>3.69294</td>
<td>0.70373</td>
<td>(0.766)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates</td>
<td>4.0858</td>
<td>0.64060</td>
<td>0.441**</td>
<td>(0.833)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>3.8023</td>
<td>0.73261</td>
<td>-0.151*</td>
<td>0.235**</td>
<td>(0.759)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement</td>
<td>4.2427</td>
<td>0.52665</td>
<td>0.375**</td>
<td>0.510**</td>
<td>0.298**</td>
<td>(0.711)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td>0.42</td>
<td>0.496</td>
<td>0.202**</td>
<td>0.129</td>
<td>-0.223**</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>0.25</td>
<td>0.434</td>
<td>-1.45</td>
<td>0.001</td>
<td>0.092</td>
<td>0.053</td>
<td>-0.278**</td>
<td>-</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.01 level (2-sided) **The mean difference is significant at the 0.005 level (2-sided)
Table 5. Binary Logistic Regression on Work Values and Career Choice Intention

<table>
<thead>
<tr>
<th>Hosme and Lemeshow test</th>
<th>OP</th>
<th>Variables in the Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$B$</td>
</tr>
<tr>
<td>Chi-square</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>S</td>
<td>14.005</td>
<td>8</td>
</tr>
<tr>
<td>G</td>
<td>-3.006</td>
<td>1.890</td>
</tr>
<tr>
<td>SG</td>
<td>5.40</td>
<td>0.485</td>
</tr>
<tr>
<td>C</td>
<td>0.093</td>
<td>0.231</td>
</tr>
<tr>
<td>V</td>
<td>2.824</td>
<td>8</td>
</tr>
<tr>
<td>G</td>
<td>-0.972</td>
<td>0.335</td>
</tr>
<tr>
<td>VG</td>
<td>0.156</td>
<td>0.497</td>
</tr>
<tr>
<td>C</td>
<td>0.162</td>
<td>0.229</td>
</tr>
</tbody>
</table>

OP: Overall Percentage, $S=$Security $V=$Variety $G=$Generation $SG=S \times G$ $VG=V \times G$ $C=$Constant

Discussion

From the comparison of work values of students and parents, we conclude their difference on Achievement, Associates, Variety and Security. The difference of millennial generation’s work values helps organizations build more targeted human resource practice. For the organization, they should pay attention to the younger staff’s work values. Work values could influence one’s behavior in the work. As the millennials’ expectations are satisfied, they will be more stimulated at work. Work arrangements for the millennials should be designed in a more appropriate way to fit their characters. The millennials are achievement orientated, so the stimulation ways should not only be material awards, but also spiritual awards like encouragement or trust. The organization can also support the members to fulfill one task on their own to let them feel working in an equal and trustful situation. The millennials prefer to have good associate relations, as a result organizations should emphasize a more human centered culture and harmonious atmosphere to help staff work in a mutual support situation.

We discovered that people’s choice on foreign-invested company is related to their security value. If one valued the security of work more, he would be less likely to work in the foreign-invested companies. Although the relation between work value and career choice were proved, only one dimension to support the idea is certainly not strong. Maybe people’s choice to career may not only relate to their values but also relate to the whole career market. As we all know, the current career market in China is not optimistic, for the economy has developed into a bottleneck. Many foreign-invested companies cut their expenses and do not recruit a large amount people, which also gives people an unstable image of the foreign invested companies. Decades ago, the salary of foreign-invested companies was really attractive compared to local Chinese firms, however now such gap is less obvious. Also some high-paying jobs of monopolized industries in China are mainly in state-owned companies, which will also influence people’s choice. Unfortunately, no generational difference is found among the work values and career choice intentions.

Conclusion

This paper concluded that millennials valued variety, associates relations and achievements more, but less on the security of work, while their parents valued security of the work more. The millennials preferred to work in the foreign-invested companies more than their parents wished them to choose, and more parents wished their millennial sons or daughters to work in the government than the millennial generation wished themselves to do. Further, this study explored the relationship between work values
and career choice where it was found that if one valued the security of work more, he would be less likely to work in the foreign-invested companies and what’s more, there was no generational difference for the relations between work values and career choices.

There are several limitations in this paper. The classification of generation is very rough, just students and parents representing different generations. Further studies should have a clear and systematical division of generations to learn more clearly about work values and how the values influence the millennials in the work place. Also, the content of millennials’ work values may be different from former generation’s values, thus the construct of work values could also be discussed. Although Super’s definition of work values pay attention to people’s need, which means work values do not belong to those with work experience, students still lack sensitive recognition of work, which is not perfect for a thorough study of millenial’s work values. Also, only four dimensions of WVI were used, and more research on millennials’ work values and behaviors should be made to understand millennials further.

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Economic Globalization and Chinese Enterprises’ Moral Responsibility

Chen Ying
School of Humanities and Social Sciences, North China Electric Power University, Baoding, China
Email: 245952241@qq.com

[Abstract] In recent years, China’s food quality problems have put forward unprecedented challenges to the credibility of Chinese enterprises. In fact, more than the issue of food safety, problems of varying degrees exist in various industries in China. Therefore, it is of great significance to improve enterprises’ morality and let enterprises bear the corresponding responsibilities in the development of Chinese enterprises. Against the backdrop of economic globalization, China’s trade with other countries is on the rise, which creates both new opportunities and new challenges for the development of moral responsibility of Chinese enterprises. So, how to take advantage of the economic globalization to promote moral obligation of Chinese enterprises has become a hotspot issue in the development of enterprises.

[Keywords] enterprises’ moral responsibility; enterprises’ social responsibility; economic globalization

Enterprises’ Moral Responsibility

Concept of Enterprises’ Moral Responsibility
Enterprises’ moral responsibility generally means that enterprises consciously fulfill ethical criteria and standards in the production and operation activities. Most scholars suggest the moral responsibility of enterprises be analyzed from the perspective of stakeholders. It is generally divided into external and internal responsibility. Moral responsibility within enterprises is about the employees, and external responsibility mainly associates with customers, competitors, the natural environment, government and so on.

An enterprises’ moral responsibility encompasses a broad sense and narrow sense. From the perspective of generalized morality, economic responsibility, legal responsibility, social responsibility and other forms of enterprises’ responsibility can be accommodated into enterprises’ moral responsibility. From the perspective of narrow morality, the moral responsibility of enterprises differs from the economic, legal and social responsibilities, etc.

According to different levels of moral responsibility, enterprises’ moral responsibility can be divided into bottom-line moral responsibility, middle-level moral responsibility and high-end moral responsibility (An, 2011; Han & Lin, 2010). Literally speaking, the bottom-line moral responsibility is what enterprises must take; the middle-level moral responsibility is what enterprises can take selectively according to their conditions and with the performance of work for the welfare of their employees iniitatively, etc. High-end moral responsibility requires that enterprises play an active role in social life, such as the active support of public welfare undertaking.

Enterprises’ Moral Responsibility and Social Responsibility
In practice, enterprises’ moral responsibility and social responsibility are often confused and regarded as the same thing. There are substantial scholars say that corporate social responsibility is a kind of corporate moral responsibility to society (Cao, 2006). But according to different academic understandings, enterprises’ moral responsibility is different from enterprises’ social responsibility mainly in the following three viewpoints. The first viewpoint, the equality theory that the two are exactly the
same, is generally accepted by the public. The second one is the inclusion theory that social responsibility contains enterprises’ moral responsibility. This point of view is held by Professor Wang Shuqin from Capital Normal University. She believes that “the distinction between law and morality, we can also take the social responsibility of the enterprise is divided into legal responsibility and moral responsibility of enterprises” (Wang, 2006). The third one is the parallelism theory that the two exist side by side, which is understood in the narrowest moral level.

I think, in a broad sense of morality consisting of legislation, the corporate moral responsibility contains not only social responsibility but also other responsibility of the enterprise because the law is the lowest morality. While in a narrow sense of morality, enterprises’ social responsibility and moral responsibility are equal because the enterprises’ social responsibility cannot include morality considering the boundary between legislation and narrow sense of morality.

Problems and Causes in the Construction of Chinese Enterprises’ Morality

China is still in the primary stage of socialism development, so there are still many problems in the construction of Chinese enterprises’ morality, Such as the ambiguous relationship between ethics and business; seek nothing but profits, unscrupulous business; credit loss increased consumption and the cost of enterprise friction between enterprises; enterprise leaders lack of the idea of moral leadership (Wang, 2013). And from my perspective of view, there are some factors contribute to these problems.

First of all, China’s socialist market economy is still in the development stage. Weak economic foundation determines that China can only give economic development the top priority and other issues such as environmental responsibility, legal responsibility and so on must give way to the economic development, and as a result, many Chinese enterprises seek nothing but profits in the development and sometimes even fail to take the essential moral responsibility.

Secondly, China is a state of courtesy and also attaches great importance to cultural construction, however, many enterprises operate in disorder due to three major reasons, namely, people’s various understandings of morality in practice, different self-morality requirements of the enterprises, and the reality that the legislation has lagged behind and a number of legal norms are responses to the realistic problems without prospective sight. Finally, China lacks the perfect credit mechanism. Compared to many developed countries, the lack of credit mechanism is always a great trouble in social development. Credibility, as the core of morality, is the fundamental factor for the survival of today’s enterprises. But in our country, both individual credit system and credit system of enterprises are not fully established. Therefore, in this environment, it’s hard for enterprises to realize the importance of moral responsibility.

Economic Globalization

Concept of Economic Globalization

Economic globalization refers to the increasing economic interdependence of national economies across the world through a rapid increase in cross-border movement of goods, service, technology, and capital. Economic globalization is reflected in trade liberalization, internationalization of production, capital globalization, the globalization of science and technology.

The fundamental factor of economic globalization is the result of productivity development; the liberalization of international trade and investment is the direct cause of economic globalization, and market economic development is its system guarantee; the development of multi-national corporations is
the main driving force of economic globalization, with the development of modern communication technology, provides material and technical conditions for the development of economic globalization.

**Impact of Economic Globalization on China**

As there is huge discrepancy among different countries in economic power, natural resources, science and technology level, political and economic systems and national culture, the economic globalization exerts different influence on different countries. Economic globalization is a double-edged sword. On one hand, it accelerates the development of the global economy, provides a contact with the world advanced technology and business opportunities for a few countries, but at the same time it also deepens the international risk and international competition. In this case, the threatened often are developing countries, while in developed countries and the Multi-National Corporation became final benefit economic globalization. (Han, 2011)

The impact that economic globalization will have on China is projected as follows:

**Opportunities.**

a. It is conducive to attracting and utilizing foreign capital, and introducing advanced production technology. The developing countries lack capital and technology most in their economic development. The capital and technology brought by the economic globalization can solve this problem.

b. It is conducive to accelerating China's industrialization and optimizing its industrial structure. Today China’s industrial structure is still dominated by the secondary industry. After vigorously promoting the development of our country’s secondary industry, the economic globalization will surely speed up the development of the tertiary industry and facilitate the optimization of industrial structure in China.

c. It is conducive to being deeply involved in the international division of labor, giving full play to the domestic advantages and expanding overseas market. Under the context of economic globalization, China, with abundant resources, has great advantages in foreign trade, especially in labor-intensive industries such as clothing industry where China accounts for a large proportion of world trade. Those advantages are of significant importance for China's expansion on overseas market.

d. It is conducive to giving scope to the backwardness advantage and realizing leap-forward development. In the tide of globalization, our country can take full use of the existing scientific and technological achievements, on this basis, make innovation, establish and develop high-tech industries with the aim to realizing the leap-forward development of economy.

e. It is conducive to introducing advanced management technology, which encourages the transformation of our country’s enterprise development pattern from extensive to intensive.

**Challenges.**

a. As the developing countries are at a disadvantage in the current process of economic globalization, with the expansion of capitalist globalization, national economy of developing countries like China is facing more and more pressure and impact, and is becoming increasingly dependent on developed countries.
b. The imbalance of China's internal development level will result in more regional imbalance and gap between rich and poor under the impetus of economic globalization.

c. It will bring impact to imperfect socialist market economy system of China. When China joined the WTO, because of the special situation, there were still many not open or not completely open fields. Although it can stop part of the impact, in the long run, it’s not conducive to the development of these areas.

How to Use the Opportunity of Economic Globalization to Enhance the Level of Moral Responsibility of Chinese Enterprises

Economic globalization has brought so many opportunities and challenges to China, and in the current situation where Chinese enterprises’ morality is missing, how do we use the opportunity of economic globalization to be geared to international standards, as well as enhance the moral level of Chinese enterprises? Let’s analyze this problem from the perspective of the stakeholders.

Use advanced management technology, which is introduced in the process of economic globalization to accelerate the innovation of staff management system. On one hand, implement the reward and punishment mechanism strictly to motivate the development of the employees so that they will not do harm the interests of enterprises or harm the society more seriously because payment and reward are not in proportion; on the other hand, conduct moral education for employees. If enterprises want to enhance the sense of moral responsibility, they should first start within the enterprise. An enterprise is composed of employees, so it is the first step to filter the moral responsibility of enterprises into people's minds to increase the sense of moral responsibility of employees.

Set a series of strict standards for our enterprises according to the product and service quality standards we have learned from developed countries in the situation of economic globalization. We have to be responsible to our customers and ourselves. Concerning our current development situation, there are still many difficulties for these standards to be geared to international standards completely. In addition, looking at it from practice, there are big differences in export products’ quality and the quality of the goods sailed in domestic market. Therefore, we have to introduce the quality standards used in international market to domestic market immediately, making our enterprises’ moral responsibility reach consensus on the internal and external.

We put priority to economy development, and, inevitably, there are some imperfections in regulations for the management of enterprises. There have been frequent cases in which many enterprises go against the regulation in practice. For example, some listed companies just consider the stock market as a fund-raising tool, and the practice of insider trading has become more and more common. What’s more, Chinese stock market never shares bonuses, which differs a lot from that of other countries. In addition, many companies carry out illicit competition to seek more economic benefits and contend against their rivals. In this way, laws and regulations lack deterrent force for a lot of enterprises. So we have a long way to go to gain morality which is loftier, do we?

When it comes to natural environment, a great lesson can be attained from the experience of developed capitalist countries. We should never take measures only after the environment has been destroyed. In the process of doing foreign transactions, enterprises should attach more attention to the protection of the environment so that not only the Green Trade Barriers set by the advanced capitalist countries could be diminished, but also it’s a great chance to promote the natural environmental protection of our country.
Though market plays the leading role in the process of economic globalization, governments around the world have never let the market develop randomly. This is due to the 1929 “Great Depression” in which the world recognized the role of government in the market economy. That’s why our country should strengthen the supervision over enterprises’ moral responsibility. To take an important part of enterprise moral responsibility evaluation as the enterprise evaluation; to strengthen the legal supervision; to give full play to the role of public opinion (Zhao, 2010).

Economic globalization is an inevitable trend of world economy development, and the moral responsibility of enterprises is becoming an issue, which needs more attention in the economy development. Currently, there is a serious lack of moral responsibility of enterprises in our country. Therefore, how to utilize the wave of globalization to increase enterprises’ sense of moral responsibility and raise the level of enterprises’ moral responsibility have become new choices and new problems confronted us when we promote the development of the enterprises in this new era.

References
Take Yanjian Group for Example – On the Corporate Strategy Implementation Leadership

Ping Zhang and Ting Ting Ma  
Shandong Jianzhu University, China  
Email: tingting07011@163.com

[Abstract] Leadership is essential for the complete success of the corporate strategy from the evolution of socio-economic and blue chip corporation. As a complex to drive the various enterprise leadership behaviors of the strategy implementation, take Yanjian Group as a real business case, we elaborate on the strategy implementation leadership for the significance of the enterprises’ long-term strategic development. On this basis, we discuss its environment support in the specific operation, providing guidance and help for the growth and development of enterprises.

[Keywords] strategy implementation leadership; Yanjian Group; execution; environment support

Introduction
The economy in China is in a new stage of transformation and development with a booming market and urbanization, and changing the reality of the extensive mode of economic growth, and optimizing and transforming the economic structure are imperative. Enterprises, as the main body to promote economic restructuring, leaders’ strategic thinking and strategic implementation capacity is important for Chinese enterprises to seize opportunities and address transformation challenges in this historical process. A new strategic concept – the corporate strategy implementation leadership came into being. This paper, taking Yanjian Group for example, conducts systems analysis of the corporate strategy implementation leadership, discusses the environment supports in the specific operation, and elaborates on the Chinese contemporary corporate strategy implementation leadership through the corporate practice case at the same time.

Confucian Tradition and Korean Gender Roles – The Corporate Strategy Implementation Leadership Analysis
Leadership and strategy is natural contact and integral. U.S. strategic management experts M. A. Hitt, R, D, Ireland and R. E. Hoskisson in The Management of Strategy believe effective strategic leadership determines the organization’s strategic intent and strategic mission, which dominates strategy formulation and implementation. Strategic actions decide strategic performance, which is the embodiment of strategic intent – strategic management is a dynamic cycle of a series of strategic behavior (Bao, 2001). As a crucial step, research based on the corporate strategy implementation leadership is of great significance. As a result, the corporate strategy implementation leadership came into being (Wei, 2008). The theoretical interpretation of the corporate strategy implementation leadership is shown in Fig.1.

Strategic execution and strategic innovation are important contents of corporate strategic leadership. The former is the fundamental guarantee for the smooth implementation of enterprise strategy, and the latter is where the vitality of the corporate strategy implementation leadership continuously updated and advancing with the times (Wei, 2008). As the core elements of the corporate strategy implementation capacity, it can help to improve effectively the success rate of the strategy implementation, guarantee a leading position on the strategic level, which is future-oriented core competitiveness of organizations and individuals (Wei, 2008). Core competitiveness of enterprises is the integration of relevant skills and knowledge rooted in organizations and firm-specific of long-term precipitation and summary, which
dominates the core competencies and drives sustainable competitive advantage. In today’s competitive era of globalization, owning a competitive position is tantamount to win opportunities to achieve sustainable development.

![Figure 1. Theoretical Interpretation Framework of the Corporate Strategy Implementation Leadership](image)

Yanjian Group Enterprise Strategic Management During “the Twelfth Five-Year Plan” Period

The corporate strategy implementation leadership is comprehensive capacity driving a variety of corporate strategy implementation leadership behaviors, which centers the entire process of the strategy implementation to safeguard the strategy implementation smooth, and the successful completion of the strategic objectives for the purpose.

The essence of the strategy is action. Effective implementation of corporate strategy is the most important key to the success of strategic management, and is also an important foundation of the enterprise's core competitive advantage. The nature of the strategy implementation is a dynamic course of action of decomposing and converting strategic concept and planning into specific work content, and ultimately achieving strategic objectives. But in fact the strategy implementation has become the missing link between strategy formulation and corporate performance (Nahavandi, 2003; Xiang, 2010).

Yanjian Group Co., Ltd. was founded in 1952, and is a large construction group on the integration of housing construction, municipal services, roads, equipment installation project contracting, international project contracting, real estate development, architectural design, inspection and testing. The company has a variety of professional qualification, and its business scope extends to mostly domestic cities has successfully exploring the international market in more than 20 countries. Yanjian Group has been praised by the Sate Council, and won numerous major awards including “Luban”, “National Quality Engineering”. Yanjian Group continuously explores and pursues, and has gradually established a set of strategic thinking with a global vision during years of development through careful analysis of the construction market research and their own development.

The years 2011-2015 are the 12th Five-Year Plan period of China’s national economic and social development, and Yanjian Group’s “The 12th Five-Year Plan” strategic planning undertakes a national level “Big Five-Year Plan”. Faced with profound changes in the country and the construction industry as a whole, how to change the mode of development, adjust the deconstruction, transform from extensive management to intensive management, achieve transformation and upgrading and innovative development is currently a major strategic issue for Yanjian Group.
Under the correct leadership of the Strategic Planning Committee, Yanjian Group established strategy guiding ideology of “structural optimization and industrial upgrading” with the guidance of the consultant; successfully completed the task in the start-up training, research and analysis, strategic discussions, strategy development, strategic validation phase with the support of the relevant functional departments and grassroots units; centering three plates in the domestic construction industry, international business and real estate and collected a large number of policy information and data through interviews, questionnaires, seminars and other forms; carried out a full range of analysis summarize of the internal and external environment facing enterprises; and ultimately determined mission and vision, industry positioning, strategic objectives, competitive strategy, strategic implementation plan during the 12th Five-Year Plan period and formed Yanjian Group “The 12th Five-Year” Strategic Analysis and Yanjian Group “The 12th Five-Year” Strategic Planning.

During the 12th Five-Year Plan period, the following is Yanjian Group strategic positioning: as a strategic guiding ideology of “structural optimization, industrial upgrading”, they integrated the domestic construction industry, international business, and three real estate plates, persisted in the core status of the domestic construction industry, increased the resources and ability support to international business and real estate two plates. They also strived to improve the investment and financing capacity, paying special attention to the related industries of the three plates and emerging industries national policy support, and they continue to nurture or expand other high-margin industry, achieve diversified development, and strive to become a premium contractor of first-class province, leading domestic and internationally renowned.

Yanjian Group strategic implementation plan is the design and deployment of strategic support system merging organization/control support system, functions support system and phased support system, which is one of the most important component of the strategic planning system in Yanjian Group “The 12th Five-Year Plan” strategic planning system. Yanjian introduces high-performance business management model unlike the current system standard, which is “excellent assessment” in “maturity evaluation standard” reflecting the latest concepts and methods of modern quality management. Other business management methods like “Zero defect” management, the 10th element management 6W3H1S, PDCA cycle management, and the Success Formula “Success = Personality × Ability × Efforts”.

Yanjian Group “The 12th Five-Year” Strategic Planning is a development agenda for Yanjian Group during the 12th Five-Year Plan period defining the corporate goals and direction, which have important practical significance for enterprises to enhance the core competitiveness to promote sustainable development. All of the Yanjian Group’s people build unity of thinking, raise awareness, and participate in the implementation process of the “12th Five-Year Strategic Planning”, seizing opportunities, meeting challenges and seeking common development, focus on doing the optimization and upgrading of business, management and concept, strive to create the corporate vision of the “First-Class, Sustainable Development”, and provide protection for the full completion of the “12th Five-Year Strategic Planning” goal.

Yanjian Group Executive Culture – “No Excuse, Perfect Execution”
In the so-called “Three strategy, seven execution”, execution is the most basic normal form of enterprises, and vigorously improving organizational execution in recent years is the common concern of the business community and academia. According to relevant survey, 60% of successful corporate strategy is the level of the effectiveness of strategy execution, only 20% is associated with the strategy formulation, while
enterprise strategy execution is the way the majority of investors measure the enterprises key non-financial factors (Papadakis, & Bourantas, 1998; Jing, 2008).

The corporate strategy implementation leadership system is a complex integration of multiple levels with a variety of elements, and its essence is the synthesis of enterprise capabilities performing in organizational practice. As one of the critical deconstruction dimensions, enterprise strategy execution is the basis for the strategy successfully implemented laid the cornerstone of effectiveness (Chinese Academy of Leadership Task Force. 2009). Enterprise strategy execution is one kind of strategic implementation force coordinating organizational resources and matching the system environment, as the practice media between strategic planning and goal achievement, which is the comprehensive reflection of the overall value of the organization concept and whose level determines the strategic objectives completed or not. Corporate leaders, involved in strategy implementation, should focus on the positive role of the organization and coordination, continue to improve the strategy implementation control and change force to promote the development upgrading of the corporate strategy implementation leadership, and meanwhile, play a mutually supportive role of execution and strategic objectives to provide a guarantee for the strategic mission successfully reaching (Wei, 2008).

The executive culture is the essence and soul of the Yanjian Group culture providing a solid guarantee to ensure corporate strategic goals into reality results. The executive culture is results-oriented with a means of check and incentives to reward and punishment focusing on personal potential and team cooperation win-win in work practice. It changes the beliefs and behaviors of employees and creates high performance through sustained and perfect workflow. The executive culture of Yanjian Group is “No Excuse, Perfect Execution”. “No Excuse” is the most important conduct code in the United States Military Academy at West Point (Dong, 2012).

The aided project departments Xuanping and Baini outstandingly accomplished 12 projects of reconstruction tasks, and created the miracle of the first construction speed in the whole province with a high degree of responsibility and superior execution in the circumstances of steep mountains, a lack of water and electricity, impassable roads, and a shortage of materials. The aided project departments of Beichuan New county overcame numerous difficulties in the case of time constraints, onerous tasks, high demand, and successfully completed the task of building 17 projects in just one year and two months. Let the Yanjian Group spirit “United and Pragmatic, Self-improvement, Innovation” bloom in Qiang Township in practical action, which is the outstanding representative of “No Excuse, Perfect Execution”.

In more than two years of aid of Sichuan construction, the Yanjian Group, as the only enterprise of Yantai participating in the construction, successfully completed 29 major projects funded by a total investment of 840 million yuan, achieved the objectives and tasks in an amazing speed – “Yantai Speed”, and has been highly praised by leaders at all levels, becoming the focus of media coverage. The Ministry of Human Resources and Social Security, the National Development and Reform Commission, the People’s Liberation Army General Political Department jointly awarded them the honorary title of “Advanced Collective Wenchuan Earthquake Recovery and Reconstruction Work” in 2011.

Environment Support of the Corporate Strategy Implementation Leadership

The corporate strategy implementation is an organization learning-oriented dynamic adaptation process. Any strategy implementation must be carried out in a certain organizational context and environment, and whether objectives are clear and responsibilities are in place can reflect the rationality of the enterprise
organizational structure to a certain extent, with clear job responsibilities and patency of the business processes. The operating environment will largely affect the corporate strategy implementation leadership, and a scientific environment system support platform is particularly important for the strategy implementation facing the institutional environment and the dynamic and confrontational of the industry itself which has influenced the evolution of Chinese corporate strategy. In order for the enterprise to obtain a sustainable competitive advantage, they need to create a support system model based on the environment of the organizational structure, human capital, and corporate culture, and give full play to the basic “Lever” in order to ensure the effectiveness of the strategic implementation with changes in the internal environment and achieve corporate strategic objectives ultimately (Dong, 2012; Ya, & Lan, 2010).

The enterprise is an organic collaboration system composed by a number of interrelated interaction elements for the purpose of achieving common goals, obtaining dynamic balance, and evolving continuously in the interaction with the environment. The vitality of the business organization is inseparable of the interaction and organic integration between the various internal elements. The synergy based on the organizational structure is the foundation of enterprise survival and development, whose main role is to eliminate the barriers to organization strategy implementation, and create the organizations strategic coordination effect across business and departments to manufacture enterprise competitive advantage (Ya, & Lan, 2010). Enterprise strategic management, on the basis of the whole enterprise and overall situation, needs to optimize the organizational structure with strategy-orientation, establish an organizational structure to adapt to the strategy, and update the organization design functions, role orientation, responsibilities allocation and organizational structure models in response to the constantly dynamic changes of the internal and external environment (Nahavandi, 2003).

Under the conditions of knowledge-based economy in the 21st century, the overall quality of the organization members improved significantly. The organization members of knowledge-based enterprises are a kind of human capital significantly different from non-human capital, which can promote corporate strategy implementation leadership. Corporate culture or an organization’s culture is the enterprise gradually formed in long-term course of development, which is one set of the universally shared values, vision, mission, set of cultural core business philosophy of all organization members. The corporate culture is the soul of the enterprise and rich in content, which is an important “Lever” support to the corporate strategy implementation leadership as the “soft power” of the organization (Ya, & Lan, 2010).

Yanjian Culture “Gratitude, Responsibility, Execution”, is a set of unique values and cultural characteristics gradually formed in the course of the 60 years of enterprise development, reflecting the cultural characteristics of the modern enterprise development connotations. Gratitude is the cultural force and source of Yanjian culture, responsibility is the cornerstone and fundamental, and the execution is the essence and soul of the culture.

Human capital and the creation of a learning organization is the basic idea of the Yanjian Group having established the professional personnel training development platform “Yanjian College”. Yanjian continuously improved the two human resource management agencies set, always adhering to the “prospering enterprise” development model, actively implementing people-oriented management philosophy and shifting to a strategic human resource management model providing adequate human resources and support for the sustainable development of enterprises.
Conclusion
In the corporate leadership based on the corporate CEO, senior management is one of the dominant driving forces of the strategy implementation, while the corporate strategy implementation leadership is the power source successfully promoting the strategy implementation process. Thus, this paper, in the specific practice case of Yanjian Group, systematically expounded Chinese contemporary corporate strategy implementation leadership, and discussed its environment supports providing a platform for the leadership training and the development of the strategy implementation. We tried to open up and explore new ideas, a new concept of effectively enhancing the success rate of corporate strategy implementation, and expected to provide some advice and help for the corporate strategy implementation leaders.

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Mindset and Practice of Diversity Management: A Case Study of Three Multinational Telecom Companies

Zhang Junya and Tang Ningyu

Antai College of Economics and Management, Shanghai Jiaotong University, Shanghai, China

Email: zjy299299@163.com and nytang@sjtu.edu.cn

[Abstract] In this paper, we discuss the mindset and practice of diversity management in companies via a case study. We find that the core of the diversity management mindset is respecting the differences between employees and managing this diversity at a strategic level. Diversity management practice mainly focuses on equal employment opportunity, training and development, and work-life balance of employees. Specifically, companies pay more attention to women employees and international employees, and do help employees with diverse and specific professional skills training and career training, and balance employees work and life via childcare service and health security programs, as well as flexible work time model and diverse work styles. Finally, our paper discusses the implications of these findings for practice and further research.

[Keywords] mindset; diversity management; multi case study; practice

Introduction

Diversity refers to differences between individuals that may lead to the perception that one is different from others (Roberge & Van, 2010). Researchers describe the differences between persons via different sets of indicators. One of the most popular descriptions was proposed by Harrison, Price & Bell (1998). They proposed two distinct dimensions of diversity indicators: surface-level diversity and deep-level diversity. Surface-level diversity is obvious differences among members and is reflected in physical features, such as age, gender, and race. In contrast, deep-level diversity refers to more subtle attributes that cannot be directly and immediately observed, such as personalities, attitudes, beliefs and values.

Diversity management originated in the late 1980s in the USA as a possible new management paradigm to cope with the problems aroused by diversified workforce and workplace inequality (Kelly & Dobbin, 1998; Thomas, 1990). In the following decades, the literature on the subject proliferated and diversity management became an established field in management research (Bell & Berry, 2007).

The important objective of diversity management is managing differences between employees by creating a multicultural organization. A multicultural organization not only focuses on the dominant group of employees (Cox, 1991), but also offers equal opportunities for all employees (Süß & Kleiner, 2007). One the other hand, the diversity management should be added strategic importance.

Multiculture should be emphasized by organization vision, organization mission, organization strategies and HRM strategies, and it needs the support and commission of the organization (Shen, Chanda, D'Netto, & Monga, 2009). Diversity commission should be reflected on the respect of organization vision, mission and strategies to eliminate any psychological and physical obstacles. As a result, organizations hold the value that diversity is the key to success of management at the strategy level.

In order to reach the objective of diversity management, some researchers build up the relationship between diversity management and human resource management (HRM). Olsen & Martins (2012) describe the definition of diversity management via HRM. They refer that diversity management is a set of utilization of HRM practices to: (i) maintain or increase the differences between employees on some
given dimensions; (ii) make sure that the differences will not block the achievement of organization objectives; and (iii) make sure that the differences will facilitate the achievement of organization objectives. Truss, et al. (1997) claim that management and HRM largely overlap. Both of them focus on how human resources contribute to corporation strategy, and both of them are concerned about personal differences of employees and employees’ development and satisfaction in an organization. As a result, effective diversity management can be reached via appropriate HRM strategies (Litvin, 1997).

Diversity practice has different forms in different researches depending on the contexts of organization studied. Reviewing the literatures, we find that recruitment and selection, training and development would be an important and major part of diversity management practice. As Tatli (2011) proposes, the diversity practice consists of monitoring, recruitment and training activities with a substantial attention to legislation and group-based differences via a multilayered exploration in the UK. While some researchers hold that recruitment and selection, training and development, performance appraisal and pay constitute a diversity management practice system (Shen, Chanda, D'Netto, & Monga, 2009). Many world-class companies reflect the diversity increase via effective recruitment of women and minorities to win new clients (Perlman, 1992). As for training and development, managers always focus on two kinds of training programs. One is diversity awareness training and the other is professional skill training and career training. Good diversity awareness training will facilitate the effective blend among diversity group members (Rynes & Rosen, 1995). In addition, some scholars throw light on diversity practice in terms of helping employees balance their work and life. This practice may induce positive attitude and efforts by strengthening the social exchange between organization and employees (Shen, Chanda, D'Netto, & Monga, 2009).

The above review suggests that although many studies of diversity management mindset and practice exist, they suffer from inconsistent conceptualizations and non-comparable empirical results. There is a scope and a need for improving the conceptual tools and empirical explorations in this area (Zanoni, et al., 2010). In this article, we try to comb the mindset and practice of diversity management via a case study of three multinational telecom companies depending on the existing theoretical and empirical research.

**Methodology**

**Case Selection**

In this study, we conducted case analysis of three multinational telecom companies, namely American Telephone and Telegram (AT&T) of the USA, Deutsche Telekom (DT) of Germany, and KDDI of Japan. The following shows the major characteristics of these 3 companies: AT&T, founded in 1877, is an American multinational telecommunication corporation. At present, AT&T is the largest provider both of mobile telephony and of fixed telephony in the United States. Its headquarters is located in San Antonio Texas, with subsidiary companies and joint venture companies in Thailand, Germany, Singapore, Italy, Korea, Japan and so on. AT&T ranked 29 in 2012 in the World Fortune Top 500 List, and ranked 4th in 2012 in the Diversity Inc. Top 50 List (cited from AT&T official website).

DT is the largest telecom operator in Europe, and the third largest over the world. It transformed to become a joint-stock company in 1995 and now has 71 subsidiary companies and joint venture companies in 29 countries and regions. It ranked 89 in 2012 in the World Fortune Top 500 List (cited from DT official website). KDDI was established in 2001 via a series of mergers and reorganization.
Now, it is the second largest mobile operator in Japan, and is the world leader in the CDMA business area. It ranked 220 in 2012 in the World Fortune Top 500 List (cited from KDDI official website).

We considered several factors in selecting the cases. First, since these companies come from three different countries, the result can reflect the region variance in diversity management if differences exist, or reflect the universality of diversity management if not. Second, since all three companies have branches in many counties and regions, they have a typical diverse workforce. Third, since these companies ranking in the World Fortune Top 500 List are world-class organizations with excellent performance, their experience in diversity management would be reference to others.

Data Collection and Description
We collected these three companies’ diversity management information from official websites, annual reports, related news and reports in newspapers and magazines. The following is a summary of the data.

AT&T. It stated in their official website that “We know that diverse, talented and dedicated individuals are critical to our success, so we look for people from various backgrounds and give them opportunities to grow”. In 2009, AT&T created the Chief Diversity Officer (CDO) Forum. It is committed to ensuring that all employees and members of the community can connect with their world, including those with communications challenges and medical disabilities. Since 1988, hundreds of recently hired college graduates have completed AT&T’s Leadership Development Program. In 2011, AT&T invested more than $280 million in employee training and development programs and an additional $28 million on tuition reimbursement. AT&T builds up life centers for children to provide professional advice and help. AT&T launches health accounts to lighten the burden of medical staff of employees (cited from AT&T 2011 Annual Report).

DT. It is establishing a culture of mutual respect and appreciation of individual skills and different lifestyles. DT wants to achieve a noticeable and measurable increase of women in expert functions and strategic management positions throughout the Group. It encourages dialog across generations that is helpful to mutual respect and knowledge transfer. DT has build up an international Diversity Network for participants from the countries of our affiliates. The company balances work and life of employees by granting its workforce greater freedom to harmonize work, individual life styles, and private life. Besides, parental leave and childcare services, flexible time and job-sharing models are examples of a growing service portfolio for the company’s diverse community (cited from DT 2011 HR Report).

KDDI. According to the statement on its official website, KDDI recognizes the promotion of diversity as an essential corporate strategy. KDDI works to create an environment that allows each employee to maximize his or her skills and this respects and leverages individual differences. In order to strengthen various diversity-related measures, such as employing various types of people, supporting the work of female employees, creating an environment conducive to establishing a work-life balance through efforts including support for childcare, and promoting the employment of people with disabilities, the company created a Diversity Promotion Office within the Human Resources Department on April 1, 2008. In addition, in order to spread understanding of diversity and inclusion, KDDI has published a handbook on the company intranet. They launched a series training programs and systems, including Job Rotation Systems, Common Skill and Specialized Skill Training, Overseas Dispatch Employee Education Program and so on (cited from KDDI 2011 CSR Report).
Data Coding
We used content analysis to code the data. In this paper, we adopted the 2-person coding method. First, we classified the information into mindset and practice categories. Second, we created subcategories using classifications adopted in previous research when they were appropriate, and at the same time, formed new subcategories. The final result of the coding is shown in Table 1.

<table>
<thead>
<tr>
<th>Company</th>
<th>Mindset</th>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Definition</td>
<td>Strategic Importance</td>
</tr>
<tr>
<td></td>
<td>respect difference</td>
<td>create multiculture</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>DT</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>KDDI</td>
<td>v</td>
<td>v</td>
</tr>
</tbody>
</table>

Results
Through coding and analysis of the information of diversity management of these three multinational telecom companies, we find that the diversity management mindset and practice of these three have much in common, even if they have different emphasis.

Diversity Management Mindset

As Table 2 shows, we classified the diversity management mindset information into two parts – definition and strategic importance. For the definition, there are three key aspects – respecting differences, creating multiculture, playing skills. DT and KDDI emphasize all these three concepts, while AT&T focuses on respecting differences. So respecting differences should be the core of diversity management mindset. For the strategic importance, these three companies keep consistent. They all manage diversity with strategic consideration and set up special departments to carry out diversity policies.

Diversity Management Practice
As Table 3 shows, we classified the diversity management practice into three categories – recruitment and selection, training and development, work-life balance. As for recruitment and selection, we emphasize the equal employment opportunities for employees, including women, youth, old aged, the disabled, minorities and international employee. All these three companies focus on women and international employees, and also ensure a proportion of women and international employees in the managerial positions. In addition, two of these companies focus on youth, old aged, and the disabled employees. Only AT&T focuses on minorities.
As for training and development, there are diversity awareness training and professional skill training and career training. Only KDDI sets up diversity awareness training program to enhance the employees’ diversity cognition and promote the company diversity philosophy. On the other hand, all three companies regard diverse and specific professional skill training and career training programs for youth, women, and the old, and for skills and international competency as important diversity management practice.

As for work-life balance, all three companies set up childcare programs and healthcare programs for employees to lighten their burden. Besides, DT and KDDI also promote flexible work time model and diverse work styles to balance employees’ work and life.

**Discussion and Conclusion**

In this study, we combed the diversity management mindset and practice through a multi case study. Through data coding and data analysis, we get some important conclusions. First, we find that the core of diversity management mindset is respecting the differences between employees. In addition, organizations should put diversity management up to a strategic level, and set up special department to ensure the implement of diversity policies and strategies.

Second, we conclude that the diversity management practice mainly focus on equal employment opportunity, training and development, and work-life balance. Specifically, companies should pay more attention to women employees and international employees in the respect of equal employment opportunity. Ensuring equal employment opportunities for women is vital to the effectiveness of diversity management, and will influence employees’ attitude and behaviors in an organization (Shen, D’Netto & Tang, 2010). With global economic integration, in multinational organizations and even any other companies, effective international employee management becomes much more important. Moreover, organizations should provide diverse and specific professional skill training and career training programs to employees, and help employees balance work and life via childcare service and healthcare programs, as well as flexible work time model and diverse work styles.

To sum up, this study focuses on the diversity management mindset and practice of the organization. Via a case study of three multinational telecom companies, we set up a map of mindset and practice of diversity management. In the future, scholars can conduct research based on this map. And the practitioners could use this map as their guidance and develop new and advanced practice or technologies further.

**Acknowledgement**

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References


MTS Goal Hierarchies Theory and its Application in Emergency Rescues: Based on the Case of Wenzhou Bullet Train Collision

Xiao Yuchun and Li Qiong
School of Business Administration, Zhejiang Gongshang University, Hangzhou, China
Email: liqiongk@163.com

[Abstract] Goal hierarchies are one of the core elements of MTS; it is a core bond that links up each team. In the process of Chinese economic transition, various enterprise emergencies resulted in significant casualties and property losses, and multi-team systems (MTSs) theory and the management methods of MTS goal hierarchies have great significance in that they promote the rescue efficiency of enterprises emergency and enhance the capability of reducing disasters. This article articulates the concept of MTS goal hierarchies and its main points, taking Chinese recent rescue of enterprise emergency for example, and discussed the management model and its application prospect of goal hierarchies theory within the multi-team.

[Keywords] enterprise emergencies; multi-team systems; goal hierarchies

Introduction
With the rapid development of the Internet and other high technology, the modern enterprise scale has increasingly expanded, facing more and more accidents, especially in coal, oil and natural gas enterprises that have production and transportation processes with a large number of flammable, explosive, corrosion raw materials. The explosive, fire, poisoning accidents and other accidents occur easily, posing a serious threat to people’s life and property security, seriously disturbing social harmony and the positive development of enterprises, and putting forward a severe trial to the capacity for social emergency rescue. On November 21, 2009, a gas explosion accident occurred in Xinxing coal mine, causing 108 deaths. On June 21, 2010, a powder explosion accident occurred in the city of Pingdingshan in Henan, causing 49 deaths, and injuring 26 people. On May 1, 2011, a collapse occurred at an experimental primary school in the city of Ordos, causing 6 deaths, and injuring 5 people. In the disposal of unexpected accidents, in order to deal with accidents more effectively, and to further improve the rescue effect, we should establish an accident rescue multi-team. Each component team of the multi-team is responsible for different jobs, and has their own separate goal, and each component team coordinates to achieve the ultimate goal that reduces casualties and restores the enterprise’s normal operation. This paper first reviews the foreign relevant theories about multi-teams and MTS goal hierarchies, and then based on this perspective, explores the MTS boundaries, its internal interdependence, each component team’s goal, and goal hierarchies’ form in the case of Wenzhou train collision. We summarize the fundamental form of the effective accident rescue MTS goal hierarchies, with a view to provide experiential and theoretical guidance for fast and efficient rescue of similar accident.

Multi-Team System Theory and MTS Goal Hierarchies

Dynamic Multi-Team Systems
In the recent 20 years, the enterprise’s working environment has become more and more complex and challenging (Ilgen, & Pulakos, 1999). The rapid development of communication and information technology increases the speed, scope and scale of work (Hesketh, & Neal, 1999), and the task interdependence and complexity is increasing. Traditional organizations have been unable to respond to
this change, so many different team-based organization forms have appeared, including matrix, components and cellular designs, task forces and virtual organizations, etc. The past decade has witnessed cross-boundary collaboration that exists in traditional teams and organizations boundary. In the face of large-scale crisis events, many departments’ interdependent rapid response is needed. The organizations that meet this demand are different from the traditional team and the large-scale team, and also different from the virtual organization and matrix. On the contrary, in order to comply with the current environmental challenges, a kind of organization appears, and each component teams of this organization are closely integrated. Different component teams may have different core tasks, professional technology, structure, norms and procedures. Mathieu, Marks & Zaccaro (2001) defined this organization as multi-team systems (MTSs). It is a relatively new organization form that appeared in order to adapt to the environmental challenges. The definition of MTS of international and domestic academics are not the same, but basically they have the following kind of statements, as shown in Table 1:

<table>
<thead>
<tr>
<th>Authors</th>
<th>Date</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathieu, Marks &amp; Zaccaro</td>
<td>2001</td>
<td>An organization that is composed of two or more teams that accomplish a common goal through direct communication and interdependence when facing external contingencies.</td>
</tr>
<tr>
<td>Liu &amp; Simaan</td>
<td>2005</td>
<td>Composed of multiple teams; each team has multiple decision makers, and they cooperate to accomplish their own team goals.</td>
</tr>
<tr>
<td>Hoegl &amp; Weinkauf</td>
<td>2005</td>
<td>Composed of multiple component teams; each component team is responsible for one of the components of a product, and cooperating and communicating with each other, and eventually completing the integration of the entire product.</td>
</tr>
<tr>
<td>Humphery</td>
<td>2007</td>
<td>Any team that has more than one work units, the work unit refers to a group that has a common plan, defined goals and a group of role management.</td>
</tr>
</tbody>
</table>

In conclusion, unlike other organization forms, MTSs are set up to be based on multiple teams. In order to distinguish MTS from other work entities, Mathieu, et al. (2001) gave five features of MTSs:

1. MTSs are composed of two or more teams.
2. MTSs are unique entities that are larger than teams yet typically smaller than larger organizations within which they are embedded. Some MTSs may even cross traditional organizational boundaries.
3. All component teams exhibit input, process, and outcome interdependence with at least one other team in the system.
4. MTSs are open systems; their particular configuration stems from the performance requirements of environment that they confront and the technologies that they adopt.
5. MTS component teams may have different proximal goals, but they share a common distal goal or set of goals.

Mathieu, et al. described an emergency response MTS, as shown in Figure 1. This emergency rescue MTSs includes four component teams: firefighters, emergency medical technicians, an emergency room surgery team, and a recovery team. Those teams have a common goal, namely, to save the lives of the wounded, and each component team must coordinate in order to achieve this common goal. The completion of the goal of each component team may influence other teams’ goal, and then influence the completion of the ultimate goal. Therefore, MTS is not a team, but is composed of two or more teams,
and the goals of those teams are related. Marks (2005) argued that it is the goal hierarchies that combine each component team with others.

**Multilevel Multi-Team System Goal Hierarchies**

Locke and Latham (1990) defined goals as “the ideal outcomes to achieve in the performance aspect”. The predominant MTS technology drives the development and maintenance of a goal hierarchies, this technology refers to the physical combined with the intellectual or knowledge processes by which materials in some form are transformed into outputs (Hulin, & Roznowski, 1985). The form for how work gets accomplished is within and between component teams that articulate their operative goal hierarchies (Tesluk, et al., 1997). Marks (2005) defined an MTS goal hierarchies as a related goal network, where the shortest term (proximal) goals are at the lowest levels of the hierarchies, longer term (distal) goals are at higher levels, and the MTS superordinate distal goals are at the top of the hierarchies. An MTS goal hierarchy is a structure that describes how the proximal team goals combined to accomplish distal MTS goals. Different goal hierarchies not only describe what kinds of teams are part of an MTS, but also suggest how to integrate their contributions to achieve higher-level goals.

Mathieu, et al. (2001) suggested that the MTS goal hierarchies have five characteristics:

1. MTS goal hierarchies have at least two levels.
2. The accomplishment of higher-level goal needs more interdependence among component teams than the accomplishment of lower-level goal.
3. The accomplishment of the superordinate goal requires depends on the accomplishment of all lower-level goals.
4. The higher-level goals are more likely to be longer-term goals than lower-level goals.
5. Each goal has different priority and valence (Marks, et al., 2005). MTS component teams work interdependently to accomplish at least a short-term goal, coordinating the action of all component teams to accomplish distal goal.

A component team may work together with other teams to accomplish a short-term goal, but also work together with other teams to accomplish the second goal, and this goal may be in the same level as the first goal, or may also be in higher-level. Similarly, at a point of a performance episode, the accomplishment of a component team’s goal may need reciprocal interdependence with a team, but at different points of a performance episode, the accomplishment of a component team’s goal may need sequential interdependence with the same team or different teams. So the interdependence among component teams may have a big change in the process of achieving the distal goals.

There are two important factors influencing MTS goal hierarchies: (1) The origin of MTS. The origin of MTSs has a great influence on tasks, goal hierarchies and other structural elements: some MTS are set up or appointed by leaders or senior executive committees. In this case, the distal goals of MTS are set by the leaders. Some MTSs are set up by several teams, and in this case, the short-term goals and long-term goals are from the discussion and interaction. (2) The number of MTS component teams. Although Mathieu, et al. (2001) put forward that the MTS are composed of two teams at least, but they did not point out what maximum size of the MTS. The goal hierarchies are more flat and the interaction is more coordinated when the MTS component teams are few in number. MTS general interdependence is more complex when the number of MTS component teams increases.

In MTS goal hierarchies, Mathieu, et al. (2001) study an emergency response MTS. Figure 2 shows the short-term goals and long-term goals of the emergency response MTS. The MTSs are composed of
firefighters, emergency medical technicians, an emergency room surgery team, a recovery team. The ultimate goal of the MTS is the survival of patients. The short-term goals of the firefighters and emergency medical technicians are: (1) to extract victims and stabilize them, and (2) transport them to a hospital and they would receive care from an emergency room surgical team.

Figure 1. Multi-Team Systems for Handling Severely Injured Accident Victims

Figure 2. MTS Goal Hierarchy

The Analysis of Wenzhou Bullet Train Collision Rescue operation

On July 23, 2011, the D301 train from Beijing South Railway Station to Fuzhou was rear-ended by train D3115 that was going from Hangzhou to Fuzhou, causing four cars to plunge off a bridge. This is the Wenzhou bullet train collision that shocked the world. This accident caused 40 (including 3 foreigners) deaths, and about 200 people were injured. The accident occurred at all levels of its society, and various forces are assembled to carry out emergency rescue operations. There were 17 rescue teams in the rescue of this incident, including the Ministry of Railways, the State Council, the blood donation center, firefighters, news media, ambulance team, air rescue team, public security cops, the Armed Police, electric repair team, microblog rescuers, emergency medical technicians, local people, railway professional rescue workers, logistical communication support group, surgical team, and recovery teams.

In the accident, the emergency response MTSs included 17 component teams — they all had their own tasks, and these tasks were interdependent; all the component teams are interdependent and inseparable, as shown in Figure 3:
Figure 4 shows WenZhou emergency response MTS goal hierarchy. All of the rescue teams have a common goal, namely patient survival, and they only accomplish the lower-level goals first, and they can accomplish higher-level goals in the MTS goal hierarchies. The accomplishment of the higher-level goals depend on the accomplishment of the lower-level goals: in order to repair a patient, we must have correct rescue commands. On that basis, in firefighting, maintaining telecommunications, preserving order, releasing the information and so on, by only finishing these tasks can they finish higher-level tasks, such as field treatment, transporting patients, performing surgery. By only accomplishing these low-level and middle-level goals can they accomplish the highest goal.
Figure 4. Wenzhou Bullet Train Collision Rescue MTS Goal Hierarchy

Case Summary: The Goal Hierarchies of Successful Emergency Response MTS

The characteristics of the case of Wenzhou bullet train collision was that it was sudden, urgent, relevant and uncertain. We can see from these characteristics that in order to deal with these kind of accidents, we should improve the management level of rescue, and we need a rescue system that can capture timely environmental change and that has the ability of make quick response it. We can see from the definition of MTS that it is a different entity that is different from any team-based organizations; it is a open system and can make quick response to environmental change. The formation of MTS is to deal with a highly uncertain environment, structuring system and allocating resources in accordance with the environmental demands. A key feature of MTSs is “requisite variety”; it has the ability to adapt efficiently and effectively to challenging environments (Keller, 1994; Scott, 1987). There are two types of MTS: internal MTSs that are fully embedded within the organization, and cross-boundary MTSs that contain teams both within and external to the organization. The goal hierarchies of MTSs are driven by the environment (Lawrence & Lorsch, 1967) and the communication technologies (Keller, 1994). MTSs are open systems that are interdependent with their surrounding environments. Therefore, MTSs are rescue systems that are suitable for managing the rescue actions of Wenzhou bullet train collision. The management of rescue actions of enterprise accidents cannot be completed by a single person or a single team, but needs the coordination and interdependence of all teams, that is an emergency response MTS system. Enterprises must clear the ultimate goal of rescue operations first when structuring enterprises emergency response MTSs, and subdivide the goals into several sub-goals; according to these sub-goals they need to make sure each component team completes a relevant goal, and all the sub-goals are interdependent. The accomplishment of some goals must depend on the accomplishment of other teams’ goals, or some goals must be accomplished in the same time. Establishing the cooperative relationship among all the component teams is based on the relationship of their goals. All component teams work interdependently, and their goals are interconnected and interdependent, which constitute a goal hierarchy.

A goal hierarchy is a bond linking all component teams. In the case of Wenzhou bullet train collision, if the whole rescue MTS did not have a goal hierarchy, if each component team did not have its own and clear goal, if all the component teams didn’t work direct to the ultimate goal, then it would have been impossible to rescue successfully. The key to the rescue operation in this accident was that
emergency response MTS knew the ultimate goal, that is, to reduce casualties and repair patients, then realize all the sub-goals on which the accomplishment of the ultimate goal depends, and understand that each goal should be completed by which component team or teams, as well as the time priority of the goals. Therefore, the keys to the successful rescue in the Wenzhou bullet train accident were the MTS goal hierarchies.

MTS goal hierarchies overcome the traditional drawback that there are not clear goal hierarchies and all teams worked directly toward the ultimate goal in the management of enterprises rescue actions in China, as shown in Figure 5. Improve the chance of rescue success to a large extent by using the theory of MTS goal hierarchies in the rescue management of enterprises accidents. The main reason of previous rescue failure is the rescue teams did not have clear short-term goals. But in the case of successful rescue, all the rescue workers formed a MTS, and the MTS is divided into several component teams that are responsible for different sub-goals. Each component team must complete its own goals in order to achieve the ultimate goal of repair patients, as shown in Figure 6:

![Figure 5. The Failure Goal Hierarchy](image1)

![Figure 6. The Successful Goal Hierarchy](image2)

Reasonable MTS goal hierarchies can enhance collaboration among component teams, and improve the performance of MTS. Paulo Trigo, & Helder Coelho (2005) thought the problem of the formation of MTS was actually a decision-making about goals through simulating the formation of MTS in major natural disasters. We must clarify which goal is the most important in a certain period and by which team to achieve it is most efficient when dealing with accidents. Therefore, there is outstanding theoretical significance and realistic significance of applying the theory of MTS goal hierarchies in the management of enterprises rescue actions. In order to performing rescue operations successfully, we should: (1) Know the ultimate goal, which is in the top of the goal hierarchies. (2) Know each component team’s goal, which is in the lower level of goal hierarchies. (3) Determine the task of each component team according to goals. (4) Determine the input interdependence, process interdependence and outcome interdependence according goal interdependence.

**Conclusion**

In conclusion, we can find that MTS goal hierarchies play an important role in the rescue management of enterprises accidents. Although some scholars studied MTS and MTS goal hierarchies, and accidents rescue operations as a special case, they did not perform empirical research about the impact of MTS goal hierarchies on accidents rescue operations in China, and they lacked systematic study of MTS goal hierarchies.

In recent years, accidents have occurred frequently in China, causing a huge threat to human life and property safety, and the survival of enterprises also faced a challenge. Therefore, it is very important to
improve the level of emergency rescue management. MTS and MTS goal hierarchies are not key factors
to improve rescue management level, but also are important ways of conducting rescue operations. But
the study of MTS and MTS goal hierarchies in China is still in its initial stage. Therefore, summarizing
the MTS goal hierarchies theory that are suitable for enterprises emergency rescue management in China
is the challenge that our scholars and enterprises managers are facing.

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Keller, R. T. (1994). Technology-information processing fit and the performance of R&D project groups:
University Press.
NJ: Prentice Hall.
Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of
K. Sinangil, & C. Viswesvaran (Eds.). Organizational Psychology: Handbook of Industrial, Work


Research into the Influence of General Well-being and Academic Delay of Gratification on Commitment to Major of College Students in Police Training School in China

Wenyiing Xu
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
College of Humanities, Zhejiang Business College, Hangzhou, China

Ailing Huang
College of Educational Science and Technology, Fujian Normal University, Fuzhou, China

Jianqing Ma
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China

[Abstract] Based on the current situation that some students in police training school in China have a low commitment to a major, and low general well-being, this research takes the students in police training school as objects and focuses on their commitment to a major, their general well-being and academic delay of gratification, which have great meaning to their study and life. The results show that the commitment to a major, general well-being and academic delay of gratification are positively related to each other. We can improve their commitment to a major by improving their general well-being and the academic delay of gratification.

[Keywords] college students in police training school in China; commitment to major; general well-being; academic delay of gratification

Introduction

According to Husserl’s theory of the living world, the world of school education is one of the students’ two living worlds. With the development of society, the students’ learning life has been paid more attention to. But in recent years, there are some students who are not interested in their majors, resulting in a low commitment to major, as well as a low general well-being, and even some of them indulging in games or entertainment and neglecting their studies. As a special group among college students, students in police training school have these issues too. As a survey on students in police training school by Juan Li shows that (2002): there are a considerable number of students that have pessimistic attitude towards difficulties and setbacks, which bring negative impacts on their daily learning activities. Another research by Bing Lin shows that (2006): vocational college student’ commitment to their majors, career self-efficacy and mental health are in close relation. In a word, in order to improve the quality of education, there should be more concern about students’ learning and life. The learning of students in police training school is a professional-oriented learning, which has a great meaning to their study and life. Based on the former research results, this research takes their general well-being, academic delay of gratification and commitment to a major into consideration and studies all of these impacts.
Methods

Participants
This study used cluster random sampling method; 550 questionnaires were distributed and the effective rate is 93.45%. The basic situation is listed in Table 1:

Table 1. The Distributing Status of Participants (N=514)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Grade</th>
<th>Place of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>First</td>
</tr>
<tr>
<td>397</td>
<td>117</td>
<td>93</td>
</tr>
</tbody>
</table>

Research Tools
This research mainly used the interview and questionnaire survey methods. The “College students' commitment to major scale” designed by Lanhua Wu (2004) consists of 27 items, assessed by five points from totally inconsistent to fully comply with the corresponding scores from 1 to 5. The scale was divided into four factors: affective commitment, ideal commitment, normative commitment and continuance commitment. The scale psychometric investigation revealed that it has a good reliability and validity, which means that it can be used as an effective measurement tool for students’ commitment to major. The “General Well-Being Schedule Scale” was revised by Jianhua Duan (1996). The single item score and the total score correlation coefficients is between 0.48 and 0.78; the total scale and subscale correlation coefficient is between 0.56-0.88, and the internal consistency coefficient is 0.91 in male and in female is 0.95. Combined with interviews and the Bembenutty’s Delay of gratification scale, I designed the “Academic Delay of Gratification Scale”. This scale’s internal consistency coefficient is 0.7558. Using principal component analysis, the KMO is 0.720, the test of sphericity is significant, and the confirmatory factor analysis shows that it has good construct validity. The single factor confirmatory factor analysis results were shown in Tables 2 3.

Table 2. Item-Total Statistics of Academic Delay of Gratification

<table>
<thead>
<tr>
<th>Scale mean, if item deleted</th>
<th>Scale variance, if item deleted</th>
<th>Corrected item total correlation</th>
<th>Alpha, if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 23.2773</td>
<td>30.1617</td>
<td>.4633</td>
<td>.6796</td>
</tr>
<tr>
<td>C2 23.4160</td>
<td>30.5135</td>
<td>.5040</td>
<td>.6759</td>
</tr>
<tr>
<td>C3 23.1387</td>
<td>30.5926</td>
<td>.4660</td>
<td>.6803</td>
</tr>
<tr>
<td>C4 23.1641</td>
<td>30.3370</td>
<td>.5155</td>
<td>.6740</td>
</tr>
<tr>
<td>C5 23.5781</td>
<td>32.1818</td>
<td>.3193</td>
<td>.7024</td>
</tr>
<tr>
<td>C6 22.9434</td>
<td>28.0731</td>
<td>.2361</td>
<td>.7558</td>
</tr>
<tr>
<td>C7 23.5371</td>
<td>31.4702</td>
<td>.4247</td>
<td>.6879</td>
</tr>
<tr>
<td>C8 22.8398</td>
<td>31.5281</td>
<td>.3906</td>
<td>.6921</td>
</tr>
<tr>
<td>C9 23.6738</td>
<td>32.0089</td>
<td>.4006</td>
<td>.6920</td>
</tr>
<tr>
<td>C10 23.7637</td>
<td>32.2317</td>
<td>.3079</td>
<td>.7041</td>
</tr>
</tbody>
</table>

Table 3. Fitting Index 1 of Structure Model for Academic Delay of Gratification

<table>
<thead>
<tr>
<th>X^2/df</th>
<th>NFI</th>
<th>RFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic delay of gratification scale</td>
<td>2.435</td>
<td>.922</td>
<td>.865</td>
<td>.952</td>
<td>.916</td>
<td>.951</td>
</tr>
</tbody>
</table>
**Process of Measurement and Data Processing**

Trained graduate students majoring in psychology were used as the main trial; the questionnaires were distributed with anonymous answers. Data management and analysis have been done by Amos 4.01 and SPSS10.0.

**Results**

**The Correlation Results**

From Table 4, students’ commitment to major and its dimensions, general well-being and its various factors, and academic delay of gratification are related each other.

**Table 4. The Correlation of the General Well-being, Academic Delay of Gratification and the Commitment to Major Among All Students**

<table>
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<th>2</th>
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<td>3</td>
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<td>4</td>
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<td>6</td>
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<td>-.02</td>
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<td>.08</td>
<td>.10*</td>
<td>.18*</td>
<td>.15*</td>
<td>.13*</td>
<td>.15*</td>
<td>.27*</td>
</tr>
</tbody>
</table>

(1= Affective commitment, 2= Ideal commitment, 3= Normative commitment, 4=Continuance commitment, 5=Health concerns, 6= life satisfaction, 7= Relaxation and tension, 8= Control on emotion and behavior, 9=Energy, 10= Depression or happy, 11=General well-being, 12=Commitment to major, 13= Academic delay of gratification)

**The Regression Analysis Results**

Based on the correlation analysis, I continued to explore the impact on commitment to major through a two-level regression analysis. The first layer regression analysis takes the total commitment to major as the dependent variable, general well-being and academic delay of gratification as independent variables. The results of stepwise regression analysis show that general well-being and academic delay of gratification have a certain predictive ability and totally explain 16.7% of the variance of commitment to major.

**Table 5. The Regression Analysis**

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>B</th>
<th>Beta</th>
<th>T</th>
<th>Sig</th>
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</thead>
<tbody>
<tr>
<td>General well-being</td>
<td>.356</td>
<td>.167</td>
<td>37.092</td>
<td>.259</td>
<td>.233</td>
<td>5.570</td>
<td>.000</td>
</tr>
</tbody>
</table>

The second layer of regression analysis is to investigate whether general well-being’ factors and academic delay of gratification influence the commitment to major. In the regression analysis the independent variables are the factors of general well-being and academic delay of gratification, the dependent variables are commitment to major and its sub-dimensions. The results show that the energy factor and academic delay of gratification have a good predictive effect, which explained a total of 14.3% of the variance of commitment to major. Moreover the energy and academic delay of gratification
explained 15.7% of variation of affective commitment; energy, the life satisfaction and academic delay of gratification together explained 10.5% variation of ideal commitment; energy, control on emotion and behavior and academic delay of gratification explained 10.5% of the variation of normative commitment; energy explained 3.2% variation of continuance commitment.

**Structural Equation Modeling**
According to the previous theoretical and empirical researches, then I used structural equation modeling to further explore the effect of general well-being and academic delay of gratification to commitment to major. In the model, general well-being, its various factors and academic delay of gratification are independent variables, the commitment to major and its sub-dimensions are the dependent variables. The model fit indices are as follows, this model made a better fit to the data. From it, we can conclude that general well-being and academic delay of gratification have some influences on the commitment to major, as well as general well-being in a certain extent affects the commitment to major through academic delay of gratification.

(1= Affective commitment, 2= Ideal commitment, 3= Normative commitment, 4=Continuance commitment, 5=Health concerns, 6= life satisfaction, 7= Relaxation and tension, 8= Control on emotion and behavior, 9=Energy, 10= Depression or happy, 11=General well-being, 12=Commitment to major, 13= Academic delay of gratification)

**Figure 1. Fitting Index of Structure Model for General Well-being, Academic Delay of Gratification and Commitment to Major**

**Table 6. Fitting Index 1 of Structure Model for Academic Delay of Gratification**

<table>
<thead>
<tr>
<th></th>
<th>X^2/df</th>
<th>NFI</th>
<th>GFI</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
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<tr>
<td>Model</td>
<td>4.25</td>
<td>.890</td>
<td>.936</td>
<td>.890</td>
<td>.913</td>
<td>.080</td>
</tr>
</tbody>
</table>

**Analysis and Countermeasures**

**Analysis**
From Table 4 it can be drawn: First, Academic delay of gratification is positively correlated with the commitment to major, affective commitment, ideal commitment and normative commitment in a significant level. Due to the expertise and training, students may gradually get some professional accomplishment, so they may will to pay more on learning, or even delay the instant gratification. At the
same time, because of the lack of career planning as well as the confusion about future and the grim current employment situation, their commitment to major and academic delay of gratification maybe low. This reminds the police training school should strengthen the life and career planning training for students.

Second, the commitment to major and general well-being are significantly correlated, the commitment to major is positively correlated with energy, life satisfaction, control on emotion and behavior, depression or happiness. Obviously, they have a certain relationship. Because of the special learning content in police training school, it is hard for some students to adjust to it, as well as their own reasons, such as poor foundation, the confusion about the future development, all these bring them some difficulties in learning. But as a student, learning is the most important part of their life, so there are some conflicts. The conflicts may cause the low satisfaction and low control on emotion and behavior, which to a certain extent related with the low general well-being and the low level of commitment to major.

Third, the academic delay of gratification and the general well-being are significantly correlated. The academic delay of gratification are positive correlated with the energy, depression or happy, control on emotion and behavior and relaxation and tension, with a negative correlation with the factor of health concerns. From the interviews, we found that general well-being has an impact on the academic delay of gratification, some students may say: now with a major in police is not a bad choice, after graduation they can engage in police, which is not bad. With a higher satisfaction, they may get a clear goal and pay more attention on learning-related skills and knowledge, and may consciously adjust some of the conflicts. Of course, there are some students without a good family background, advantages or some resources which are the key elements for job hunting in their mind have no confidence in their employment, resulting in depression, lower general well-being, they will more inclined to indulge themselves in some games and do not to delay such as entertainment, fun or other instant gratification for their study, leading to a lower sense of academic delay.

Additional results show that here is a significant positive correlation between the general well-being and academic delay of gratification, while general well-being has some influence on the academic delay of gratification. There was a significant positive correlation between the general well-being and the commitment to major, the general well-being has some influences on commitment to major, at the same time, general well-being can affect the commitment to major through academic delay of gratification; academic delay of gratification is positive correlated with commitment to major and its three dimensions including affective commitment, ideal commitment and normative commitment.

General well-being is the assessment of the quality of life based on custom criteria, including not only the emotional evaluation but also the perception, which is another very important point. If a student's general well-being is relatively high, it means that he may have more positive emotional experience, as well as the more satisfaction with the current situation. With the better physical and mental state, they are more likely to have interest in learning and spend more time on learning, they may have a clear awareness about their responsibility and have better handle on the relationship between needs and satisfy, emotions and behavior. They maybe not experience too many conflicts between them. Learning is the most important task for students, and professional learning is a prerequisite for future employment, once the students can recognize these, they will consciously adjust their emotions and behavior, or delay instant gratification for studies, thereby increasing investment in learning and improving the commitment to major.
Strategies
The results show that: General well-being, academic delay of gratification and commitment to major are related and affect each other. This inspires us to focus on two aspects for improving the commitment to a major:

First, pay more attention on general well-being, to encourage students to consciously adjust their behavior and emotions, carry out learning under a relatively pleasant state. At last improving the commitment to major by raising their general well-being,

Second, we should more concern about students’ demands, especially their need of career guidance education. With clear goal, they are more prone to reflect on their own learning activities and self-regulation, thereby increasing their investment in learning.

In conclusion, the research shows that general well-being and academic delay of gratification are effective means of improving commitment to major; we can enhance students' commitment to major by improving the level of general well-being of students and academic delay of gratification.

References

Corresponding Author: Jianqinq Ma, E-mail: majq2007@163.com
Causes and Consequences of Job Burnout among College Instructors in China

Meiyan Zhu
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
Zhejiang University Ningbo Institute of Technology, Ningbo, China

Jianqing Ma
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China

[Abstract] This research takes 225 college instructors as samples to develop the “Job Burnout Scale for College Instructors in China”. We then used the scale to explore the relationships between job-related stress, occupational commitment and job burnout, especially the mediating effect of job burnout between job-related stress (antecedent) and occupational commitment (consequence). The results show: (a) job-stress, as the antecedent of job burnout, could cause job burnout; that is, the higher job-related stress one perceived, the more severe the job burnout symptoms he/she has; (b) job burnout could lead to the consequence of low occupational commitment.

[Keywords] college instructors; job burnout; job-related stress; occupational commitment

Introduction
Freudenberger (1974), one of the famous American clinical psychologists, proposed the term “burnout” to describe a state of physical, emotional, mental and behavioral exhaustion experienced by people in the service and helping professions when coping when the work environment requires excessive personal energy and resources. Later, Maslach (1976) redefined job burnout as a tripartite syndrome consisting of emotional exhaustion, a feeling of cynicism and reduced personal accomplishment. Among all three dimensions, emotional exhaustion represents the central and basic dimension of burnout. Job burnout could cause negative influences on personal job performance, which has been studied widely.

A lot of evidence shows that job-related stress is a direct predictor for job burnout. In fact, Dunham (1992) viewed job burnout as an extreme form of job-related stress, which is a psychological syndrome in response to overwhelming stressors on the job. An individual may perceive burnout when bearing with job-related stressors over a long period of time under the condition of limited resources and support (Vandenberghhe, & Huberman, 1999). Mingfu Xu (2003) found certain sources of job stressors could affect the three dimensions of burnout in a totally different way among teachers in China. Role conflict and ambiguity in the job were important predicting variables for job burnout (Moore, 1999; Harden, 2000).

Besides the causes of burnout, the outcomes also have been studied frequently, and are usually related to job performance. Burnout was found to be associated with decreased job satisfaction and turnover. This study focuses on reduced occupational commitment to the job/organization as the outcomes of job burnout.

Few existing papers explore the links of burnout with stress and commitment on college instructors in China. Our study contains two main parts. The first objective of the current study is to develop “Job Burnout Scale for College Instructors in China” using MBI (see Maslach, et al., 1996) for reference. Then, we would establish the framework linking job-related stress, job burnout and occupational commitment together to call for effective and theoretical interventions on burnout.
Study 1: Development of the Burnout Scale

**Samples**
We randomly collected data through email anonymously. The sample included 93 males and 132 females. Most participants were married (64.9 percent). 164 participants achieved a master degree, and others had a bachelor degree. The majority of the subjects ranged from age 26 to 35 (87.6 percent).

**Items**
We translated the MBI developed by Maslach into Chinese. Based on an in-depth interview and research review, we then altered the items to fit the Chinese culture and occupational characteristics. The initial version of the Burnout Scale included 19 items – 7 for emotional exhaustion, 4 for depersonalization and 8 for reduced personal accomplishment. All items were scored on a four-point rating scale ranging from 1 (‘never’) to 4 (‘always’).

**Results**
We randomly split the sample in two – Sample 1 and Sample 2. Sample 1 served to explore the factor structure and reduce some items, if necessary, and Sample 2 served to validate the model afterwards.

**Item-analysis.** Before analyzing the structure, we first verified the quality of items. We divided Sample 1 into three groups based on the total scale score. Participants with scores higher than 27% of total sample were viewed as the high group, and participants with scores lower than 27% of the total sample were viewed as the low group. We then compared each item between these two groups. Significant differences indicated high quality of certain items. Results showed all the 19 items met the good standard.

**Internal consistency.** Internal consistency was evaluated by using Cronbach’s $\alpha$ for the total and item-total scores in subjects from Sample 1. Cronbach’s $\alpha$ for the emotional exhaustion dimension, depersonalization dimension and personal accomplishment dimension is 0.802, 0.713 and 0.787, respectively. If a certain item being deleted in a scale was accompanied by increasing Cronbach’s $\alpha$ of the scale, and its item-total correlation coefficients were lower than 0.4, this item should be deleted (Churchill, 1979). We found four items in our scale that should be deleted.

**Exploratory factor analysis.** We ran principal components analysis with Varimax rotation of the remaining 15 items using Sample 1. With the Kaiser-Meyer-Olkin Measure of Sampling Adequacy index 0.764 higher than 0.7, and significant of Bartlett’s Test of Sphericity, all 15 items fit for factor analysis. Three factors with Eigenvalues being, respectively, 4.192, 2.798, and 1.654 explained 54.03% of the variance. Factor loadings of Item 18 were higher than 0.5 in both personal achievement and depersonalization dimensions. Therefore, it was deleted because of a lack of discriminant validity (Nunnaly, 1994). All the other 14 items fit well under their own dimension with 6 questions on emotional exhaustion, 5 on personal achievement and 5 on depersonalization (see Table 1).
Table 1. Factor Loadings of Items with Varimax Rotation

<table>
<thead>
<tr>
<th>Item</th>
<th>EE</th>
<th>PA</th>
<th>DP</th>
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<tbody>
<tr>
<td>Q2: I usually feel exhausted after work.</td>
<td>0.870</td>
<td>0.108</td>
<td>-0.103</td>
</tr>
<tr>
<td>Q8: Instructor work makes me exhausted.</td>
<td>0.815</td>
<td>0.096</td>
<td>0.076</td>
</tr>
<tr>
<td>Q3: I feel really tired when getting up in the morning, yet, must start to work without another choice.</td>
<td>0.812</td>
<td>0.109</td>
<td>0.219</td>
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<tr>
<td>Q1: This job has used up all my emotional energy.</td>
<td>0.634</td>
<td>0.044</td>
<td>0.260</td>
</tr>
<tr>
<td>Q20: I have no energy for job at all.</td>
<td>0.560</td>
<td>-0.200</td>
<td>0.130</td>
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<tr>
<td>Q13: I often suffer the feeling of failure during working.</td>
<td>0.483</td>
<td>-0.142</td>
<td>0.408</td>
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<tr>
<td>Q17: It’s easy for me to create a relaxed circumstance when getting along with my students.</td>
<td>-0.127</td>
<td>0.744</td>
<td>0.129</td>
</tr>
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<td>Q7: I can deal with students’ affairs efficiently.</td>
<td>0.024</td>
<td>0.728</td>
<td>0.039</td>
</tr>
<tr>
<td>Q9: I feel I can positively impact students’ lives through my work.</td>
<td>-0.008</td>
<td>0.668</td>
<td>0.011</td>
</tr>
<tr>
<td>Q19: I have accomplished much in my job.</td>
<td>0.096</td>
<td>0.654</td>
<td>0.374</td>
</tr>
<tr>
<td>Q21: I can control my emotion when dealing with students’ affairs.</td>
<td>0.084</td>
<td>0.619</td>
<td>-0.040</td>
</tr>
<tr>
<td>Q10: I become indifferent to others since starting this occupation.</td>
<td>0.143</td>
<td>0.158</td>
<td>0.841</td>
</tr>
<tr>
<td>Q5: I treat some students as objects without life.</td>
<td>0.084</td>
<td>0.102</td>
<td>0.780</td>
</tr>
<tr>
<td>Q11: I worry that my job will make me emotionally numb.</td>
<td>0.209</td>
<td>0.055</td>
<td>0.767</td>
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<tr>
<td>Eigenvalues</td>
<td>3.931</td>
<td>2.480</td>
<td>1.577</td>
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<tr>
<td>% of Variance</td>
<td>28.078</td>
<td>17.712</td>
<td>11.264</td>
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</table>

**Confirmatory factor analysis.** We used Sample 2 (109 participants) to verify the three-factor model and to test the reliability and discriminant validity of the scale. Confirmatory factor analysis showed the data fit well ($\chi^2/df=1.669<3$, CFI=0.90, RMSEA=0.079<0.08). All the factor loadings were significant at the 0.001 level and higher than 0.45.

**Reliability.** All factor loadings were significant at the 0.001 level and exceeded 0.45. Furthermore, composite reliabilities of the three factors were 0.854, 0.814 and 0.839 for Emotional Exhaustion, reduced Personal Achievement, and Depersonalization, respectively. All these suggest that the factors were reliable.

**Discriminant validity.** We compared the average variance extracted (AVE) within factors with the square of the bivariates correlations between factors. The AVEs of the three factors were 0.505, 0.468 and 0.635 for Emotional Exhaustion, reduced Personal Achievement, and Depersonalization, respectively. The square of the correlations between Personal Achievement and Emotional Exhaustion is 0.019, the square of the correlations between Personal Achievement and Depersonalization is 0.188, and the square of the correlations between Personal Achievement and Depersonalization is 0.145. Since all the squares of the correlations are smaller than average variance extracted, we can assume discriminate validity.

**Study 2: Exploration of Antecedents and Consequences of Job Burnout**

**Hypotheses**

As argued before, we expect that job-related stress is a direct cause of job burnout (Vandenberghhe, & Huberman, 1999; Mingfu Xu, 2003). That is, job-related stress can be an antecedent of job burnout. Schaufeli, and Bakker (2004) found burnout was positively related to turnover intention. Based on empirical evidence, we hypothesize that job burnout could cause reduced occupational commitment. Finally, we expect job-related stress can affect occupational commitment through job burnout.

In summary, this study seeks to test the following three hypotheses:

*Hypothesis 1:* Job-related stress causes job burnout positively.

*Hypothesis 2:* Occupational commitment decreases while burnout increases.
Hypothesis 3: Burnout mediates the relation between stress and occupational commitment.

Methods

Samples. The sample was the same as Study 1.

Instruments. Job burnout was measured by the self-developed “Job Burnout Scale for College Instructors in China” to measure job burnout in this study. The scale includes three subscales: Emotional Exhaustion (EE; 6 items), Depersonalization (DP; 3 items) and Personal Achievement (PA; 5 items). All the 14 items use four-point frequency rating scale ranging from 1 “never” to 4 “always”. High scores on Emotional Exhaustion and Depersonalization and low scores on Personal Achievement (all items are reversibly scored) indicate burnout.

Job-related stress was measured by stressors existing in college instructors’ work. Given the specific occupational characteristics, we rated job-related stress in two different dimensions: relationship with students (SR; 3 items, $\alpha=0.650$) and career development (CD; 4 items, $\alpha=0.792$). All 7 items are on the four-point frequency rating scale ranging from 1 “never” to 4 “always”. High scores on these two dimensions are indicative of stress.

Occupational commitment indicates employees’ positive attitude towards their job and strong engagement for their work (Blau, 1985). It was measured by 6 items rated in the similar way to the previous two scales.

Results

Exploratory factor analysis and multi-linear regression analysis were conducted by SPSS 16.0 to test the hypotheses. The depersonalization correlated with job-related stress positively at 0.001 significant level (i.e. relationship with students), and occupational commitment correlated negatively at the 0.001 significant level. Personal achievement correlated with relationship with students negatively and occupational commitment positively. Emotional exhaustion correlates with two factors of job-related stress positively. In addition, both dimensions of job-related stress correlated with occupational commitment negatively.

Table 2. Correlation Between Variables

<table>
<thead>
<tr>
<th></th>
<th>DP</th>
<th>PA</th>
<th>EE</th>
<th>SR</th>
<th>CD</th>
<th>OC</th>
</tr>
</thead>
<tbody>
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<td>DP</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>PA</td>
<td>.345***</td>
<td>1</td>
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<td></td>
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<tr>
<td>EE</td>
<td>.385***</td>
<td>-.173**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SR</td>
<td>.490***</td>
<td>-.190**</td>
<td>.444***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>.123</td>
<td>-.039</td>
<td>.466***</td>
<td>.192**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OC</td>
<td>-.289***</td>
<td>.405***</td>
<td>-.354***</td>
<td>-.190**</td>
<td>-.431***</td>
<td>1</td>
</tr>
</tbody>
</table>

Note 1: * $p<0.05$, ** $p<0.01$, *** $p<0.001$.
Note 2: DP, Depersonalization; PA, Personal Achievement; EE, Emotional Exhaustion; SR, Relationship with students; CD, Career Development; OC, Occupational Commitment.

We assumed that burnout was the mediator between stress and occupational commitment. To confirm this assumption, we conducted two-step regression analyses. In the first step, we entered the three dimensions of burnout (i.e. EE, DP and PA) as dependent variables, and two factors of stress as independent variables. Stress originated from relationship with students caused symptom of depersonalization ($\beta=0.484$), which can explain 24.1% of variance of depersonalization. Stress originated
from relationship with students could also reduce individual’s personal achievement ($\beta = -0.205$), which can explain 4.2% of variance. As for the key dimension of burnout-emotional exhaustion, stress originated from both dimensions of stressors could be the cause with the standard regression weights .368 and .396 for relationship with students and career development respectively ($R^2=0.348$). Therefore, the higher stress one perceived from job-related stressors, the sever burnout they might have. Hypothesis 1 was confirmed.

In the second step, we considered occupational commitment as dependent variables, stress (two factors) and burnout (three factors) as independent variables to run the regression analysis. The result shown at least one independent variables could influence occupational commitment significantly: $F (5, 219) = 26.532, p<0.001$. All the five independent variables explained 37.7% of variance. Only the regression weights of career development and personal achievement were significant: $\beta = -0.0404$ and $\beta=0.381$ respectively. Hypothesis 2 was confirmed.

Overall, it can be concluded that job-related stress could affect occupational commitment with the burnout as mediator (see Figure 1). Hypothesis 3 was confirmed.

To see more clearly, we combined the results of two steps of regression analysis together to form the path framework; see Figure 1. There are six main paths: (1) stress from relationship with students reduced personal achievement; (2) stress originated from dealing with student affairs could also get rise to symptoms of depersonalization and emotional exhaustion; (3) stress originated from career development cause individual’s emotional exhaustion; (4) career development could reduce individual’s commitment towards their work directly; (5) Reduced personal achievement caused by job-related stress could reduce individual’s occupational commitment.

![Path Framework of Two-Step Regression Analyses](image)

**Figure 1. Path Framework of Two-Step Regression Analyses**

**Discussion**

There were two objectives of the current study: development of the burnout scale and testing a framework to specify possible predictors and consequences of burnout. In doing so, we conducted two studies. Study 1 was to develop the burnout scale for college instructors in China. Then, in Study 2 we used the scale to measure burnout and found out its antecedents and consequences. We assumed job-related stress as the predictor of burnout, as well as reduced occupational commitment as the consequences of burnout.
The Job Burnout Scale for College Instructors in China

Job burnout for teachers or instructors was commonly measured by translating the version of MBI in China. Few scales were developed to measure the burnout of college instructors specifically. This study took MBI as inference to develop the job burnout scale for college instructors in China, regarding the specific working characteristics. The scale structure was confirmed by CFA. The reliability and validity of the scale were high. It can be an effective instrument to measure burnout in the future.

Predictors and Consequences of Burnout

This study confirmed that stress could cause job burnout. Jia Zhu (2009) and Ping Wang (2011) also found that job-rated stress could affect job burnout significantly among college instructors. Therefore, we can assume that job-related stress is an important predictor of burnout, the high stress one perceived in his job, the easier he would experience burnout.

More specifically, we found stress originated from student affairs was the main cause for job burnout. That means dealing with student affairs, or trying to communicate with students, which is a central task for college instructors is the main stressor for burnout.

Lammer, et al. (2010) and Onyett, et al. (1995) reported that job burnout correlated negatively with occupational commitment. This study found the occupational commitment as the consequence of job burnout. Reduced personal achievement could decrease individual’s commitment toward job directly. In this case, reduced personal achievement mediated the effect between stress and occupational commitment. A similar result was reported by Li Shang, et al. (2009) that job burnout acted as mediator between work stress and health function. Therefore, we can conclude that reduced occupational commitment is a consequence of job burnout.

Conclusion

Our first goal of this study has been to develop the burnout scale for college instructors in China. This scale has confirmed high reliability and validity. It can be a standard and effect scale to measure job burnout for college instructors in the future. Our second goal was to explore the antecedents and consequence of job burnout. As a main predictor of job burnout, job-related stress could positively cause an individual to feel burnout, while the burnout symptoms could lead to consequence-reduced occupational commitment. Therefore, removing related stressors can be assumed to be a good way to control job burnout, and then improve the individual’s commitment towards their job.

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Corresponding Author: Jianqinq Ma, E-mail: majq2007@163.com
The Construction of a Harmonious Relationship Between Enterprises and Employees, Based on a Psychological Contract

Yan Haqiang

Suqian College, Suqian, Jiangsu, China

Email: yanhaiqiang@163.com

[Abstract] With the development of economy, the relationship between enterprises and employees is becoming more complicated and diversified, and problems frequently outbreak. Based on the psychological contract, this paper establishes an enterprise and employee harmony analysis evaluation of multiple attribute mathematical models and proposes that we can achieve the target management by designing the right incentives, reduce employee turnover rate through scientific career planning, improve employee job performance through relieving work pressure improve management efficiency by improving management, and improve employee satisfaction through effective communication to establish a harmonious relationship between enterprises and employees.

[Keywords] psychological contract; harmonious relationship; incentive mechanism

Introduction

The harmonious relationship between enterprises and employees is an intrinsic need of a healthy enterprise and for steady development; it is also the foundation of the harmonious society, because the relationship between the staff and the enterprise is the most basic social relation and economic relation in society, and if the relationship is not harmonious, this society cannot be harmonious (The Harmonious Labor Relationship is the Foundation of the Harmonious Society, 2007). In recent years, however, while we enjoy economic achievement, the relationship between the enterprise and the employee has also become complicated and diversified, and problems frequently break out, which shows that the relationship between enterprises and employees is not harmonious. But the main reason for this disharmony is the violation of the psychological contract, which has a negative impact on employees’ attitudes and behavior, and further results in the loss of profits of the enterprise. A psychological contract is various unwritten expectations from both perspectives, and is agreed upon beforehand between the organization and the employee; it is a kind of implicit, internal, and informal documentation of hopes and promises between them. Although the psychological contract is intangible, it plays a tangible role. At present, enterprises value contracts, agreements and other tangible contracts, but a psychological contract is widely ignored, and the enterprise does not clearly understand the employee’s needs and desires of development, and tries to satisfy them, it does not give proper guides for employees’ demands, which leads to the low realization degree of employees demand, and the psychological orientation difference between enterprises and employees is bigger, so their relationship is not harmonious. Previous studies have consistently found that there is a high positive correlation between the employee’s perception of psychological contract violation behavior and bad employee behavior (including departure, careless work), a high negative correlation between positive employee behavior (e.g., job performance, organizational citizenship behavior, organizational commitment) and attitudes (such as job satisfaction, organizational loyalty) (Wei, & Zhang, 2004).
Analysis of the Factors Influencing the Harmonious Relationship Between Enterprises and Employees

Lack of Rationality of Incentives and Barriers to Target Management

Trying to motivate employees and increase employee motivation becomes the consciousness of many enterprises, but enterprise incentives tend to lack rationality, which often leads to the failure to achieve the purpose of the psychological contract management. Due to the differences among employees’ needs, even if the same employee in different stages has different demands, many enterprises in the process of specific incentives often appear monotonic and misplaced. Monotonic incentives mainly focus on material incentives, whereas misplaced incentives tend to be the unexpected incentives that employees don’t want in a certain stage. The fulfillment of psychological contract should be comprehensive incentives for employees and emotional incentives occupy an extremely important understanding. Obviously, monotonic incentives can not well express enterprise’s sincerity of fulfilling psychological contract and incentive purpose, and misplaced incentives are often contrary to employees’ psychological needs, and can not fully arouse the enthusiasm of employees, so both are the barriers to management target of enterprise psychological contract.

Uncertain Career and High Employee Turnover Rate

With the increased globalization orientation of the economy and increasingly fierce market competition, the career planning of the staff is essential. Employees choose a business often based on the purpose of personal development. But enterprises lay too much emphasis on meeting the organizational goals, and determination and implement of employee career are often ignored. Such high quality and good performance staff often show negative psychology because the enterprise does not fulfill the psychological contract and clear career prospects for staff, so in a market of economy society, his choice is only to move, and find a better job.

Too Much Pressure and the Professional Exhaustion of Staff Psychology

Pressure itself is used to propel employees, eliminate those who have poor work performance, have difficulty improving skills or don’t subjectively work hard, and improve job performance. But too much pressure is prone to cause a job burnout feeling. As competition intensifies, in order to make employees feel market pressure, enterprises require them to higher development tasks, and employee pressure grows gradually in geometric progression. But the psychological pressure employees can undertake is limited. When the increasing work pressure exceed expectations, it is easy to cause them professional boredom, namely the “vocational exhaustion”, whose performance lacking enthusiasm for work, increasingly bad work attitude, low work efficiency, and resistance to work and enterprise, which affects the harmonious relationship between enterprises and employees, so the benefits of the enterprise are also affected. All of this backfires.

Improper Management and the Decline of Management Efficiency

In the formation of a good psychological contract, the main aspect of contradiction lies in way of management. Enterprises, in order to maintain stability, mostly adopt the mode of centralized management as a whole, which can reduce the operational risk. But enterprise staff structure, composed of a new generation employees, are more willing to work in play and display their personality and ability, not only to obey their superiors, so they will want companies to give them enough space and certain rights. But managers do not take different management means and methods according to the different
stages of enterprise development and enterprise personnel structure change in different period, different characteristics and needs of the employees, and they do not gradually authorize employees. So employees have no innovation spirit and management ways and methods are in conflict with the time development mode, so that the staff enthusiasm suffers a setback, enterprise energy falls, and management efficiency is on the decline.

**Lack of Effective Communication and Employee Satisfaction Reduced**

In the face of market competition, enterprises usually would mainly focus on business development, and ignore the effective communication with employees, but communication is one of the important factors that affect the harmonious relationship between employees and enterprises. Because the form of psychological contract is subjective, when employees and enterprises interpret the contents of the contract, there would inevitably be a deviation. At the same time, with the change of environment condition of enterprise and people's ambiguity of understanding of the psychological contract, psychological contract violation is almost inevitable. Keeping a fair and dynamic balance of the contract is a process of interaction between enterprise and employees. When because of the lack of communication, it or he subjectively feels injustice of contract, any party organization or an individual often unilaterally makes some actions to encourage balancing a contract “payment”, so as to seek their own sense of fairness. When they can’t regulate or the adjustment process is too fast, a party will refuse to perform the contract. But on the communication with employees, managers often think, due to their low quality and lack of access to the situation, the staff can not propose valuable advice, so they discount the employees’ opinions and views, even if there is “democratic centralism”, Employees’ Congress, and Dialogue system in some enterprises, especially those involving enterprise development planning and policy of vital interests of employees. They cannot communicate with employees and these policies are not transparent to them, which increases the communication “gap”, so that differences of opinion between employees and enterprise are enlarged. Numerous studies have proved that psychological contract serves as the inner source of organizational commitment and job satisfaction (Wei, & Zhang, 2004). That is to say, the implement or breach of employee psychological contract is an important factor that has an impact on organizational commitment and job satisfaction of employees.

Due to the destruction of the psychological contract and the decline of organizational commitment, the above five factors affect the harmonious relationships between enterprise and employees, destroy the stable development of enterprise internal environment, directly affect the foundation of the joint efforts of both sides, and weaken the competitiveness of enterprises.

**Analysis Model of Harmonious Relationships Between Enterprise and Employees Based on Psychological Contract**

Building a harmonious relationship between the enterprise and the employees is to obtain a stable development of enterprises, so the enterprises can set an ideal psychological contract \( s^* \) to achieve the harmonious relationship between the enterprise and the employees and obtain certain earnings targets, namely, setting the ideal incentive system enterprises can offer or is willing to provide, staff career planning, pressure employees need to undertake, management style and the related sample of due communication as follows: \( s^* (x_1^*, x_2^*, \ldots, x_m^*) \). And from the employees’ perspective, they will have their own psychological contract \( s_i \) to realize their own ideal target, namely according to own need to work for the enterprise to gain the motivation, career planning, to take or accept work pressure and
management style, needed appropriate communication the psychological contract is formed: \( s_i \) (\( x_{i1}, x_{i2}, \ldots, x_{im} \)). Comprehensive evaluation mathematics model of multiple attributes is set up:

The weighted distance between the evaluated employee psychological contract \( s_i \) and enterprise ideal psychological contract \( s^* \) is defined as:

\[
y_i = \sum_{j=1}^{m} w_j f(x_{ij}, x_{j}^*), \quad i=1, 2, \ldots, n \quad (1)
\]

In the equation, \( w_j \) stands for weight coefficient, \( f(x_{ij}, x_{j}^*) \) for some component distance between \( x_{ij} \) and \( x_{j}^* \).

Usually take Euclidean distance (weighted), namely,

\[
y_i = \sum_{j=1}^{m} w_j (x_{ij} - x_{j}^*)^2, \quad i=1, 2, \ldots, n \quad (2)
\]
as the evaluation function. At this moment, we can evaluate the difference between the enterprise and the employees of the psychological contract and the degree of its implementation according to the value of \( y_i \) (obviously, the smaller value of \( y_i \) is, the better it is. In particular, when \( y_i = 0 \), \( s_i \) is met or known as the ideal point \( s^* \). If a smaller value of \( y_i \), says \( s^* \), the ideal of psychological contract set by companies, and \( s_i \), employee psychological contract, in some sense, are very close. The differences of the psychological contract between both sides are smaller or it is performed better. If what the companies can offer happens to be what the employees expect, the relationship between employees and enterprises is harmonious, and both sides can work together to achieve their respective goals. But the greater value of \( y_i \) says the differences of the psychological contract between two sides are bigger or performance of it is poor, so the relationship between the enterprise and the staff must not be harmonious, employee loyalty is low, and it is difficult for the enterprise to achieve steady development.

Therefore, the enterprise should be careful to analyze their own power and other related internal and external factors, determine the psychological contract and the appropriate scope of its adjustments, and decide the standards and conditions of recruiting employees and the employees can choose suitable for enterprise to develop according to the internal and external environment of the psychological contract. To the former hired employees, with their continuous growth and maturity, enterprises also need to timely and appropriately understand and adjust their psychological contract according to the changing internal and external environment, draw each other's distance closer, maintain a dynamic and harmonious relationship, and seek to achieve their common interests.

**Some Countermeasures for Constructing a Harmonious Relationship between the Enterprise and the Employees**

Based on the above analysis model, enterprises should, as far as possible, adapt to the staff's reasonable expectations in order to satisfy themselves and their employees, and build a harmonious relationship between the enterprise and their employees from the following aspects to maintain a stable and sustainable development of enterprises.
Reasonably-Designed Incentive Mechanism and Implementation of Management Objective

Whether the design of incentive mechanism is good or bad, whether it can satisfy the various needs of employees or not, whether it can motivate the staff to positively contribute to the enterprise or not, and whether it can stimulate staff conscientiously to fulfill job responsibilities are the keys to meet their inner commitments to the enterprise. On the other hand, the reasonable design of an incentive mechanism can make employees know what the enterprise advocate and discourage, understand the intangible promises that enterprises are expecting employees to make a corresponding contribution to the organization while satisfying the employees’ needs in order to implement target management. So organization should set up a scientific, reasonable and effective incentive mechanism that employees can understand and recognize according to different staff recognition and understanding of different obligations to meet the needs of different individuals, and ensure the consistency between employee work activities and the organizational goals.

Scientific Career Planning and the Reduction of Staff Turnover Rate

Career planning for staff is a good way to strengthen their organizational loyalty and prevent brain drain. The vast majority of employees in the knowledge economy era have a certain desire for their future career development; they may set the ultimate and progressive goals of development, and will actively create conditions to achieve their aspirations and goals. Whether the employees’ career goals can be fulfilled or not, or the degree of implementation is great or not depends not only on how hard employees work, but more still depends on the enterprise. Whether enterprises create conditions for the employee’s career has a huge effect on the realization of the enterprise’s strategic target. Scientific career planning based on psychological contract is in accordance with the enterprise strategy, the combination of the personal career development with enterprise development, the coordination of the staff and organizational development, and the joint promotion of the harmonious situation.

Alleviating the Staff’s Pressure and Improving Their Job Performance

Psychological research shows that the relationship between stress and job performance is inverted U curve. Man can play the best only under moderate pressure. Too low or too high pressure will cause low work efficiency. Nowadays, employees are increasingly faced with various pressures. If it wants to realize its own development, the enterprise needs the best performance of its staff and it must highlight the pressure and management on the staff. Enterprise should help staff relieve stress through various ways and channels, avoid the phenomenon of occupational psychological exhaustion, and ensure employees to correctly face tasks under affordable and appropriate pressure to improve work performance.

Improving the Ways of Management and Promoting their Efficiency

Through improving the ways of management way, the enterprise can give employees more opportunities to participate in enterprise management, arouse employees’ deep heart initiative and creative spirit, release the potential of employees, and make them grow up with the enterprise and get a sense of achievement in work. Employees involved in management, on the one hand, can express their opinions and accept management policies. On the other hand, it is a common decision making process of balancing the interests of all parties. High openness, democracy and participation of enterprise management make staff full of passion to work for the realization of the goals of the company, alter from “Want Me To Do” into the positive one “I Want To Do”, so that management efficiency is improved and the competitiveness of the company will be greatly improved.
Ensuring Effective Communication and Improving Employee Satisfaction

The establishment and maintenance of psychological contract is the interaction process between enterprise and employees, rather than the result of unilateral efforts. Therefore, to strengthen communication is a key link. Communication is an important way of clarifying psychological contract, repairing and maintenance of the psychological contract, and it is one of the effective ways to improve the quality of psychological contract management and to promote the harmonious development of enterprises. Enterprises should establish a trust mechanism, internally build two-way communication channels, maintain effective and smooth communication, timely understand the employees’ dynamic, and understand ambiguity and violation of psychological contract. According to the expectations and the existing problems, enterprises should offer solutions in a timely and effective manner, actively take effective measures, and repair and maintain the psychological contract in order to improve the employee satisfaction and make employees respected, and increase self-confidence. At the same time, organizational problems are also solved so that they can achieve a win-win situation in the harmonious relationship.

Conclusion

The relationship between employees and the enterprises is an important part of the production relations, and one of the most basic and most important social relationships. If they want to function normally, enterprises must have a harmonious relationship with employees, and they need to trust each other and work together. Based on the psychological contract, enterprises should employ employees with similar psychological contracts in the process of recruiting, and ensure its commitment complying with facts. Those employed staff should timely adjust their psychological contracts according to the internal and external environment changes to keep the contract fair and dynamic balance. In a word, enterprises should meet the needs of the staff and their own, design a reasonable incentive mechanism, scientifically make employee career planning, relieve pressure, improve management, and ensure effective communication and other measures to achieve the realization of both sides psychological contract, establish a harmonious relationship between enterprise and employees, improve enterprise cohesion, and enable enterprises to develop stably, continuously and rapidly.

References

Construction of Higher Vocational Teacher’s Occupation Growth System within the Community of Interests

Li Weihong
Lishui Vocational and Technical College, Lishui, China
Email: 971668916@qq.com

[Abstract] To realize the sustainable development of higher vocational education, a teacher’s occupation growth is the key. The article begins from the unique connotation of higher vocational teachers, which are endowed with the new period in the development of higher vocational education. This paper focuses on the major problems for the growth of teachers. With the platform of the community’s interest, it will try to discover the effective paths for the improvement of higher vocational teachers.

[Keywords] higher vocational teacher; occupation growth; community’s interest; path analysis

Introduction
Improving the quality of talent cultivation is the lifeblood of sustainable development of higher vocational education, and higher vocational teacher's competitiveness is the key to improve the personnel training; any measures of organization and implementation cannot do without the teacher’s actively participating in it. Therefore, focusing on vocational college teacher occupation growth, and leading the school’s education development with outstanding characteristics of teachers, is of great significance to embody the characteristics of the school. The article consults the opinions of professor Shao Jiandong, Dr. Wang Zhenhong, tutor Tang Jinhua and so on. In particular, the paper specializes in Jinhua Vocational and Technical College’s practice of the community’s interest.

This article begins from the unique connotation of higher vocational teachers, and with the platform of the community’s interest, it will try to discover the effective paths to the improvement of higher vocational teachers.

The Unique Connotation of a New Era in Higher Vocational Colleges’ Teacher Occupation Development
Specific vocational education cultivates high skilled talents, teaching environment implementation complexity of work and study, followed by traditional higher education, constituting the uniqueness of the vocational teaching profession. In the value orientation of cross-border education, the inherent spirit of high academic and technical in nature, embodying open multiple cooperation is the unique connotation. Teacher occupation growth of higher vocational teachers and their professional structure is a changing and rich process, with teachers’ teaching practice and reflection of truth through continuous understanding of higher vocational education.

Value Orientation of Cross-Border Education
High skill talent training is the goal of talent cultivation for higher vocational education, and higher vocational education plays an irreplaceable role in other education to promote local economic and industrial development. This cannot be substituted in the school-enterprise cooperation, and open education, combined with the engineering personnel training mode, shows to be the most incisive. As the
perpetrators of human culture – teachers – the value orientation of the formation of cross-border education is to achieve this critical training model.

First of all, teachers should have contingency awareness and innovation capability. Higher vocational school, regional economic and trade cooperation between enterprises, making the teaching content of the myriads changes, needs to be updated soon. Sometimes with industrial restructuring or technological updates, introducing new industrial cooperation as well as other reasons, does not need to be open. In some cases teaching materials need to be replaced, professional enrollment changes happen, and they need to accept the new curriculum. Teachers need to adapt to the teaching environment constantly; it is a changing reality. They need to establish a good attitude to accept the challenge, have an enterprising and innovative spirit, and his occupation career needs to be firmly close in an era of economic development.

Secondly, the teachers need to constantly enhance the awareness of self development. Their professional pursuit and development of the professional services industry are closely related, and by expanding the occupation teaching means of knowledge, professional knowledge and industry field work process knowledge, ensures the teaching practice and is forward-looking. In practice ability it is hard, do not empty talk teacher, only do in practice, practice, scientific research, the development of new technology and the ability of highly integrated teacher, in a field of two classrooms and enterprise work, to realize their own value.

Finally, the teachers need to have enough patience and confidence. Higher vocational students from the vocational college students cultural quality is not high, and the cultural foundation is weak; they entered the university study and professional knowledge with profound respect and humility, lack of confidence for the future occupation, showing more negative emotions. This requires teachers to give a full understanding and guidance to the students, patience and care more in daily study and life, and help them to establish the ideal occupation, good occupation planning and business planning. The students cannot do without the teacher hard water in each step, and this pain is more embodied in the guiding skills and the spirit of equality, equal communication and the students liking teachers, and teachers also establishing friendly friendship between teachers and students. Their dependence on the teacher is not only at the knowledge and technology level, but the spirit level is equal. Taking the students practice, whether of on-campus or off-campus internship, or internships, the students need to stand together through storm and stress, and the teacher will realize their own occupation value and students together, reflecting this as excellent teachers of higher vocational education culture. The core competitiveness is of higher vocational education.

**Natural Combination of Academics and Technology**

A highly skilled personnel training mission determines that the vocational colleges and social services are closely related to production; this close association determines the vocational teaching profession is a combination of academics and technology. On the one hand, teachers should dare to research technical problems, so that schools become a major science and technology to solve problems, with advanced manufacturing equipment and Humanities Research institutions, which reflects its academics. On the other hand, the service area economy and local industry are key to play in the school-enterprise cooperation in professional team of teachers applied research and product development capabilities so enterprises can improve processes, improve technology, and develop new products, providing companies with skilled craftsmen, which reflects its technology.
For teachers to teach knowledge and skills from the reserves, they should not only possess solid professional knowledge, but also be familiar with the professional work process knowledge. Since socio-economic development and industrial restructuring, new knowledge, new technology, and new requirements emerging, teachers want to update professional knowledge and refine their skills in order to ensure the scientific and teaching prospective. Occupational and vocational education openness of work and study, requires teachers to have academic and technical integration, to follow the development of the times.

**Open Multiple Cooperation Across the School-Enterprise**
The school-enterprise cooperation, combining learning with this background, with vocational teachers as traditional educators, and workers with higher education is relatively independent academic space, have a particular problem or a particular teaching career studying and exploring spirit, and this kind of spirit makes vocational education go beyond reality, making the teachers win the corresponding academic status. However, different from the traditional higher education workers, vocational teachers in the academic study or research content are not isolated, but are closely linked with the social reality of the skills. Vocational colleges are the biggest challenge facing teachers from students’ vocational skills acquisition process experience in imparting an excellent vocational teacher, but it must be a master. The name of a good teacher, and his teaching content and form must be open across diverse school-enterprise cooperation.

**The Main Career Growth Problems that Higher Vocational Teachers Face**

*Teacher’s Ability is Congenitally Deficient, and they Lack Value Orientations*

It is more difficult to adapt to the practical teaching in higher vocational education. Academic supreme values still dominate the occupation value orientation of higher vocational teachers, take the initiative to obtain occupation certificate of technical qualifications of the minority people, provide hope to business people who exercise also does not see more, and the knowledge structure of the primitive accumulation of the vocational college teachers’ ability is congenitally deficient, lacking occupation attitude and value orientation of their ability to make promotion, the awareness of their own professional development path is not clear, causing teacher groups in the combination of engineering talent training mode to be a difficult break through.

*Heavy Task of Teaching Leads to Difficulty in Achieving Practical Teaching Mode*

Higher vocational colleges aim at training high skilled talents, and highlighting the practical teaching is a fundamental difference in the academic university. In recent years, the number of students in higher vocational colleges has increased, and many high vocational development vocational students have reached several million people. In a few short years the total of students has increased several fold, but the number of teachers, teaching facilities and teaching equipment has not caught up, resulting in a teacher-student ratio imbalance. It is difficult to carry out the practice of small class teaching, and the classroom teaching mode can only have instilling-use teaching. In this way, students practice training opportunities, the teacher-student interaction is less, they can’t hear the learning needs of the students, and it is difficult to make the adjustments according to the status of the students. Practice teaching quality is still expected, and implementation of practical teaching with students as the center is still a gap.
Lack of Teacher Training Institutions Leads to Follow-Up Education Problems

In the training of teachers in the higher vocational institutions set, China is relatively backward, and the number of domestic specialized vocational teacher training institutions are not much. It is difficult to meet the multi-level of teachers and the needs of many types of vocational teachers professional training. In particular the teachers in society, and in the enterprise, enhance the ability to exercise their own practice platforms for exchange and they also do not have or perfect. The school itself has not yet established a complete system, including the teacher professional development planning, incentive mechanism, evaluation standard, management norms, organizational guarantee, professional team building and other related measures, and institutionalization and standardization of these measures has not been implemented well in higher vocational colleges.

Teacher training institutions need to call the school and enterprise cooperation of any party to build, not reality. As higher vocational schools, due to the shortage of educational funds, they hope that the government will build the platform, and the relevant enterprises and institutions will establish the teacher training mechanism; as the enterprise, they also hope to have substantial government incentives to ensure that investment of human and material resources will return. So, teacher training institutions, participated in by the government, schools, and enterprises, will be imminently widely-established

Community of Interests is the Platform of the Higher Vocational Teacher’s Occupation Growth

The community of interests is a professional school or choice of a better enterprise growth of regional economic in related fields, and jointly set up by a talent cultivating entity. The community of interests groups could be in the form of a college, department, center, and can also be a union body, foundation, and cooperative organization. The organizations include three aspects: decision-making, implementation, and consulting. Decision-making includes the important things of decision-making mechanism; the executive body implements the board president responsibility system under the leadership of the advisory body, and is founded by the business enterprises of industry experts and the experts of the committee on professional guidance, specialty construction, talent training scheme, curriculum system development puts forward valuable suggestions.

Finding the common interests between schools and enterprises is the survival value of interest-only. The workplace environment, advanced equipment, well-endowed training rooms and senior technical staff are owned by the value of enterprise and school. The enterprise is lacking achievement of science and technology, skilled labor, excellent teachers, and experiments. To lead the corporate culture of professionalism, innovation, service consciousness into higher vocational colleges, and also lead the books of higher vocational colleges, campus culture, the spirit of scientific into the enterprise, all constitute the driving forces towards the direction of common interests.

A mutually-beneficial winning school-enterprise cooperation is the starting point and the ultimate point. The interests of the community can play a very good platform utility in higher vocational teachers occupation growth. In the teachers’ development, enterprises not only provide opportunities for teachers to take exercise, also provide opportunities for teachers that do not have regular business practice, and let the backbone of enterprise technology and teachers form cooperative groups, forming a close cooperation mechanism. In addition, teachers can also go out of the school gate, to enhance the quality of employees, to provide the staff with culture training and enterprise culture, to develop training courses, to continue education for employees, and improve the employee quality of culture. With this platform, enterprise
donates teaching equipment, provides the practice base construction of schools, factories, and improved the teaching conditions in schools. Teachers have more opportunities to participate in the training programs provided by the manufacturer, and to accept the new knowledge. In addition, teachers still have more opportunities to participate in the transformation of development to the enterprise of new products and new technology achievements of the project. Multi-fields, and multi-level cooperation make the teachers have more interaction with the enterprise.

Path Analysis to Higher Vocational Teacher’s Occupation Growth Within the Community of Interests

School-Enterprise Cooperation Platform Can Coordinate Resources
A school-enterprise cooperation platform and services for teachers and staff interaction can allow coordination of resources. The system and mechanism innovation of school-enterprise cooperation builds a community. The enterprise is an important carrier of teachers’ training, making the teacher become a normal business practice and can have the following specific operations: one is the base of teaching and scientific research organization reconstruction, according to the professional characteristics of different professional organizations of project department, engineering departments, technical departments, marketing departments, administration departments, studio fusion school-enterprise traits, and growth through the real situation to promote teachers' occupation; second, it can build an on-the-job training platform, school development through the establishment of a teacher development center or a teacher occupation committee. These specialized teacher occupation growth management mechanisms, on the basis of different levels, different classes, and the establishment of three-dimensional layers at different stages of the training system for teachers training project, allow them to choose according to their own professional development level and demand, and to promote teachers' professional development; third, it can build a platform of cooperation and communication, expand communication channels, and regulate the exchange system, the exchange to persistence, standardization, further development.

Part-Time and Full-Time Teachers Form a Project Team
To establish the new teaching team under the different interests of the community by the professional characteristics, part-time teachers join the project team. They exchange training, assisting each other, highlighting the collective honor, promoting common development, emphasizing the whole team, collecting discussion, observing each other, visiting class each other and sharing resources. The school should create conditions to plan and organize the learning of team learning, such as inviting the famous vocational education experts or scholars, community business executives, industry department’s responsible person, for some report, lectures, seminars and any other forms. This solves the puzzles of the teaching team, and also finds the solutions for the problems of talent culture. The team members must get the personal occupation development plan by the direction of personal development. To attend the various training courses, the community of enterprises in practice, further study in colleges and universities designs to improve their occupation accomplishment.

With school-enterprise communities of interest, full-time and part-time teachers form the teaching community, the business community and learning community. Through various research and development projects, they achieve the knowledge, skills, and experience of teaching. They learn from each other in various communities throughout the teaching team to implement the collective optimization. Part-time teachers become full-time teachers in the communities. Teaching is the fulfillment of his duties.
School teachers, we call them full-time teachers, in the teaching team, need to play their own information and cultural advantages, together with the part-time teachers to carry out programs and professional development. Together, they make out the teaching materials, personnel training programs and other duties. So that the whole team can also be targeted to the enterprise technology research. They help enterprises solve practical problems, and in the process, team members will greatly enhance the practical ability.

**Construct and Strengthen the System**

First of all, establish a high-level talent selection criterion, and emphasize the school teachers’ growth policy. The policies include the teacher employment, job evaluation, selection criteria of professional leader, mentoring results, teachers serving local economy, coaching ability evaluation and other aspects of standardization and innovation. Second, further establish and improve the relevant teaching and social service management system. The system can cause the teacher occupation growth to the healthy development direction. Lastly, establish the evaluation system of teacher occupation growth. Enterprise evaluation and tutor’s evaluation are joined into the community of interests.

The community selects a group of prestigious university and enterprise experts for the master. Then the master picks one or two middle-aged and young teachers as pupils. The Master is responsible for the implementation of the training system, and the periodic evaluation of the pupils, who are the young and middle-aged teachers.

**Advocate the Incentive Mechanism, and Promote Career Progression**

Establish a target assessment and evaluation as the core development incentives to promote teachers' personal career development. Seek the ultimate goal belonging to school and teachers' development goals. Highlighting the level of teachers’ practice teaching quality, and focusing on teacher’ evaluation of the course construction, we set a hierarchical classification evaluation.

Establish mechanisms for teachers' continuing education training. Select community enterprises and vocational colleges as an excellent base for teacher training, but also select a foreign training base. Ensure that every teacher has a fixed time to the enterprise to carry out practical work and become personally involved in the production, management and technology development, particularly by providing some of the more long-term and systematic training opportunities.

Set up a platform of showing teachers’ results, by rating excellent chefs, studious apprentice, technical experts, and so on. This contributed to all kinds of teaching and skills to carry out competition. Encourage growth and development of new and veteran teachers. Incentive mechanisms should balance the material and the spiritual, the long-term and short-term, teams and individuals, schools and businesses’ interests. There is only one purpose of all of these, and that is to stimulate the growth and development of teachers in the pursuit of self desire to promote individual career growth and career the great development of school education.

**References**


Developing Psychological Capital to Cope with Psychological Poverty

Shenghong Zhang
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
Teaching and Research Institute of Political Theory, Zhejiang University of Technology, Hangzhou, China

Jianqing Ma
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China

[Abstract] Positive Psychological Capital (Psycap) is defined as an individual’s positive psychological construct which consists of four dimensions: self-efficacy, optimism, hope and resiliency, and it is a positive psychological state that can be developed. Psychological poverty refers to poor college students plunge them into mental conflict and confusion (such as inferiority feelings, remain inactive, jealousy, and so on) because of heavy economic pressure. To poor college students, educators must put emphasis on positive guidance and help them develop psychological capital to cope with psychological poverty: 1) Set goals, move forward step by step, and cultivate hope for life; 2) Be lenient for the past, appreciate nowadays, find ways to future development and facilitate optimistic attitude towards life; 3) Experience success and have a share in others’ success in order to improve self-efficacy; 4) Fully analyze the personal resources that an individual own in a bid to strengthen resiliency to face difficulties.

[Keywords] psychological capital; psychological poverty; optimism; hope; resiliency; self-efficacy

Introduction
Nowadays, psychological capital development has become a new tendency of human resource management. As the strong supply of human resource, college students play a more important role in social development. Therefore, developing college students’ psychological capital is definitely necessary. This paper tries to discuss the psychological capital development of poor college students in order to deal with psychological poverty.

Conception of Psychological Capital
At the end of 20th century, Seligman, the chairman of American Psychological Association (APA), called on that psychology should give up overemphasizing the study of people’s negative psychology, turning to the research of people’s positive psychology. He pointed out that some psychological factors that caused individual’s positive behaviors could be subsumed to the category of capital and paid more attention to, which led to researchers’ attention and research of “psychological capital”. Psychological Capital, which people usually call PsyCap for short, refers to “an individual’s positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans, Youssef, & Avolio, 2007, p. 3).

As a brand new theory, PsyCap has the following characteristics: Firstly, positive. Luthans emphasizes that besides the traditional use in economics and finance, the term capital has also been used to represent the value of human resources (human capital) as well as with other concepts (e.g., intellectual capital, social capital, cultural capital) (Luthans, Avolio, & Avey, 2007). The constituent elements of
PsyCap (self-efficacy, optimism, hope, and resiliency) have the meaning of positive tendency. Meanwhile, the whole (PsyCap) may be greater than the sum of its parts (self-efficacy, optimism, hope, and resiliency) (Luthans F, Youssef CM, Avolio BJ. 2007, p. 19). Therefore, PsyCap is positive. Secondly, measurable. Measuring is always the core of scientific research and application. The existence of some reliable and efficacious measuring tools brings PsyCap to the area of science. Psychological capital questionnaire (PCQ) measures different kinds of samples and get inspiring results. Nowadays, the researchers in China are trying to develop a more general psychological capital questionnaire, which can be applied to a wider range. With the help of these effective measuring tools, systematic analysis, prediction and control become feasible. Thirdly, exploitable. In the process of constructing and measuring the conception of PsyCap, Luthans emphasize in particular the “State-like” of its compositions that is relatively malleable and open to development (Luthans F, Avolio B, Avey J, 2007). Besides, they propose some methods and specific guidelines with regard to the exploitation of each psychological capital composition. In the perspective of application and training, such definition is attractive without any doubt.

Just because PsyCap is positive, measurable and exploitable, which deliver so much hope to people to develop human being’s PsyCap so that it can play a positive part in several areas.

**Manifestations of Psychological Poverty**

Today in Chinese colleges, about 15%-20% of the total students have economic difficulty, in which students with special financial difficulties take up 5%-10%, that is five or six million students. Thus the problem of poor college students has become a widespread social issue that parents, teachers and students worry a lot (Xiong Yang, 2008, p. 9), “Psychological poverty” of those students has been the focus of social attention. How to cope with poor students’ psychological poverty is a problem that worth researching and this paper discusses it from the angle of PsyCap.

Psychological poverty is a psychological plight and negative change of personality of the poor college students caused by serious economic stress. Comparing to economic poverty, psychological poverty is covert, but it directly affects the stability of colleges and the future development of poor university students. The deep meaning of psychological poverty include two parts, one is an individual has various psychological disorder; the other is an individual’s psychological condition which cannot adjust to social development. The former can be performed as self-abased, negative, pessimistic, jealousy and so on, while the latter is short of psychological qualities and knowledge structure that modern society requires (Zhanjiang Chen, 2007).

It needs to be stressed that not all the poor college students, due to the financial problem, will get psychological poverty. Negative psychological state and psychological problem are definitely not the unique characteristics of poor students. Some students living in rich family will also have psychological problems because of different reasons. The psychological poverty we usually refer to is mainly a problem of some poor college students, which has the following manifestations:

**Self-Abasement – Affect Interpersonal Communication**

Due to the limitation of living condition, psychological contrast between the poor students and the people around them will lead to self-abased psychology. Thus the poor students often think that they are inferior to others and keep negative attitude towards themselves. Self-abasement makes them lose courage to overcome difficulties, and choose the coping style of escape. According to a survey, about 60% poor
students feel ashamed about their economic condition, 22.5% feel self-abased, unwilling to let others know their current situation, and even reluctant to receive any kind of sympathy from teachers or schoolmates (Zhenxing Xu, 2010). Under such circumstances, they may more or less feel hostile or discontent to those superior students, and worsen the relation between schoolmates, affect ordinary communication and finally lead to interpersonal confidence crisis.

**Being Negative and Flinched – Limit the Development of One’s Ability**
Suffering from the double pressure of economy and study, the poor students cannot keep young Vigor in daily life. They are less enthusiastic to studies, less interested in activities, and short of confidence and energy. They can hardly keep positive states of mind to change the serious situation, lack initiative and self-confidence to deal with problem, thus fail to build up a sound personality. All these above limit the ability that needs to be developed and trained.

**Anxiety – Influence Learning Efficiency**
Anxiety is a kind of emotional state emerged when an individual is confronted with harmful stimulation or perceives a coming failure. The poor college students often worry about their tuition fee and living expenses, their hard-working parents, and they are even afraid the poor academic performance will sadden parents. Such worries make them live in anxiety, which may easily make them become absent-minded, forgetful, sleepless and so forth. At first, the students want to work hard to have a good academic performance to repay their parents. But finally overanxiety compromises their learning efficiency.

**Jealousy – Make Behaviors Immoral**
As a relatively weak group, poor students will become self-enclosed and anxious in communication, and jealous of other students, which may do harm to normal social activities. Sometimes, they may have frustration-attack behaviors, and cannot be much flexible to handle problems. What’s more, some poor students may even gamble or theft because of the poor situation. Recently, “psychological poverty” has accompanied by increasingly criminal cases and attracted much social attention.

**Psychological Deprivation and Helplessness**
Psychological deprivation and helplessness is a kind of helplessly subjective feeling caused by the belief that people do not get their own rights and interests and they are deprived by others or society. It is a combination of dissatisfaction and rancor that people think they are treated unequally (Xuhui Xie, Ying Sun, 2004). Psychological deprivation and helplessness is a negative evaluation, coming from poor students’ subjective judgment of their own economic interest. When poor students make a comparison of their own basic necessities of life with other students, the sense of deprivation will bring up naturally.

**Coping with Psychological Poverty – To Develop Poor College Students’ PsyCap**
Self-efficacy, optimism, hope and resiliency are the four dimensions of PsyCap, which is necessary to have a better life. But the students with psychological poverty lack the four characters. According to the research, the level of the poor students’ self-confidence, hope, resiliency, optimism and the whole condition of their PsyCap is obviously lower than the control group who is not so poor (Pan, & Zhou, 2009). Economic poverty makes them self-abased, negative, flinched, and jealous and have psychological deprivation and helplessness, which needs to be improved. It is found that the above symptoms of these students with psychological poverty may form a relation of inter-restriction with the four characters of
PsyCap. Only if the students are guided positively, developing the qualities of self-confidence, optimism, hope and resiliency, can they deal with psychological poverty efficiently.

**Set Goals, Move Forward Step-by-Step, and Cultivate Hope for Life**

As the most widely recognized theory-builder and researcher on hope, Snyder defined hope as "a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy), and (2) pathways (planning to meet goals)" (Snyder, Irving, & Anderson, 1991, p. 287). That is an individual can set realistic and challengeable goals, and finding relevant pathways to achieve these goals. When one pathway is blocked, he can still find another substitute way to realize his goals.

To those poor college students, planning their learning career is basic. They should set a goal for their future development. Goal is a kind of value based on people’s needs. Since the needs are stratified and multiple, students have to divide their great development goal into smaller and more easily achievable ones. Once they achieve a small goal, they can have a reward for themselves in order to encourage them mentally, thus these students may have greater hope of life. Besides, the poor students should actively take part in both various activities in and after school and action plans that they design for themselves. Participation can make students analyze and ponder continuously, and make impossible things more possible. Finally, schools can provide targeted tutorship and training for students, so that they can have more chances to participate in, interact and share with.

**Be Lenient for the Past, Appreciate Nowadays, Find Ways to Future Development and Facilitate Optimistic Attitude Towards Life**

Schneider (2001) presents three perspectives that are particularly applicable to developing realistic optimism in the workplace: leniency for the past; appreciation for the present; and opportunity seeking for the future (Schneider, 2001). These three strategies can be used to develop poor college students’ optimism: first is to tolerate the past. People should learn to reorganize and accept their past. The past poverty, failure and contempt has gone, while how to face the future is the key. It’s a positive reconstruction skill that respects the realistic situation, and it can make the poor students calm down to have a favorable judgment, and furthermore choose a better attitude in response to the uncontrolled factors in environment. Second is to cherish nowadays. No matter what happens and no matter how bad things go, people should find and enjoy the positive aspect. Appreciating nowadays can prevent poor students from having the idea that they are losers, which may make students lack of motivation to change their life and give up working hard for future. Third is to look forward to the future on the basis of reality. People should seize every opportunity to make great efforts, and take the future uncertainty as the chance to make progress, which is the best presentation of positive action.

In the process of positive attitude formation, group counseling is an effective and practical method. By designing some activities in group counseling, poor students can recognize that the current dilemma is a situation with high consistency, low continuity and high uniqueness, which can form external attribution: he or she is not the only poor student because the quantity of poor college students increases rapidly due to various reasons (high consistency); the current poverty cannot last long, he or she cannot be poor all the life because life can be changed by working hard (low continuity); apart from poor life, he or she has many positive qualities, such as the desire to be better, kindness, strong will and so on (high uniqueness). JinHe, et al. conducted a research which proves such external attribution can help poor students adopt a more optimistic explanation. According to the poor students’ evaluation of group counseling’s effect, the group members have acquired four points from the group counseling: feel positive
emotion, learn positive cognitive methods, bring up positive personality and deal with the current problem (He, & Fan, 2010).

**Experience Success and Have a Share in Others’ Success in Order to Improve Self-Efficacy**

“Self-efficacy” was put forward by psychologist Albert Bandura, and he defined it as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave” (Bandura, 1994). According to Bandura’s study, self-efficacy can be developed by experiencing success, vicarious experiences, social persuasion and reduce people’s stress reaction (1994).

Success does help to strengthen people’s self-confidence, which in return can lead to higher performance and success, and make such spiral happen continuously. Colleges should create various opportunities for poor students, so that they can experience and understand their abilities, and show their talents in their daily life by managing to handle problems. It is a good way to acquire sense of accomplishment and improve self-confidence in the progress. Except for experiencing success directly, providing poor students with vicarious learning and simulation, which is to observe other students’ success or failure, is also powerful way to improve self-efficacy. When an individual observes that people like himself finish some tasks and realize goals, and he is also interested in these tasks and goals, he will become more confident to do his own tasks. Colleges can invite some successful graduates back to college. These graduates who used to be poor students can set a good example for the students. By analyzing the graduates’ effective behaviors and strategies, observers can get enough vicarious experience. Besides, college can pair the graduates and the students, providing much practical experience by playing a role of transmission, aid and lead so as to help poor students overcome difficulties and psychological confusion. In addition, a positive reinforcer such as concern, approval and positive feedback can change an individual’s self-suspect into self-efficacy. In daily life, if advisors or teachers who are often in touch with the poor students can feedback positively, they can do great help to improve the students’ self-confidence.

**Fully Analyze the Personal Resources that an Individual Owns in a Bid to Strengthen their Resiliency to Face Difficulties**

In PsyCap, resiliency can be defined as “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” (Luthans, 2002). That is, by overcoming difficulties and setback, the resiliency that an individual possesses can help him grow up and strengthen his advantages. The influence of poverty on an individual’s growth is double sided: to a person with high ambition and desire to make progress, poverty is a test and stimulation; if a person lacks of dreams and pursuits, is always negative and hesitates, poverty is a disaster. Therefore, enhancing an individual’s resiliency is of great importance.

Resiliency is a kind of dynamic and exploitable psychological advantage. First of all, poor students should have a reasonable assessment to the current dilemma they are confronted with instead of evading deliberately. Objective poverty is neither caused by their faults, nor is it a shame. Poverty is only reflected in economy, which doesn’t mean they are inferior to other students. These students should transform pressure caused by poverty into motivation to study and live better, and vent negative emotion timely in order to relief mental stress. Next, poor students can fully analyze their own external support and internal resource. Nowadays, apart from the economic support from national policy, poor students have many powerful external support, such as the assistance of scholarship, work-study program, teachers’ concern
and schoolmates’ acceptance and support, targeted psychological counseling and practical skills training. In internal resources, the students are receiving higher education. Their knowledge is accumulating and ability is promoting by exercising. If an individual is equipped with qualities like fortitude and optimism, they will look at problems from a positive aspect, which will be their most powerful resource. Finally, poor students can consciously take advantage of their own resources to grow up in a healthy manner. It is the fact that living in plight is not totally bad. Sometimes, crisis will become a favorable turn, which needs an individual to regulate and control his consciousness. Poor students should realize psychological poverty is much more terrible and sadder than material poverty. Understanding how to acquire knowledge and put it into practice is intelligent. Although the students are confronted with material poverty, they are in the starting point to get spiritual wealth. Thus, they should cherish the opportunity to study in colleges and make use of current resources to change their fate.

References

Corresponding Author: Jianqinq Ma, E-mail: majq2007@163.com
The Effects of Different Social Support and Work-Family Conflicts on Police Physical and Psychological Health Problems, as well as Anxiety Problems

Chen Xinmiao
Zhejiang University of Media and Communications, Hangzhou, China
Email: chenxinmiao_456@126.com

[Abstract] Police officers are a special social group of people who may be in an emergency at any time, and suffer much more stress on both their physical and psychological health. This study examines the effects of two important factors – social support and work-family conflict on physical and psychological health of members of the police force. Results demonstrate: (1) Support from family members, supervisor and colleagues are negatively related to physical and psychological health problems, as well as anxiety problems; (2) two dimensions of work-family conflict both have positive correlations with psychological problems and anxiety problems; (3) work-to-family conflict is positively related to physical health problems; (4) the two dimensions of work-family conflict are mediators in the relationship between different social support and physical, psychological health problems and anxiety problems.

[Keywords] social support; work-family conflict; physical and psychological health problems

Introduction
Public security organizations maintain social public order in accordance with the law. Police officers are the most important human resources as direct executors of functions. As contradiction is becoming more obvious, while facing new challenges, overloaded and high strength work brings various physical and psychological problems upon the police, which seriously hamper their performance. Therefore, the question on how to ensure their health so that they can work efficiently continues to attract research attention nowadays.

The work-family conflict issue has important implications for understanding the competency model and increasing the efficiency of human resource management. Previous studies showed that high-level work-family conflict is related to negative psychological outcomes, such as an increase in depressive symptoms, and a decrease in life satisfaction (Eby, Casper, et al., 2002). There’s also evidence that work-family conflict will lead to a lower self-assessment on physical condition, poor appetite, obesity and diseases like hypertension (Frone, et al., 1997).

Meanwhile, researches indicate that social support has a positive relationship with work performance and health condition. Loss of social support is negatively related to anxiety, worry and depression. Lowenthal and Haven (1965) found that close contact with friends effectively decreases depressive symptoms. Despite the impact of life events and coping style, social support has an inverse relationship with the scores people get in the General Health Questionnaire in an emergency. This study aims to examine the effects of social support and work-family conflict on physical health, psychological health and anxiety problems. Suggestions would also be given to public security organizations to help improve their police management system and to take effective measures.

Theoretical Background and Hypotheses
Work-family conflict is caused by either hard to handle family responsibility because of work tasks or the inability to fulfill work requirements because of a heavy burden from the family. According to Greenhaus and Beutell (1985), work-family conflict is “a form of inter-role conflict in which the role pressures from
the work and family domains are mutually incompatible in some respect”. Work–family conflict is considered to be bi-directional (Adams, et al., 1996; Frone, Russell, & Cooper, 1992a); for example, work can interfere with family (work-to-family conflict; WFC) and family can interfere with work (family-to-work conflict; FWC) (Allen, et al., 2000).

Previous studies focus on two of sub-constructs: received social support and perceived social support. Measures of received social support are designed to assess the specific supportive behaviors that are provided to recipients by their support networks. Perceived social support measures recipients’ perceptions concerning the general availability of support and/or global satisfaction with support provided (Sarason, Sarason, & Pierce, 1990).

Supportive work environment researches, which include supervisor support, organizational support, and colleague support, showed that support from supervisors have a positive influence on potential work-family conflict (Eisenberger, Huntington, Hutchinson & Sowa, 1986; Parasuraman, et al., 1992). Many results indicate that work-family conflict has a negative impact on physical and psychological health, while high-level social support is relevant to low death rate, and it also decreases risks of mental distress. In this study we chose two typical supporters – supervisor and colleague support and family member support – to examine their effects on physical and psychological health. In addition, special work nature may lead to more anxiety problems, so we regard anxiety problem as a factor independent from psychological health problems. Also, the impact of two dimensions of work-family conflict – work-to-family conflict and family-to-work conflict – was investigated.

According to relevant theories and the above analysis, the hypotheses are as follows:

**H1a:** Supervisor and colleague support is negatively related to WFC/FWC.

**H1b:** Supervisor and colleague support is negatively related to physical, psychological health problems and anxiety problems in police officers.

**H2a:** Family member support is negatively related to WFC/FWC.

**H2b:** Family member support is negatively related to police physical, psychological health problems and anxiety problems.

**H3a:** WFC is positively related to physical, psychological health problems and anxiety problems in police officers.

**H3b:** FWC is positively related to physical, psychological health problems and anxiety problems in police officers.

**H4a:** FWC is a mediator of the relationship between support from a supervisor and colleague and police physical, and psychological health problems, as well as anxiety problems.

**H4b:** WFC is a mediator of the relationship between support from a supervisor and colleague and police physical, and psychological health problems, as well as anxiety problems.

**H5a:** FWC is a mediator of the relationship between support from family members and police physical, and psychological health problems, as well as anxiety problems.

**H5b:** WFC is a mediator of the relationship between support from family members and police physical, and psychological health problems, as well as anxiety problems.
Methods

Subjects
Subjects were chosen from public security organizations in Ningxia Hui Autonomous Region using stratified sampling method first and then randomly collected data from police officers in each substation. 527 valid questionnaires were retrieved; 75.3% of the respondents were male and 24.7% were female. The age of the respondents ranged from 20 to 60 years old. 82.4% of the respondents were married and 15.2% were single. In addition, 6 people were divorced and 3 were bereft of their spouses.

Measures
A social support scale was adapted from Perceived Social Support Scale (PSSS) (Blumenthal, 1987) to measure the level of support people perceived from various kinds of social support sources. According to results of the preliminary interview, we put ‘relatives’ into ‘family members’, and deleted ‘teachers’ and ‘classmates’, which have little relationship with police work and daily life. Finally, eleven items were included and divided into two dimensions – family member support, and supervisor and colleague support. Responses were obtained on a five-point Likert scale from 1 (‘strongly disagree’) to 5 (‘strongly agree’). (Family member support, alpha=0.802; supervisor and colleague support, alpha=0.782)

Work-family conflict was measured using the scale primary and secondary teachers’ work-family questionnaire (Wu, 2009). Some items were revised by results of interviews and occupation features of the police officers, after preliminary survey and items analysis, and ten items were left divided into two dimensions of work-family conflict (WFC/FWC). Subjects rated the items on five-point Likert scale from 1 (never) to 5 (always). (FWC, alpha=0.831; WFC, alpha=0.851).

Physical health problems, psychological health problems and anxiety problems were assessed with nineteen items from Mandarin Chinese for Taiwan version of the PHQ (Spitzer, Williams & Kroenke, 2005). For physical health problems, responses of six items were provided on a five-point Likert scale from 1 (never) to 5 (always), alpha=0.860. Psychological health problems was assessed with seven items, and responses were provided on a five-point Likert scale from 1 (none) to 5 (almost every day), alpha=0.859. Anxiety problems were assessed with six items. Responses were provided on a five-point Likert scale from 1 (not at all serious) to 5 (very serious), alpha=0.903.

Data Analysis
The measures were subjected to Cronbach alpha analysis through SPSS 17.0 to provide support for the issue of internal consistency. Amos 17.0 was used through path analysis.

Results

Common Method Variance Post Hoc Test
Harman’s one-factor test (Podsakoff & Organ) was used to test whether there was common method variance. We entered all items of independent and dependent variables into SPSS, and then conducted factor analysis. Eight components were extracted when the matrix was not rotated. The component that accounted for most of the variance explained only 26.46% of all the variance. Therefore, there’s no common method variance problem in our study.

Correlations of Study Constructs and Path Coefficients
Correlations for the constructs used in the study can be viewed in Table 1. The findings of this study indicate that most of our hypotheses are tested preliminarily. However, significant results based on
bi-variable analysis couldn’t prove the significance when all variables were tested at the same time. So, regression analysis was used to give further proof of our hypotheses (Table 2).

**Table 1. Inter-Correlations Between the Study Variables**

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<td>1. Family members</td>
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<td>2. Supervisor and Colleague</td>
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<td>3. FWC</td>
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<td>4. WFC</td>
<td>-0.145**</td>
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<td>0.615**</td>
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<td>5. Physical problems</td>
<td>-0.190**</td>
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<td>0.242**</td>
<td>0.404**</td>
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<td>6. Psychological problems</td>
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<td>-0.314**</td>
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<td>0.506**</td>
<td>0.626**</td>
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<td>7. Anxiety Problems</td>
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Notes: *p< 0.05, ** p< 0.01, *** p< 0.001 level

**Table 2. Standardized Regression Weights**

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<td>Anxiety Problems</td>
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Notes: *p< 0.05, ** p< 0.01, *** p< 0.001 level

**Moderating Effect of WFC and FWC in the Relationship of Social Support and Physical, and Psychological Health Problems, as well as Anxiety Problems**

Table 3 lists the fitness indexes of the path model. All indexes reached the standards, which were needed in the fit model, indicating a well fit model.

**Table 3. Fitness Index of Path Model**

<table>
<thead>
<tr>
<th></th>
<th>GFI</th>
<th>(\chi^2)</th>
<th>df</th>
<th>(\chi^2/ df)</th>
<th>CFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.998</td>
<td>4.166</td>
<td>4</td>
<td>1.041</td>
<td>1.000</td>
<td>0.984</td>
<td>0.996</td>
<td>0.009</td>
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</table>

According to Figure 1, FWC is a full mediator between supervisor and colleague support and anxiety problems, and this partly supports H4a and H1b. FWC is a full mediator between family member support,
psychological health problems, and anxiety problems, and partly supports H5a and H2b. WFC is a partial mediator between supervisor and colleague support, and physical and psychological health problems, and a partial mediator between supervisor and colleague support and anxiety problems, so H4b is supported. WFC is a partial mediator between family member support and physical health problems, and a full mediator between family member support, and psychological health problems and anxiety problems, H5b is supported.

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Figure 1. Path Analysis Model and Path Coefficients

Discussion

The result of our study verifies that previous researches showed the influence of social support on work-family conflict (Frone, et al., 1997) and health problems (Hutchinson & Sowa, 1986). Two dimensions of work-family conflict – work-to-family and family-work conflict – both have a positive relationship with psychological health problems and anxiety problems. Work-to-family conflict has positive relationship with physical health problems.

As summed up by Kan Shi and Miao Li (2003), social support influences work-family though colleague support or a supportive environment. Our results also verified this conclusion. Specifically, work-to-family and the family-work conflict both are mediators in the relationship between supervisor and colleague support and physical and psychological health problems, and anxiety problems. WFC and FWC are both mediators in the relationship between family members and psychological health problems and anxiety problems. Besides, work-to-family conflict is the full mediator between family member support and physical health problems.

The results of our study support most of our hypotheses, however, part of our hypotheses were not proved, including “FWC is positively related to police physical health problems”, “FWC is the mediator between family member support and physical health problems” and “FWC is the mediator between supervisor and colleague support and physical health problems”. Some previous researches showed that FWC is related to a degree of excessive drinking, but isn’t related to worker’s health (Frone, 1997). But there are also other results indicating that the two dimensions of work-family conflict both negatively
predict psychological health significantly (Xie, Zeng, & Shi, 2007). Police officer’s work obstructs their rest and then leads to physical health problems, but the influence of family affairs is not obvious.

**Suggestion**

According to this study, increased support from supervisors and colleagues can decrease health problems through decreasing the work-family conflict. Public security organizations can offer personal treatment for police officers combining their work and family features. For example, supervisors should show solicitude for their subordinates. Family members, especially the spouse, should give them more emotional support and share more family affairs.

**References**


A Study on Employability of Contemporary Chinese University Students and Improvement Strategies

Zhu Xiuxiang and Ma Jianqing
Teaching and Research Institute of Political Theories, Zhejiang University, Hangzhou, China
Email: zhuxiuxiang@zju.edu.cn and Majq2007@163.com

[Abstract] Employment difficulties for university graduates are a focus in China today. The key to this problem lies in the improvement of students’ employability. Basing itself on the definition of “employability”, this paper analyzes the challenges facing Chinese university students and their fundamental causes in this regard. The authors also propose solutions for improvement from the perspectives of the students and the university.

[Keywords] university students; employability; improvement strategies

Introduction
Employment difficulties for university graduates are a focus in China today, which is related to the development of the country’s higher education, as well as the economic growth and social stability. A good vocation is of great importance in life. Successful employment is essential for university graduates to make a living, to enhance themselves and to actualize their personal worth. For them, employability is a defining factor for finding a good job. However, it is the lack of employability that has contributed to employment difficulties for Chinese university students. Generally, education is expected to improve employability. But the current educational system in China fails to undertake this task. Therefore, employability development should be placed at the center of China’s higher educational reform.

Definition of Employability
As Mansfield (2001) pointed out, it was the British expert Beveridge who introduced the idea of employability in 1909. The concept was widespread throughout Europe and the U.S. in the following 100 years. Employability was initially defined in terms of the availability to be employed, referring to an individual’s ability to gain and maintain employment.

The definition of employability is yet to be agreed on in the western countries. Employability emphasizes an individual’s specialized knowledge, skills and characteristics required to gain and maintain employment. The International Labour Organization (ILO), for example, pointed out that employability is individual ability to gain and maintain a job, promote in working and respond changes in work (2004). However, Sherer and Eadie (1987) believed that employability skills were not job specific, but were skills that cut horizontally across all industries and vertically across all jobs from entry level to the chief executive officer. This definition clearly focuses on the universality of employability. According to Lee Harvey (2001), another British expert on employability, its definition “implies that employers have an idea of the attributes that are necessary for the effective functioning of their organisation…” The U.S. Education & the Workforce Committee also pointed out that employability refers to not only the ability to get a job, but also the ability to exhibit one’s potential to promote working and to contribute to the company’s strategic goal.

Zheng Xiaoming (2002), a Chinese researcher, defined employability as a comprehensive ability that university graduates have acquired, through knowledge acquisition and comprehensive personal development, to achieve the career goal, satisfy the needs of society and realize one’s own values in life.
Generally speaking, this point of view is representative of a majority of Chinese researchers. Based on this definition, combined with the status quo of the Chinese graduates’ employment, employability can be viewed as a student’s comprehensive ability to seek, gain and maintain employment.

The employability of university students can be divided into three aspects: professional capability, non-professional abilities, and job-seeking skills.

1. Professional capability refers to the ability to master the rationale and methodology in one’s area of study, to form a systematic knowledge framework, and to apply the knowledge in the actual work.
2. Non-professional abilities refer to the skills linked with communication, teamwork, adaptation, organization & management, practice, analysis and judgment. Different from professional skills, they are not acquired solely through textbooks or examinations. Instead, they are cultivated outside the classroom, usually through work, practices, activities and social interactions.
3. Job-seeking skills refer to an individual’s ability to exhibit his/her advantages, make use of career information and gain employment. They also include but not limited to the abilities concerning the collection and analysis of information, self-evaluation, opportunity analysis, decision-making and self-marketing.

**Lack of Employability in Chinese University Students and a Cause Analysis**

A closer look at the status quo of the employability of Chinese university students proves that the lack of employability is evident. To be specific, the problem is three-fold: First, the students are weak in their professional skills. In response to a survey question, “How well can you apply your professional knowledge in the practice”, only 10.1% of the students answered “very well”, and 48.7% answered “quite well”. In other words, more than 40% of the graduates either think themselves professionally unqualified or have little idea in this respect. In particular, 5.2% of the interviewees answered “very worse”, which further shows the students’ lack of expertise.

Secondly, the students are weak in basic skills, practices and experience, failing to meet the demand of the employers. In recent years, many of the Chinese students attending the university are the single child of the family. A majority of them are dependent with little experience in practical work. Moreover, Chinese universities in general are giving inadequate attention and training to the improvement of the students’ practical and verbal skills. Insufficient social practice has led to insufficient development of practical skills, inaccurate self-evaluation, a lack of knowledge in enterprises and society, the absence of a career goal and difficulty in accepting and integrating into a corporate culture.

Lastly, the students are weak in job-seeking skills. This problem is mainly reflected in their lack of preparation, insufficient knowledge of the current employment situation, and outdated concepts about career life, over-expectation, and inaccurate self-evaluation. It is also reflected during the job-hunting process where they fail to utilize effective techniques and strategies. In addition, they lack forethought in career planning and professionalism, and prepare their application materials in a mundane fashion.

Objectively speaking, the employability difficulties of Chinese university graduates come from multiple aspects – mainly from students themselves and from universities:
Universities Fail to Give Enough Attention to the Students' Employability.

Universities should be a main stage for employability training. Yet they are not paying enough attention to this problem, especially in the following aspects:

They focus more on the size of university rather than its education quality. Some universities, despite an insufficient number of teachers and a shortage of facilities, lavish on its plan to expand. Inadequate attention to the teaching resources and the education quality has resulted in a large number of underachieving students.

They highlight books rather than practice. The traditional way of teaching in Chinese universities is basically examination-oriented, emphasizing book knowledge while ignoring individualized guidance and learning skill development. As a result, students put much of their effort on improving test scores, leaving little time for the training of practical, communicational, verbal and innovative skills.

They fail to adjust its available majors and curriculum in response to the changing demand of the job market. Many Chinese universities simply offer programs as required by the supervising body, and sometimes they do so merely based on its existing teaching resources and the economic return without a comprehensive market research. Therefore, they fail to consider the demand of the job market in a future period. Such short-sightedness easily isolates the campus training from the real job market.

They fail to set the priority of employability development at a strategic height and are unable to establish a well-organized training system. Most Chinese universities are yet to establish a clear agenda to include employability into its long-term plan; they have not identified ways to integrate employability into its main educational goal.

Students Fail to Develop Employability as Desired

University students should actively improve their employability. However, with traditional mindset still prevailing, they are not fully aware of the importance of employability development and lack a sense of urgency. First, they emphasize much more on test scores than practical skills. Under the traditional educational philosophy, some students are paying too much attention to the test score—they consider it the most crucial criterion for self-evaluation. Meanwhile, they overlook the importance of capacity building, including the abilities concerning knowledge acquisition, problem raising and solving, innovation, interpersonal relationship, adaptation to social changes, social judgment, decision-making, and participation.

Secondly, they emphasize much more on professional knowledge than practical skills. Some students immerse themselves in books to learn professional knowledge while turn a blind eye to the rest. They consider extracurricular activities “a waste of time”. As a result, their overall abilities are hampered, failing to meet the expectation of the university or the employer.

Thirdly, they are unable to adjust their career plan to the changing employment situation. Most university students are aware of employment difficulties, but they have little timely and updated knowledge about the employment policy, the general situation and even themselves. Therefore, they cannot evaluate themselves accurately or comprehensively, and do not have a clear picture of their future plan. Moreover, a majority of students are not particularly concerned with the planning of a medium- or long-term goal of their studies and career, let alone the planning of skill training and capacity building to this end.

Strategies for Improving Employability of University Students

Employability improvement is a complex and systematic process that does not rely on a single perspective. It calls for the collaboration between the government, universities, enterprises, students
themselves and other stakeholders from social organizations. Universities and students, however, are the most crucial perspectives. They are playing a pivotal role in the students’ employability improvement. This paper will propose solutions and suggestions from both aspects.

**Higher Institutions Should Focus on Educational Reform to Bring Their Function of Employability Development into Full Play**

Higher institutions are a key provider of employability development services, and share compelling obligations to this end. They should be fully aware of the importance of employability development, and carry out employment-oriented reforms on different aspects. Particularly, attention should be paid to improving the employability development system, reforming and innovating the mode of talent training, and creating platforms for students to enhance employability.

First, universities should raise the awareness and incorporate employability development into its general educational goal. To be specific, they should adopt the following approaches: (1) Adjust its programs of study to ensure that the courses are adapted to the needs of socio-economic development. The course contents should also be updated to reflect the latest breakthroughs in a specific field of study. Universities are recommended to conduct surveys six months after the graduates left the campus. Such follow-ups would allow universities to find out more about the students’ employment and their self-evaluation at work, so that the programs of study in the university can be adjusted accordingly. (2) Promote student-oriented subjective education and individualized education programs. This can be achieved through educational programs that highlight discussions, debates and heuristic teaching methods, motivating students to learn and improving their thinking ability and practical skills. (3) Strengthen practical teaching. On one hand, this teaching method may involve case studies, classroom simulations and practice training, allowing students to combine abstract knowledge with real-world situations and thus improve their logic and communicational skills. On the other hand, universities may establish a platform for cooperation with recruiters to provide internship opportunities. Meanwhile, teachers are encouraged to participate in business management practices to master new knowledge and skills so as to make their courses relevant and practical. In addition, the establishment of social practice bases in the campus should be further encouraged.

Secondly, universities should perfect their employment guidance services and establish a career services system. Universities should view the employment services as their lifeline. They should place the improvement of employability at a strategic height through all possible means, providing a complete set of services and diverse and professional employment guidance. Their work should focus on the improvement of the students’ employability during their studies and cultivate in them good qualities and a healthy mindset.

To this day, most Chinese universities have established something like an Employment Information Center. They are suggested to analyze the weaknesses of their students’ employability before providing specific career guidance based on the demands of the job market and recruiters. Their work may include: (1) Offer employment guidance courses and equip the new curriculum with professional teachers. Universities should also provide lectures on employment guidance to help freshmen better understand their majors and prospects; universities should provide the evaluation on employability to help the students plan their college life and set a career goal. (2) Give greater attention to campus activities. Campus activities improve the students’ practical skills and help them build a solid foundation for the career life. (3) Enhance the training of job-hunting skills, including resume writing, interview skills and
job search etiquette. (4) Establish a career network. The network should be aimed at providing information about seeking job opportunities and running start-ups so that the students are allowed access to the background information of the recruiters, corporate culture, selection criteria, job vacancies and contact details. At the same time, universities can offer personalized information about their graduates to the job recruiters, and invite companies to organize employment briefings in the campus to establish a two-way channel between job-seekers and recruiters.

Thirdly, universities should develop the overall ability of college students. With the economic development, professional knowledge alone is not enough to satisfy the demand of society. College students should combine theoretical knowledge with practice to improve their quality and abilities, including communication skills that allow them to express themselves accurately. They should also emphasize teamwork and time management skills.

University Students Should be Aware of Their Obligations and Improve Their Employability from Multiple Aspects

Students are the key to their improvement of employability. Every college student should have this awareness, change their attitude in this regard and attach greater importance to the development of employability. First, students should improve their overall ability and core competence. The overall ability can be categorized into two types, namely “soft power” and “hard power”. “Hard power” can be interpreted as professional knowledge and skills while “soft power” represents a person’s basic qualities. To enhance the core competence, the improvement of hard power is a must. This requires the utilization of subjective initiative, hard work, employment-oriented study planning, and the improvement of professional knowledge and skills. Professional knowledge may be a stepping stone to the job market, while the long-term learning ability and the social adaptation ability are central to a desirable position and sustainable career development. This requires college students to develop their advantages, personal traits as well as specialties, and calls for combining their abilities with employment information and employment training.

Secondly, students are encouraged to actively participate in social practice to improve practical skills. They should strive for the opportunities of internship and social practice as well as other extracurricular activities. They should participate in the “Second Classroom” social activities organized in the campus to achieve the goal—to become a professional with a solid foundation, a wide range of knowledge, strong capability and high quality. They should value practice or training courses in the campus.

Thirdly, students should make a clear career plan to enhance their employability. University years are a crucial transition period for students to become a social actor. A sound plan is thus needed. Career planning is an important step to improve employability. From the moment of enrollment, students should try to identify their strengths and weaknesses through career interest test, and further comprehend social demands and job information through the Internet, the university’s career information site and job fair. All these will facilitate their understanding of what qualities and abilities they need for employment and help them set a target and a career path.

References


Hazard Analysis of the Unreasonable Teacher Mobility among Chinese Colleges and Universities

Jianqing Ma
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China

Jin Tao
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
College of Information Engineering, Zhejiang University of Technology, Hangzhou, China

[Abstract] To realize rational mobility of teachers among colleges and universities is a beneficial measure for China’s current faculty structure improvement. Due to some nonstandard manipulation during the flow, the effect of mobility is influenced. This paper mainly analyzes some negative effects. We believe that colleges and universities should not only make a point of inducing talent, but they should also choose a scientific outlook on development for guidance, deal with the relationship among mobility, stability, and development, make a rational transfer on the basis of stability, and strengthen faculty construction in the flow, so as to mostly exert the positive effect of rational talent mobility.

[Keywords] colleges and universities; teachers; talent mobility; negative effect; China

Introduction
Society allocates human resources by labor flowing freely between employers. This allocation mode can make a maximum satisfaction for workers and consumers at the same time. Furthermore, labor mobility is also a human capital investment. The workers can improve their monetary and non-monetary benefits by transferring jobs (Robbins, & Judge, 1996, p. 218). Nevertheless, unbalanced talent mobility brings many negative effects. It causes huge losses to employers, individuals and society. To establish a scientific and reasonable teacher mobility mode among colleges and universities is an essential requirement to realize system reformation, to promote science and society development, and to push talent intelligence to become fully developed. It's also an important issue in public human resources management. At present, teacher mobility among Chinese colleges and universities has produced good effects on improving faculty structure. However, we cannot fail to note that there are still many teachers that transfer in a nonstandard and unordered state, resulting in a waste of talent, which is due to the lack of regulation of government personnel departments, flaws in the system, and some nonstandard operations. The data reported, a developed province launched “three no policy” (no dispatch card, no file, no household registration) and “three high policy” (high wage, high treatment, high welfare) to attract talent. Since the policy implementation, a university in this province introduced more than 100 high-level youth professors in one year. More than one dozen professors were introduced from only one university in the neighboring province (Ming, 2002). At the National People’s Congress and the Chinese People's Political Consultative Conference, representatives from Gansu province said sadly, “In the past 10 years, high-level talents we lost are enough for a same level of university.” It was estimated that during the ten years, Lanzhou University had lost nearly 1000 talents (Tao, 2009). In 2008, the president of Lanzhou University spoke bluntly that the problem of talent in colleges and universities was still grim. “Faculty shortage in Lanzhou University is more than 900 people, and it is still lack 800 in 2009, let alone academic leaders. We can easily imagine the situation in other northwest colleges and universities” (Ke Liang, & Yi, 2009).

We should choose a scientific outlook on development for guidance, attaching great importance to the problems of teacher flow among Chinese colleges and universities, seriously review past experiences,
and take effective measures to minimize the possible adverse effect during transfer. This paper focuses on the possible disadvantage of teacher mobility among colleges and universities. We consider the problems brought by unreasonable teacher mobility mainly in the following areas:

**Need to Pay Greater Costs**

Teacher mobility among Chinese colleges and universities need to pay greater costs, which include individual costs and university costs around the transfer. There are three parts to the costs for individuals. The first is the settling down cost. It refers to the cost of a teacher paying to find a suitable job, including a lot of time, energy and money spent in the process of dismissing, applying for new job, moving house, arranging work for spouse, finding school for children and so on. The second is adaptation cost. It means the teacher requires considerable time and effort to adapt to a new environment, including the new weather, diet, teaching and research conditions, groups and interpersonal circumstances, and other natural and social conditions. The third is loss cost. It means some new introduced teachers may have a feeling of loss compared with his circumstances in the former school. It means the position adjustment, hardware and software condition differences, and interpersonal environment changes may cause a psychological loss. Some teachers said that since they had become a professor they began to consider transferring, which took three or four years, and it took another two or three years to adapt to the new environment. As a result, little has been done over the years.

Colleges and universities also need to pay a larger cost. Colleges and universities who import talent should put into plenty of manpower, material resources and financial power. In addition to the traditional attraction mode, such as geographical advantages attraction, career attraction and emotional attractions, in recent years, colleges and universities have carried out a series of favorable policies for talent introduction one after another, absorbing talent with generous salary and material benefits. Hundreds of thousands or millions of RMB are given frequently as settling-in allowances and scientific research funds. Schools also help providing house, arranging works for families, etc. (Chun Yan, 2009). However, the result is not just as we expect. Because the treatment and scientific research conditions haven’t been fully implemented or they have a better place to go, some introduced teachers transfer to other universities in a hurry. Some introduced teachers haven’t adapted to new circumstances well, so they can’t play the role as effectively as intended. Colleges and universities who export teachers invest a lot to cultivate excellent teachers. After these teachers received their doctorate or became professors, they transferred when they could play a key role. For the former school, not only did they not receive a due reward, but this circumstance even created an investment loss.

In summary, teacher mobility causes the individual, colleges and universities to pay great costs. The marginal decision rule states that a good or service should be consumed at a quantity at which the marginal utility is equal to the marginal cost (Libby, Tim, 2008, p. 170). Therefore, a reasonable mobility should be with less cost and gain more profit, in an individual and school “win-win” mode. However, a lack of planning in teacher mobility greatly increases the cost and reduces the profit for both parties. According to our interviews and observation on transferred teachers, we believe that the cost of talent mobility is much higher than we felt. This is reflected not only in the visibly material aspect, but also in the invisibly psychological feelings, which tend to be ignored.
Affect the Faculty Stability and Development of Colleges and Universities

First, the unreasonable talent outflow has caused some Chinese colleges and universities who export talent to have fault crisis in both faculty structure and discipline construction. Along with the increasing rate of talent mobility, a part of the high quality teachers are flowing into colleges and universities that have good conditions, high salaries or are in the more developed areas. Due to the loss of discipline leaders, some colleges and universities have experienced a faculty fault, no successors for discipline construction, and even the original well-know discipline has almost been paralyzed. Moreover, those young scholars with senior titles or doctorates, as a solid foundation and backbone of the discipline structure, naturally become an important target in the talent war among colleges and universities. At present, they are also the group that flows most frequently among colleges and universities. Their massive outflow has unbalanced the teacher age structure, and is extremely unfavorable to the construction of talent echelon, which can also lead to discipline faults. Therefore, the massive loss of excellent teachers can be extremely easy to make the discipline construction of faculty to retreat or collapse.

Second, massive talent loss induces a tendency of utilitarianism in teaching staff. The leaving of discipline leaders or other excellent teachers may cause a leaderless and disarrayed situation, which sharply decreases the quality and efficiency of teamwork. If the remaining excellent teachers see such situation, and get feedback from outflow teachers that they have a good condition and income in a new college or university, inevitably, they will think about how to find a better employer. On the other hand, some teachers who failed to transfer for various reasons, are more likely to have a sense of imbalance, so that they do not keep their mind on work, but instead do some part-time job to earn extra money to compensate for their imbalanced feeling, which has resulted in the invisible loss in colleges and universities (Chun Yan, 2009). In colleges and universities, the brain drain is easy to cause the prevalence of utilitarianism, pragmatism and other undesirable tendencies, and even form an adverse public opinion atmosphere, which is expressed like this, “not to matter not to go, to matter have to go; not a talent not to go, be a talent have to go”.

Third, massive introduced teachers share developing space and limited resources with the original teachers. Some utilitarian colleges and universities value introduced teachers, but despise the original teachers, including their training, developing and use. It has a negative impact on the original teachers’ enthusiasm and those “future stock” teachers are likely to feel neglected. Some schools introduced a great deal of senior titled and highly educated teachers, for reasons such as disciplines declared, school promoted, teaching evaluation and so on. They occupied too much of the position, title number, as well as housing and other limited resources, so this affected the original teachers to occupy their limited resources and developing space. Once the colleges or universities finished the declaration and evaluation tasks, how to properly use these introduced talents has become a troublesome problem for many colleges and universities.

Fourth, the loss of senior title teachers brings a low standard title promotion. Colleges or universities who exported a large number of senior academic title teachers, in order to make up for the vacancy and maintain academic title structure at a certain proportion, have to promote some new professors and associate professors, or even reduce the requirements on promotion, which led to a quality decline for newly promoted teachers. Unfortunately, these teachers may transfer quickly once they received their senior titles, so these colleges and universities have to promote a group of new professors again. As a result, an awkward situation emerges, in many teacher inflow colleges and universities, some newly introduced professors are less capable than the associate professors in the university they transferred to,
and some newly introduced associate professors are less capable than the lecturers in the university they transferred to, which causes the original teachers to complain a lot. On the other hand, the newly introduced teachers also have a lot of pressure from all sides; some even regret and might as well feel relaxed in their former university.

Fifth, cut-throat competition among colleges and universities for excellent teachers has caused a credit crisis. In order to gain an advantage in talent attraction, some colleges and universities offered a variety of preferential conditions, and it has caused a hot talent’s price to deviate from its real value, forming a talent bubble, which greatly increased the talent introduction cost and was not favorable to create a good academic atmosphere. Some teachers who were attracted by preferential conditions broke their contracts with their former schools, especially for some newly introduced teachers, and they hardly had been introduced when they transferred to another university, thus resulting in a talent credit crisis and they destroyed the good atmosphere of teacher mobility among colleges and universities. Furthermore, in the long run, considering the negative effect of the Domino Effect, it’s extremely unfavorable to realize development goals for both social and organization, bringing difficulty and risks for university's personnel management, and affecting the image of teachers.

Disrupt the Overall Talent Layout of Colleges and Universities

In recent years, with the expanding of colleges and universities in China, the demand for talent is rising quickly and the competition for talent among colleges and universities is becoming increasingly fierce (Yuan, 2007). If the government personnel department lacks a specific policy and powerful guidance, a single market regulation will easily lead to a spontaneity and blindness in talent mobility, what brings great negative effect to talent layout and development in Chinese colleges and universities.

First, the Matthew effect of talent mobility has exacerbated the power gap between regional universities. The Bible says, “for to all those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away.” The American sociologist Robert K. Merton called this phenomenon the Matthew Effect: any individual, group or area once got a success and progress, would have cumulative advantage, which have more chance to get greater achievements and progress (Daniel, 2010, p. 165). A lot of excellent teachers flowed from relatively backward central and western regions to southeastern coastal developed regions, or from weak universities to strong universities. That makes education and scientific research in developed areas more strongly and vice versa. Therefore, the Matthew Effect of talent mobility among colleges and universities has been highlighted. In fact, some regions or universities developed at the expense of others. In that way, we could not improve the imbalance of talent distribution, but aggravate it in China’s overall talent layout. It is adverse for country’s coordinated development of politics, economy and culture between regions, as well as nationwide promotion in modernization.

Second, a massive inflow of teachers has caused human resources consumption showing a tendency of diminishing marginal utility. Marginal utility is a microeconomics principle. The law of diminishing marginal utility applies: as the rate of consumption increase, the marginal utility gained from consuming additional units of goods will decline (Gwartney, Stroup, Sobel, & Macpherson, 2009, p. 420). In an environment of market economy, human resources is a kind of special and expensive commodity. For example, the university is one of the consumers and the consumption costs include wages and welfare, etc. The consumption process of university human resources conforms to the law of marginal utility (Qing Ru, 2008). Due to the significant Matthew Effect between universities, strong universities attracted more high
quality talents. After large-scale inflow at previous stage, the human resources growth rate is relatively higher than that of higher education and scientific research. The strong colleges and universities’ consumption process of human resources conforms to the law of diminishing marginal utility. At this time, due to the lack of development space and other objective reasons, newly introduced teachers may have difficult getting enough attention and may even be ignored, which is adverse to promote capability and inspire creativity. Some outstanding academic backbone youths who were supposed to be academic leaders in central and western regions failed to exert their fullest individual potentials. It is a waste of human resources and failed to achieve the maximization utility of talent.

Third, unreasonable teacher mobility may break the balance of dynamic talent structure in China. Everything has its point of dynamic balance, and only at this point can it have a long-term stability. It is bound to influence their development and even cause backwards development if the balance is destroyed. That is to say, any functioning college or university should have its relatively stable and dynamic balance talent structure. Once it suffers a massive talent inflow or outflow, the original balance will be destroyed and the overall performance of system will sharply decline. Therefore, dealing with the problem of teacher mobility, we should pay more attention on its rationality, keep the balance of social and economic benefits, political and culture benefits, and give consideration to immediate interests and long-term interests, personal interests and school’s interests, local interests and overall interests.

Implications and Conclusion
To be clear, the above problems are not inevitable, and do not exist in all colleges and universities, but it is a possible or local situation that is obvious in some colleges or universities. We think that it cannot be neglected by schools, society, or government at any level. In nature, teacher mobility in Chinese colleges and universities is a normal phenomenon, but some unreasonable flow conditions have emerged at this stage, which wastes the valuable human resources and produces some negative effects. There are several reasons. One is the difference in natural environment, teaching environment, scientific research condition and wages between different Chinese regions and schools. Another reason is in some colleges and universities, the internal management system and employment mechanism lacks vitality, and they haven’t finished the change from simple personnel management to people-oriented development and management idea; all of these have affected the absorption, stability and development of talent. The most important problem lies in the national policy for talent mobility. Without a perfect management policy leads to a lack of government’s third hand regulation, what makes teacher mobility process appear to be a little disorderly, and fails to realize the optimization of flow efficiency.

In today’s world, many people are cheering for talent mobility. With an objective and calm attitude, we attempt to view the present situation about teacher mobility in Chinese colleges and universities, and try to discover the problems in it in order to draw great attention from all walks of life and improve the teacher mobility mechanism. We believe that, first of all, we should establish a scientific outlook on development and a correct view for talent mobility to handle the relationship between flow and stability. Secondly, the government should make a relatively perfect management mechanism for teacher mobility, to avoid the negative effect caused by unreasonable flow as far as possible. Thirdly, national science and technology funding should be appropriately inclined to the weak schools, according to the equal marginal principle in economics, to promote the faculty construction in weak schools (Roberts, Daniel, 1995, p. 246). Fourthly, colleges and universities must establish an effective incentive mechanism, take local teachers more seriously, especially the training of local young teachers and establish a scientific talent
management view, and change the traditional management view for a development view, only in that way can we actualize reasonable mobility in basis of stability. Fifthly, colleges and universities must focus on foreign excellent talent, to develop China by introducing foreign strength. Finally, as a human resource, the talent itself should make a correct self-definition and have a fully understanding of the transferred school, try to achieve win-win situation for both self worth and social value. As an employer, college or university should have an overall consideration of teachers who planned to be introduced, and introduce scarce talent with a proper use, make effort to avoid a blind introduction.

References

Corresponding Author: Jin Tao, E-mail: taojin@zjut.edu.cn
The Relationship between Social Avoidance and Distress and Mental Health of Migrant Workers in China

Chuanjing Liao  
Center for Studies of Education and Psychology of Ethnic Minorities in Southwest China, Southwest University, Chongqing 400715, China  
Wenzhou University, Zhejiang 325035, China  
Email: cjliao@wzu.edu.cn

Huapei Mao  
Wenzhou University, Zhejiang 325035, China  
Email: mhp@wzu.edu.cn

Qin Liu and Jinfu Zhang  
Faculty of Psychology, Southwest University, Chongqing 400715, China  
Email: lilian0228@live.cn and zhangjf@swu.edu.cn

[Abstract] To explore the relationship between social avoidance and distress and the mental health of migrant workers, 407 rural migrant workers taking jobs in private corporations in Wenzhou, China were investigated. Using the Social Avoidance and Distress scale (SAD) and self-reporting inventory (SCL-90), and using correlations technique, chi-square test, independent t test, AVONA and Square Equation Model (SEM) for statistical analysis. The results are as follows: 1) mental health level of migrant workers was significantly lower than the norm criteria; 2) there was a significant correlation between social avoidance and distress and mental health; 3) there was significant differences for different martial status in social avoidance and distress and mental health; 4) social avoidance and distress of migrant workers positively predicted their mental health.

[Keywords] social avoidance and distress; mental health; migrant worker; social support

Introduction

Research on the mental health of migrant workers, with its characteristics of China, is still very ascendant obviously. Recently, scholars carried out a series of investigations on the mental health conditions of rural migrant workers in various areas (Jiang, Zhang, & Wang, 2007; Sun, 2007; Qian, & Wang, 2008; Liao, 2010), and also of migrant workers of different types, such as migrant workers in the new generation, in the building industry, and back-home migrant workers, etc. (Su, 2007; Su, Wei, & Ling, 2009; Liu, 2006).

However, studies on the mental health of migrant workers have gradually shifted from investigating their health condition to exploring factors closely influencing their mental (Hu, 2010). According to Hu (2010), social engagement, vocational psychological problems, self-esteem, subjective well-being and demand psychology were related to the mental health of migrant workers. It is worthy of further in many respects.

As a relatively disadvantaged social group (minority) in the city, the interaction situation of migrant workers has played an important role in their mental health. Good social willingness and social behavior provide effective social support system for them, which helps to ease their problems of mental health, and produce protective effects (Herman-Stahl, M., & Petersen, A. C., 1999; Sarason, Pierce, Shearin, Sarason, Waltz, & Poppe, 1991; Syrotuik, & D’Arcy, 1984). However, because of a lack of protection and
security, most migrant workers live in poor conditions (Ren, Fang, & Xi, 2008; Li & Feng, 2003; Luo, Huang, Zhang, Deng, & Xu, 2006).

Their rights have often been violated for a lack of formal organizations of their own to stand up for their rights, and there are neither organizations like trade unions, nor women's federations to speak for them, which thus, often subjects them to discrimination that has extended to most areas in social life and gives rise to a wide variety of manifestation (Yuan, 1997; Guo, 2009). In such poor conditions, they always tend to avoid necessary social interactions, so they enjoy little willingness and pleasure in communication. In daily life, they always suffer the feelings of social avoidance behavior and distress experience. Previous studies suggested that interpersonal communication and relationships, which were built on the basis of interpersonal interactions, were very important to an individual’s mental health, and the condition of interpersonal relationships could partly explain the mental health variables (Spotts, et al., 2005). Communication incompetence, anxiety and the sense of social rejection all would affect individuals’ perception of social interactions (Sarason, et al., 1991). Lakey and Orehek (2011) emphasized the importance on the function of perceived social support to mental health in their study.

Migrant workers often avoid social interaction for many reasons, and they are also prone to experience distress in their feelings. How does social avoidance and distress, as the external behavioral factors, influence mental health of migrant workers? How do they relate to each other? All of them are worthy of study. In recent years, research on the mental health of migrant workers attracts increasing attentions. However, there is little study to explain mental health problem in the aspect of social interaction. This study, by employing the Structural Equation Model, attempts to reveal the effect how social avoidance and distress influence mental health of migrant workers, so as to provide a way and evidence to carry out the study of mental health of migrant workers.

**Method**

**Participants (Sample)**
Participants included 407 migrant workers (268 males and 139 females) employed in private corporations in Wenzhou, a coastal city in the southeast part of China. 223 participants were single, including divorced, and 184 were married, including remarried.

**Measure**

**Social avoidance and distress scale (SAD).** The SAD (Watson & Friend, 1969) is a instrument with a total of 28 items, which was developed to measure an individual’s social avoidance factors and distress factors with 2 scales: Avoidance (14 items) and Distress (14 items). To complete the questionnaire, participants respond to the self-reflective response scale (true = 0 and false = 1). Scores on the whole scale range from 0 to 28, with higher scores reflecting greater social avoidance and distress. Test-retest reliability (4 months after their initial testing) on the SAD scale-Chinese form was 0.68 and item-total average correlation was 0.77. The obtained internal consistency Cronbach’s alpha coefficient for this measure was 0.85 in the present study.

**Symptom Checklist-90 (SCL-90).** The Symptom Checklist-90-Revised (SCL-90-R) is a 90-item self-report symptom inventory developed by Leonard R. Derogatis in the mid-1970s to measure psychological symptoms and psychological distress, It was designed to be appropriate for use with individuals in mental health in a non-clinical sample. Respondents completed the widely-used, validated Dutch version of the instrument (Arrindell & Ettema, 1986) which rates on a 5-point scale, with the extent
to which they experienced symptoms during the past week ranging from 1 (absolutely not) to 5 (very much). The SCL-90 is labeled: Phobic Anxiety/Agoraphobia, Anxiety, Depression, Hostility, Obsessive-Compulsive, Interpersonal Sensitivity, Somatization, Sleeping Problems, Psychoticism as well as additional item (labeled other symptoms’ in the Chinese version). The global measures are referred to as the Global Severity Index (GSI), as well as nine-facet scale scores calculated by taking the sum of all items. The obtained internal consistency Cronbach’s alpha coefficient for this measure was 0.96 in the present study.

Procedure
SPSS17.0 and AMOS7.0 were used to analyze the data.

Results

Comparison with Norm of SCL-90 and Correlation Among SCL-90 and SAD
Except Somatization, Interpersonal Sensitivity and Depression, the scores of other facet scale of migrant workers are significantly higher, compared with the norm criterion (as shown in Table 1). The percent of migrant workers in mental health problem is 24.30% (the total score 160 higher). In condition of M>2, the highest percent facet is Obsessive-Compulsive (25.55%), but the lowest Photic Anxiety (8.60%); in condition of M>3, Interpersonal Sensitivity and Hostility are both the highest (3.93%) but Somatization the lowest (0.74%).

In this study, the mean score of Social Avoidance is 4.41±1.59 and Social Distress 5.39±2.31, and the total (SAD) score 9.81±3.21. Each facet of SCL-90 is positively and significantly correlated to social avoidance and social distress.

Table 1. Comparison with Norm of SCL-90 and Correlation Among Variables

<table>
<thead>
<tr>
<th></th>
<th>M±SD (n=407)</th>
<th>Norm (n=1388)</th>
<th>t</th>
<th>M&gt;2 (%)</th>
<th>M&gt;3 (%)</th>
<th>Social Avoidance (r)</th>
<th>Social Distress (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>1.41±0.41</td>
<td>1.37±0.48</td>
<td>1.818</td>
<td>9.58</td>
<td>0.74</td>
<td>0.268**</td>
<td>0.281**</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>1.74±0.55</td>
<td>1.62±0.58</td>
<td>4.247**</td>
<td>25.55</td>
<td>3.69</td>
<td>0.321**</td>
<td>0.371**</td>
</tr>
<tr>
<td>Interpersonal sensitivity</td>
<td>1.66±0.57</td>
<td>1.65±0.51</td>
<td>0.464</td>
<td>19.66</td>
<td>3.93</td>
<td>0.282**</td>
<td>0.333**</td>
</tr>
<tr>
<td>Depression</td>
<td>1.55±0.56</td>
<td>1.50±0.59</td>
<td>1.842</td>
<td>17.94</td>
<td>2.95</td>
<td>0.340**</td>
<td>0.391**</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.47±0.47</td>
<td>1.39±0.43</td>
<td>3.358**</td>
<td>13.51</td>
<td>1.23</td>
<td>0.330**</td>
<td>0.378**</td>
</tr>
<tr>
<td>Hostility</td>
<td>1.56±0.57</td>
<td>1.48±0.56</td>
<td>2.903**</td>
<td>15.48</td>
<td>3.93</td>
<td>0.267**</td>
<td>0.311**</td>
</tr>
<tr>
<td>Photic anxiety</td>
<td>1.38±0.46</td>
<td>1.23±0.41</td>
<td>6.742**</td>
<td>8.60</td>
<td>2.21</td>
<td>0.228**</td>
<td>0.288**</td>
</tr>
<tr>
<td>Paranoid ideation</td>
<td>1.50±0.48</td>
<td>1.43±0.57</td>
<td>2.893**</td>
<td>12.29</td>
<td>1.47</td>
<td>0.303**</td>
<td>0.373**</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>1.45±0.48</td>
<td>1.29±0.42</td>
<td>6.890**</td>
<td>10.07</td>
<td>1.97</td>
<td>0.350**</td>
<td>0.380**</td>
</tr>
<tr>
<td>Total (SCL-90)</td>
<td>137.32±39.33</td>
<td>129.96±38.76</td>
<td>3.776**</td>
<td>24.30 (M&gt;160)</td>
<td>0.357**</td>
<td>0.406**</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05  ** p<0.01

Differences Between High SCL-90 and Low SCL-90 Groups
By chi-square test, there is no difference between male and female (χ2=2.004, P>0.05) (as shown in Table 2). However, there are significant differences in different marriage statuses, different social avoidance groups and distress groups.
Table 2. Differences Between High SCL-90 and Low SCL-90 Groups

<table>
<thead>
<tr>
<th></th>
<th>Low SCL-90 (total score&lt;160)</th>
<th>High SCL-90 (total score&gt;160)</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>197</td>
<td>73.5</td>
<td>71</td>
</tr>
<tr>
<td>Female</td>
<td>111</td>
<td>79.9</td>
<td>28</td>
</tr>
<tr>
<td>Unmarried</td>
<td>150</td>
<td>67.3</td>
<td>73</td>
</tr>
<tr>
<td>Married</td>
<td>158</td>
<td>85.9</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High social distress (27%)</td>
<td>97</td>
<td>89.0</td>
<td>12</td>
</tr>
<tr>
<td>Average social distress (46%)</td>
<td>152</td>
<td>80.9</td>
<td>36</td>
</tr>
<tr>
<td>Low social distress (27%)</td>
<td>59</td>
<td>53.6</td>
<td>51</td>
</tr>
<tr>
<td>High social avoidance (27%)</td>
<td>107</td>
<td>98.2</td>
<td>2</td>
</tr>
<tr>
<td>Average social avoidance (27%)</td>
<td>136</td>
<td>72.3</td>
<td>52</td>
</tr>
<tr>
<td>Low social distress (27%)</td>
<td>65</td>
<td>59.1</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>75.7</td>
<td>99</td>
</tr>
</tbody>
</table>

Differences of SCL-90 and SAD

We used marriage, gender, age, education, salary and work years as the variables to research their differences of SCL-90 and SAD in Table 3. The results are as follows: marriage plays main effect in them; compared with female workers, the paranoid ideation of male migrant workers is significantly higher; compared with the older, the interpersonal sensitivity and photic anxiety of young migrant workers is significantly higher; the one who received less education gets stronger or more interpersonal sensitivity, depression and hostility; but salary and work years do not play main effects.

Table 3. Differences in Marriage, Gender, Age, Education, Salary and Work Years

<table>
<thead>
<tr>
<th></th>
<th>Marriage (t)</th>
<th>Gender (t)</th>
<th>Age</th>
<th>Education</th>
<th>Salary</th>
<th>Work years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>0.833</td>
<td>0.915</td>
<td>1.318</td>
<td>1.406</td>
<td>0.141</td>
<td>1.636</td>
</tr>
<tr>
<td>Obsessive-Compulsive</td>
<td>2.723**</td>
<td>1.032</td>
<td>.330</td>
<td>0.676</td>
<td>0.209</td>
<td>0.050</td>
</tr>
<tr>
<td>Interpersonal sensitivity</td>
<td>4.895**</td>
<td>0.011</td>
<td>2.763*</td>
<td>2.660*</td>
<td>0.668</td>
<td>0.727</td>
</tr>
<tr>
<td>Depression</td>
<td>4.707**</td>
<td>0.904</td>
<td>1.915</td>
<td>3.111*</td>
<td>0.952</td>
<td>0.640</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4.883**</td>
<td>0.803</td>
<td>1.582</td>
<td>2.098</td>
<td>2.110</td>
<td>0.592</td>
</tr>
<tr>
<td>Hostility</td>
<td>3.643**</td>
<td>0.637</td>
<td>2.422</td>
<td>3.203*</td>
<td>0.438</td>
<td>0.972</td>
</tr>
<tr>
<td>Photic anxiety</td>
<td>4.006**</td>
<td>-1.948</td>
<td>6.868*</td>
<td>2.322</td>
<td>2.245</td>
<td>2.366</td>
</tr>
<tr>
<td>Paranoide ideation</td>
<td>4.886**</td>
<td>2.449*</td>
<td>1.893</td>
<td>0.869</td>
<td>1.529</td>
<td>0.545</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>5.123**</td>
<td>1.391</td>
<td>2.075</td>
<td>1.548</td>
<td>1.134</td>
<td>0.383</td>
</tr>
<tr>
<td>Total (SCL-90)</td>
<td>4.499**</td>
<td>0.980</td>
<td>1.534</td>
<td>2.178</td>
<td>0.583</td>
<td>0.192</td>
</tr>
<tr>
<td>Social avoidance</td>
<td>0.747</td>
<td>0.287</td>
<td>0.580</td>
<td>0.863</td>
<td>0.657</td>
<td>0.301</td>
</tr>
<tr>
<td>Social distress</td>
<td>2.853**</td>
<td>1.900</td>
<td>0.709</td>
<td>0.313</td>
<td>0.770</td>
<td>1.591</td>
</tr>
</tbody>
</table>

Path Analysis Progressive Regression Analysis

To test whether social avoidance and distress was predictive of mental health, a series of progressive regression analyses were computed in Table 4. This study selects regression analysis which puts SCL-90 as the dependent variable, demographical variables and SAD as the independent variables to predict the results. Results are as follows: The progressive regression for mental health was significant (Adjusted R²=0.242, p < .000), with the first significant predictors being Marriage, Social distress was second, and Social Avoidance was the third significant predictor.
Table 4. Regression of SCL-90

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>0.218</td>
<td>0.048</td>
<td>0.045</td>
<td>162.329</td>
<td>5.875</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td></td>
<td></td>
<td></td>
<td>-17.222</td>
<td>3.828</td>
<td>-0.218</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>0.498</td>
<td>0.248</td>
<td>0.242</td>
<td>101.474</td>
<td>7.882</td>
<td>12.874**</td>
</tr>
<tr>
<td>Marriage</td>
<td></td>
<td></td>
<td></td>
<td>-13.167</td>
<td>3.444</td>
<td>-0.167</td>
</tr>
<tr>
<td>Social distress</td>
<td>5.078</td>
<td>0.784</td>
<td>0.299</td>
<td>6.481**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social avoidance</td>
<td>6.247</td>
<td>1.130</td>
<td>0.253</td>
<td>5.528**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Psychological Symptoms and Present Condition of Social Avoidance and Distress in Migrant Workers

In this study, each factor score of SCL-90 of migrant workers is higher than the norm criterion, which means that their mental health is in poor condition. The result is consistent with earlier studies (Gao, 2010; He, 2008; Sun, 2007). The detection rate of mental health is 24.30%, close to 22.86% from the study by Lianlong Li, Qiong Li, Xia, Hu, and Guo (2012). Specifically, Obsessive-Compulsive, Interpersonal Sensitivity and Hostility are obviously higher in migrant workers, which are related to poor living conditions, low social security, discrimination from society, and educational difficulty for their children. Thus, migrant workers are quite a large vulnerable group in their social development. Society should pay more attention on them.

The total score of SAD is significantly higher than sample results of Lin and Hu’s study in 1997 (8.03±4.64, t=11.166, p<0.000), so avoidance experience in social interaction and anxiety and distress in emotion clearly exist for migrant workers. This result originated in their temporary work in new city far from home, without support of their families or effective organizations. Furthermore, with their low power, low prestige and social status in society, there are little resources available or substantive equivalents for them to exchange in broader social exchanges in cities, or gain more resources and opportunities for their self-development (Li, & Feng, 2003).

Relations Between SCL-90 and SAD Among Migrant Workers

In this study, both social avoidance and social distress are significantly correlated to SCL-90, which is consistent with the past study reported by Sheng in freshmen of college (Sheng, 2010). According to research of Differences between high SCL-90 and low SCL-90 groups (as shown in Table 2), the score of social avoidance and distress differentiates the score of SCL-90, which predicts the significant relationship between social avoidance and distress and SCL-90. One characteristics of psychological symptom is self-avoidance, anxiety and distress experienced in interpersonal communication. And social avoidance is a kind of tendency to avoiding social interaction, and a lasting and obvious anxiety in social occasions (Song & He, 2005).

Watson and Friend (1969) found that the one who tended to social avoidance was highly anxious in social interactions, with lower interest in group discussions. Social avoidance hinders persons from joining in activeness in society, perfecting self personality, or building harmonious psychological health. The social behavior and psychological symptom of migrant workers again support the above result. Also,
due to the worldly and cultural prejudice, the peasant workers are hard to assimilate themselves into the
mainstream culture of cities. They just could gain support of relatives and home-mates (Zhao & Zheng,
2008), by which they search for jobs. Marginal identity crisis, which makes them feel isolation,
discrimination or hostility really exist in their life, which further harms their psychological and physical
health, and aggravate avoiding social interaction to some extent (Li & Feng, 2003).

**Marriage and Age Influence the SCL-90 of Migrant Workers**

This part shows that marriage status predicts the psychological symptom of migrant workers: married
workers have lower psychological symptoms than the unmarried. Naturally, a social support system based
on marriage plays an important role in improving mental health and adjusting social attitude when they
are in the condition of hard work. Being far from home, they face poor living environments, such as high
job pressures, low social status, closed interpersonal interaction, and the regular situation of being ignored
and neglected.

Marriage brings great changes in life and to the mental status of migrant workers, and it also brings a
sense of settlement, happiness and satisfaction (Ren, 2008). Amiram and Vinokur (1993) indicated that
lasting support from families could ease individual’s mental problems, close relations from families could
add the support quantity and type for individuals. Individuals' social support from husband/wife or kids
could produce positive sense of happiness, which could protect their mental health (Hideki, Jersey, Neal,
Hiroko, & Hidehiro, 2004). Therefore, it’s easy to understand that, compared with the married, the social
distress to unmarried migrant workers is higher.

Married migrant workers can effectively adjust themselves to their mental and physical health.
Support from marriage or families also could substitute other social support to promote mental health to
some degree. The interpersonal sensitivity and photic anxiety in young migrant workers are higher than
that of old ones, which indicate that marriage, growth of age, life experience and knowledge in traditional
codes of conduct could protect them from eternal intervention.

**Regression Analysis**

The study shows social avoidance and distress plays a direct, positive and significant prediction to
psychological symptom. As a disadvantage group, their mental health is largely influenced by low social
status, inappropriate social behavior, and negative social feelings. Furthermore, so their psychological
symptom will be aggravated by avoiding social interaction, so as to experience more negative social
emotion.

In daily life, most migrant workers make communications in their inner groups, which is easy to
form a temporary small group named “home mates”. However, it is common to see that disputes in such
small groups often come about, which also make them unable to adapt themselves to interpersonal
relationship (Luo, 1995). If migrant workers can’t be beyond their own small groups, or can’t adapt
themselves to that small living groups, it is hard for them to set up higher social support system, so a
series of mental problems, such as self-contempt, depression, selfishness, loneliness and so on, will come
forth (Deng, 2001).

Early studies show that mental health closely relating to the amount of social interaction,
understanding each other, satisfaction, severity in interpersonal disputes, will seek social support
(Eurelings-Bontekoe, Diekstra, & Verschuur, 1995). However, most migrant workers tend to avoid
necessary social interaction for their poor living condition, they often feel the sense of ignorance,
discrimination and unfairness in interpersonal interaction because of their own limitations and external
citizen identity. Therefore, the condition of social avoidance and distress in migrant workers directly predicts mental health.

When they enjoy good social behavior and are able to build interpersonal relationship to support themselves, they will positively and flexibly cope with stress and pressure, meanwhile they believe to get necessary support and assistance from relatives, companies and society, which promotes their self-confidence and self-efficiency to go a step further to promote their mental health (Eurelings-Bontekoe, Diekstra, & Verschuur, 1995).

References


Preliminary Preparation for the Questionnaire on College Students’ Motivation Education from the Perspective of Moral Education – Based on a Survey of Five Universities in Hangzhou

Chen Lemin  
*Teaching and Research Institute of Political Theory, University of Zhejiang, Hangzhou, China*  
*Zhejiang Shuren University, Hangzhou, China*

Ma Jianqing  
*Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China*

**Abstract**  
In recent years, how to effectively carry out education of motivation has become an important part of the moral education for college students. Some scholars abroad have done a lot of research and raised many principles in this area. Some experts and scholars also studied motivation-themed educations in many universities in China. However, the existing research on the related issues are slightly weak, particularly the empirical research. Thus, proposing appropriate countermeasures is the urgent need for the job. In view of all of these, our study investigates the effect of current measures for motivating, and in light of the investigation, we have made a motivation questionnaire in the field of moral education with high validity, and propose the countermeasures in motivation education based on the survey.

**Keywords**  
questionnaire; college students; motivation; moral education

**Foreword**  
In modern academic research, “motivation” is one of the hot issues that is studied in western management and psychology. American management psychologist Leier Sen and Neil Stein once pointed out, “all the conditions, desires and motivations that an innermost being strives for constitute the motivation for the person...It is an inner state of human activities” (Zhou, 1999). A survey at Harvard indicated that, in an environment without incentives, people only could exert 20%-30% of their potential, but in an environment with better incentives, the same person could exert 80%-90% of his or her potential and even more (Wang, & Zhang, 2010).

Relevant domestic scholars also explored and researched the theories of moral education, and proposed a variety of motivation methods. By consulting the relevant literature, we generalize the methods for motivation in the field of moral education and have grouped them into the following categories: Emotion Motivation, Educational Motivation, Model Motivation, Frustration Motivation, Achievement Motivation, Self-motivation, and Objective Motivation. The contents of these motivations proposed in this study are defined as follows in Table 1:
Table 1. The Definitions of Various Motivations

<table>
<thead>
<tr>
<th>Mold of Motivations</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion Motivation</td>
<td>The motivation for college students by such sincere emotions as affirmation, encouragement and care from relatives, friends and teachers</td>
</tr>
<tr>
<td>Educational Motivation</td>
<td>The motivation for college students through the main channel of moral education, including stimulating the college students’ enthusiasm by teaching the moral theories and putting them into practice</td>
</tr>
<tr>
<td>Model Motivation</td>
<td>Guide and educate the college students by using the prominent, typical and positive people or things</td>
</tr>
<tr>
<td>Frustration Motivation</td>
<td>The motivation education when the college students encounter the setbacks and difficulties, through which they can properly deal with them, correctly find out the reasons, and find the direction of future efforts and turn the negative defense into active one</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>The college students who use their achievements or their pursuits of the accomplishment and honor to inspire their enthusiasm in study and work</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>The college students, by using more scientific approaches, timely inspire and encourage their activities on their own initiatives through the knowledge and understanding of themselves</td>
</tr>
<tr>
<td>Objective Motivation</td>
<td>The college students work hard to get the ideal results by setting the objectives with the guide of teachers.</td>
</tr>
</tbody>
</table>

This table was arranged by referring to the contents on the pages between 95 and 115 on the Theory of Educational Motivation (Li Zuchao, 2008)

Though theories of motivation education have been put forward during this time, we do not have sufficient empirical study in the moral education in China. After we searched the literature on Chinese Journal Full-text Database from 2007 to 2012, we found that there are 11 empirical research papers on the motivation for teachers in universities and colleges and only one paper on the influencing factors of motivating the college students. We couldn't find a paper concerning the questionnaire on college students’ motivation education. However, if we want to examine the practical effect of encouragement education, we need to have the appropriate tools and empirical research. Therefore, the aim of this study is to compile a questionnaire for Chinese motivation education from the perspective of moral education, and it has good reliability and validity in order to have better understanding of the educational effect of different incentive strategies, which can help us to explore the models of motivation that are appropriate for the field of Chinese moral education.

Data Analysis of the Incentive Questionnaire

After a thorough reading of the relevant literature, we have gained the dimension of the incentive questionnaire as Table 1, shown above. This part is about compiling the incentive questionnaire that applies to the moral education for college students in China. The process can be divided into three sections: in-depth interviews, the composition of the initial questionnaire and the modification and verification of the final questionnaire.

In-Depth Interviews

Before designing an initial questionnaire, we had an in-depth interview with 20 undergraduates and graduates from a university, 8 males and 12 females. During the interview, the interviewer first introduced to the interviewees the main purpose of the interview and then asked them some questions. The questions the interviewer asked mainly concern the motivation mode and effects of motivation on the
interviewees, among which there are “What motivated you the most during your past years?” and “How did you benefit from such motivation?” Besides, we made sound recording of the interview with the consent of the interviewees. After the interview, we made the interview records into text for coding and made a qualitative analysis of the text using software ATLAS.ti 6.0, and got 43 types of motivation modes.

**Initial Questionnaire**

According to the previously read literature and in-depth interview, we designed the initial questionnaire. The questionnaire consists of 50 questions. Each question concerns a specific kind of motivation mode and the full mark of each question is 5 points, ranging from “1” for no incentive effect to “5” for constant incentive effects.

**Modification and Verification of Questionnaire**

**Participation.** A total of 447 students attended this survey. They are from the 5 universities in Hangzhou (Zhejiang University, Zhejiang Shuren University, Zhejiang Agriculture & Forestry University, Zhejiang Radio and TV University and Zhejiang Vocational and Technical Institute of Transportation), among whom, 213 are males accounting for 47.7% of the total and 234 are females accounting for 52.3% of the total; 221 are freshmen and 117 are sophomores jointly accounting for 75.6% of the total. The average age of all students is 21.34 and the variance is 1.737.

These test data are randomly divided into two groups. One is used for exploration of the applicability and structure of the questions in the questionnaire (Sample 1: sample size of 230) and the other is used for verification of the structure of final questionnaire (Sample 2: sample size of 217).

**Item analysis.** We designed a total of 50 questions in the questionnaire. We conducted item analysis using software SPSS 15.0. First, we analyzed these questions and calculated the total score of the 50 questions. The 27% of respondents who got the highest marks were classified into the high score group, while the 27% of respondents who got the lowest marks were classified into the low score group. Besides, a comparison was made between the scores of the two groups for each question. Results show that the scores of the high score group are all higher than those of the low score group significantly at 0.001 level, which indicates all the 50 items (questions) have high quality.

**Content analysis.** The contents of the questions were analyzed to delete the questions that do not conform to the meaning of incentives. The questions in the questionnaires are supposed to be specific and detailed. Those abstract ones were deleted. What’s more, those questions with ambiguous meaning were cancelled. In conclusion, 29 questions were deleted with 21 questions left.

**Exploratory factor analysis.** Further factor analysis was made of the remaining 29 questions. These 29 questions were divided into seven dimensions, i.e. 5 questions on emotional motivation, 4 questions on educational motivation, 3 questions on model motivation, 3 questions on self-motivation, 4 questions on objective motivation, 5 questions on frustration motivation and 5 questions on reward motivation. We used AMOS7.0 to verify the questionnaires on these 7 dimensions and found that the model does not fit well. \( \chi^2 (362)=846.539, p<0.001, GFI=0.781, CFI=0.789 \), which indicates some problems exist in the structure of the questionnaire.

The above-mentioned problems are analyzed below. We found that the correlation between educational motivation and model motivation is 0.952, higher than 0.95. The correlation is too high, indicating that educational motivation and model motivation can be classified into one dimension. Therefore, these two dimensions were classified into new educational motivation dimension. We analyzed
the factor loads of questions and deleted those able to be classified into more than two dimensions (i.e. questions whose factor loads are both higher than 0.35 in two dimensions), and deleted eight questions without differentiation index. The final questionnaire consists of 21 questions in 6 dimensions. Its structure is as Table 2, shown below:

Table 2. The Dimension of Motivation Education

<table>
<thead>
<tr>
<th>Dimension of Motivation</th>
<th>The items contained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion motivation</td>
<td>19, 20</td>
</tr>
<tr>
<td>Educational motivation</td>
<td>22, 27, 28, 34, 40</td>
</tr>
<tr>
<td>Frustration Motivation</td>
<td>24, 26, 30, 35, 50</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>2, 10, 11, 12</td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>7, 16, 23</td>
</tr>
<tr>
<td>Objective Motivation</td>
<td>39, 41</td>
</tr>
</tbody>
</table>

Confirmatory Factor Analysis
We used the second group of data to verify the structure of the final questionnaire and found that the model fits well, with Χ²(174)=335.909, p<0.001, Χ²/df=1.931, CFI=0.907>0.90, RMSEA=0.066<0.08, indicating the structure of this questionnaire is of high external quality. Besides, the factor loads of all questions in their dimensions are higher than 0.45, mostly above the 0.001 level, showing a high internal quality.

Reliability and Validity of the Questionnaire
Now we analyze the reliability and validity of each dimension of questionnaire. As Table 3 shows below, the Cronbach α coefficients of all dimensions are higher than 0.5, except only two questions in Objective Motivation, whose reliability coefficients are less than 0.6, and other dimensions are all larger than 0.6. This indicates that each dimension of the self-designed questionnaire has high reliability.

Table 3. The Concordance Coefficients of All dimensions of Motivation

<table>
<thead>
<tr>
<th>Dimension</th>
<th>①</th>
<th>②</th>
<th>③</th>
<th>④</th>
<th>⑤</th>
<th>⑥</th>
<th>Total Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>α coefficient</td>
<td>.743</td>
<td>.804</td>
<td>.792</td>
<td>.711</td>
<td>.661</td>
<td>.554</td>
<td>.906</td>
</tr>
<tr>
<td>Number of questions</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>21</td>
</tr>
</tbody>
</table>

① stands for Emotion Motivation; ② stands for Educational motivation; ③ stands for Frustration Motivation; ④ stands for Achievement Motivation; ⑤ stands for Self-Motivation; ⑥ stands for Objective Motivation.

The dimension has discrimination validity if the same question falls into the category of only one dimension. If the same question falls into the category of more than two dimensions, it does not have discrimination validity. According to such definition, the correlation of the question with the total score of its dimension should be higher than the correlation of it with the total score of overall scale. We found that the correlations of all the 21 questions with the total scores of scale are smaller than the correlations of them with the total scores of their dimensions. The average value of correlation of them with the total scores of scale is 0.586, smaller than 0.769, and their correlation is with the total scores of their dimensions. Paired t-test indicates that the difference is significant at 0.001 level, t(20)=-9.223, p=0.000<0.001. This indicates that all the questions have discrimination validity as we can see from Table 4.
Table 4. The Testing Table of Discrimination Validity of Each Question

<table>
<thead>
<tr>
<th>Question</th>
<th>Correlation coefficient of total score of the scale</th>
<th>Correlation coefficient of total score of the dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement Motivation 2</td>
<td>.471</td>
<td>.695</td>
</tr>
<tr>
<td>Self-Motivation 7</td>
<td>.555</td>
<td>.768</td>
</tr>
<tr>
<td>Achievement Motivation 10</td>
<td>.592</td>
<td>.723</td>
</tr>
<tr>
<td>Achievement Motivation 11</td>
<td>.558</td>
<td>.756</td>
</tr>
<tr>
<td>Achievement Motivation 12</td>
<td>.553</td>
<td>.757</td>
</tr>
<tr>
<td>Self-Motivation 16</td>
<td>.497</td>
<td>.774</td>
</tr>
<tr>
<td>Emotion motivation 19</td>
<td>.522</td>
<td>.892</td>
</tr>
<tr>
<td>Emotion motivation 20</td>
<td>.539</td>
<td>.892</td>
</tr>
<tr>
<td>Educational motivation 22</td>
<td>.656</td>
<td>.719</td>
</tr>
<tr>
<td>Self-Motivation 23</td>
<td>.658</td>
<td>.777</td>
</tr>
<tr>
<td>Frustration Motivation 24</td>
<td>.664</td>
<td>.719</td>
</tr>
<tr>
<td>Frustration Motivation 26</td>
<td>.626</td>
<td>.723</td>
</tr>
<tr>
<td>Educational motivation 27</td>
<td>.668</td>
<td>.731</td>
</tr>
<tr>
<td>Educational motivation 28</td>
<td>.607</td>
<td>.766</td>
</tr>
<tr>
<td>Frustration Motivation 30</td>
<td>.619</td>
<td>.731</td>
</tr>
<tr>
<td>Educational motivation 34</td>
<td>.594</td>
<td>.748</td>
</tr>
<tr>
<td>Frustration Motivation 35</td>
<td>.593</td>
<td>.773</td>
</tr>
<tr>
<td>Objective Motivation 39</td>
<td>.525</td>
<td>.828</td>
</tr>
<tr>
<td>Educational motivation 40</td>
<td>.660</td>
<td>.780</td>
</tr>
<tr>
<td>Objective Motivation 41</td>
<td>.591</td>
<td>.835</td>
</tr>
<tr>
<td>Frustration Motivation 50</td>
<td>.564</td>
<td>.751</td>
</tr>
<tr>
<td>Mean of correlation coefficients</td>
<td>.586</td>
<td>.769</td>
</tr>
<tr>
<td>Paired t-test results</td>
<td>$t(20) = -9.223, p = .000 &lt; .001$</td>
<td></td>
</tr>
</tbody>
</table>

Results and Discussions

Conclusion: High Quality of the Questionnaire

Through in-depth interview and literature reading, we designed an initial questionnaire and revised it. The structure of the final questionnaire fits well by modification and verification of it. It consists of 6 dimensions with 21 questions. The test on reliability and validity shows that the questionnaire we designed by ourselves enjoys high quality. Overall, the Achievement Motivation and the Self-Motivation are the best of the motivation education, followed by Educational Motivation and Emotion Motivation, although Frustration Motivation can strengthen the students’ ability of the stress tolerance, but also lets them feel fear with failure, then only produce the motivation to avoid failure and lack of further incentive effects. Among these, the effect of Objective Motivation is in the last place, which should make us concerned.

Suggestions

This paper, combined with research results, puts forward the following suggestions: According to our research, Achievement Motivation gets the best affects on motivating students, so when students achieve something, we are required to encourage them without delay so as to strengthen their initiative and positivity. Moreover, more efforts ought to be exerted to discover the advantages and strengths of the students, mainly with a positive incentive.
As for Educational Motivation, educators play a vital role in it. All the educators can use various effective measures to encourage students through class teaching or after class, such as praising them, or giving them a challenging task. As for Self-motivation, teachers should lay stress on teaching correct incentive methods and guiding students to stimulate themselves, thus shifting the external incentive into the internal incentive so that the incentive effects last longer. For Emotion Motivation, teachers, parents and other friends should pay attention to the emotional communication and students’ emotional demands with a real feeling to touch them, guide them and encourage them.

As the research has shown that Frustration Education has two sides, so during the implementation of the frustration education and a certain punishment mechanism of negative incentive, teachers should pay attention to the degree of certainty, consider the student's mental capacity and acceptance, and should not let them develop a resistant or rebellious psychology. As for Objective Motivation, we should not pursue large and empty goals when making target guidance and management. Instead, the goals must be closer to the actual situation of the students and combine with their own personalities and requirements, so that they will neither feel daunting and find it difficult to achieve nor think it is easy and lighten their heart. Once the goals in the goals incentive are grasped inaccurately or lack of intermediate procedure management, it will influence the whole incentive effects as we can see from the results of our study.

**Directions for Future Research**

The incentive research on college students has received wide attention from the scholars currently as the intersection of moral education and psychology. It is significant to prompt individual growth and success of the students and enhance the effectiveness of moral education. The incentive theory and practice accumulation carried out abroad is relatively mature, however, because China starts relatively late in this area, and this requires us to be on the basis of using theory and research results abroad and at home for reference, combine with the actual situation, do the investigation and research earnestly.

In addition, though the incentive questionnaire that we prepared has good reliability and validity, one thing to note is that this study is not fully representative because our samples for study are only from 5 universities in Hangzhou. It is necessary to further expand the samples for study. It can only be generalized after further enlarging the researching samples and the further re-modification, deletion and adjustment. Next, on the basis of the preparation of the incentive questionnaire at earlier stage, we will carry out research on the effects of each incentive dimension on the self-efficacy, psychological resilience and moral sense of undergraduates.

**References**


Corresponding Author: Ma Jianqing, E-mail: majq2007@163.com
The Relationship Among Career Plateau, Job Satisfaction and Turnover Intention

Zhu Wei and Fang Shou Hu

Education Department, Zhejiang University of Water Resources and Electric Power
Hangzhou, China

Email: psychoren@126.com and fangshh@zjwchc.com

[Abstract] This present study tries to explore the relationship of career plateau, job satisfaction and turnover intention. Using the scales for career plateau (16 items), job satisfaction (20 items) and turnover intentions (4 items), 350 college young teachers were measured. Correlation analysis showed that the items of career plateau and the items of job satisfaction correlated negatively with each other (r=-0.24~0.34, p<0.01), while the items of career plateau were significantly correlated positively with turnover intentions (r=0.20~0.42, p<0.01). The items of job satisfaction were significantly correlated negatively with turnover intentions (r=-0.13~0.28, p<0.05). By establishing a structural equation model, we found job satisfaction was a mediating factor between career plateau and turnover intentions. WE conclude that career plateau affected turnover intentions through job satisfaction.

[Keywords] career plateau; job satisfaction; turnover intentions

Introduction
Changes in the organization structure and the continuous improvement of organization effectiveness directly cause more employees in the lower levels of the organization structure to enter the peak of their careers. This concept of career plateau was first presented abroad by Ference (1977) who defined career plateau as individuals having a small possibility of further promotion at some stage of their career. Since then many researchers have enriched this concept and carried out a large number of studies on the structure, influencing factors and countermeasures of career plateau and gained fruitful achievements.

At home, the research of job burnout and career plateau was just in the beginning stage because of the limitation of research level while more researches still stayed in review of teachers. Meanwhile, people pay more and more attention to their own career development, how to realize their professional status, and the consequences associated with their current professional status, especially for young teachers in colleges and universities. This study starts with the career plateau of young teachers in colleges and universities, explores this phenomenon and its result, providing theory support and practice support to burden easing of young teachers in colleges and universities.

Method

Participants
350 young college teachers in China participated in this study in exchange for course credit. Six participants who didn’t complete some items were excluded from the data analysis. So the final sample consisted of 344 participants (161 females and 173 males). Their ages ranged from 23 to 35 years, with a mean of 29.57 (SD=4.78).

Measures
Career plateau questionnaire. The questionnaire was composed of 16 items in total with three dimensionalities of hierarchical plateau, content plateau and centering plateau (Xie, 2008).
Questionnaire projects were scored by Likert 6-point, the higher scores meant that the higher level of career plateau reached. The overall $\alpha$ coefficient was 0.909, and the three dimensionalities of $\alpha$ coefficient were respectively 0.878, 0.823 and 0.811.

**Job satisfaction questionnaire** (Moorman & Lynn, 2002). It was selected from Minnesota Satisfaction Questionnaire (MSQ). The questionnaire consisted of 20 items, including three dimensions of intrinsic satisfaction, extrinsic satisfaction and general satisfaction. The job satisfaction questionnaire was scored by Likert 5-point system; the higher the score means the higher the employee job satisfaction. The internal consistency coefficient of MSQ was between 0.85 and 0.91, the $\alpha$ coefficient of intrinsic satisfaction was between 0.82 and 0.86, and the $\alpha$ coefficient of extrinsic satisfaction was from 0.70 to 0.82, with good structure validity.

**Turnover intention questionnaire.** Employee turnover intention survey questionnaire was the turnover intention questionnaire developed by Chen and Francesco (2000), composed of four projects, within it the third question was a reverse question, scored reversely by Likert 6-point (1 represented don’t agree at all, 2 represented don’t agree in some degree, 3 represented a little negative, 4 represented agree slightly, 5 represented agree in some degree, 6 represented very agree, the higher the score meant the stronger the employee turnover intention was.

**Results**

**Descriptive Statistics and Correlational Analysis**

Making a correlation analysis on the measuring result of career plateau among young teachers, job satisfaction and turnover intention, the results are shown as Table 1. The three indexes of career plateau had a significantly negative correlation with job satisfaction with the correlation coefficient between -0.22 and -0.30, but had a significantly positive correlation with turnover intention with correlation coefficients above 0.20.

**Table 1. Means, Standard Deviations and Inter-correlations of Variables**

<table>
<thead>
<tr>
<th></th>
<th>M±SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hierarchy plateau</td>
<td>13.34±2.51</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Content plateau</td>
<td>20.82±3.22</td>
<td>0.08</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Centering plateau</td>
<td>19.71±3.49</td>
<td>0.12*</td>
<td>0.09</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4 Job satisfaction</td>
<td>50.78±6.24</td>
<td>-0.30**</td>
<td>-0.28**</td>
<td>-0.22**</td>
<td>-</td>
</tr>
<tr>
<td>5 Turnover intention</td>
<td>12.84±3.17</td>
<td>0.42**</td>
<td>0.28**</td>
<td>0.20**</td>
<td>-0.22**</td>
</tr>
</tbody>
</table>

*Note: * $P<0.05$, ** $P<0.01$*

**Job Satisfaction as a Mediator between Hierarchical Plateau and Turnover Intention**

The research further studied the relationship among hierarchical plateau, job satisfaction and turnover intention, which were in line with the basic analysis condition of intermediary effect based on Wen Zhonglin and other people’s relevant statements about their inspection of intermediary effect, and explored the mediating role of job satisfaction in career plateau and turnover intention. Making a regression analysis on the job satisfaction with hierarchical plateau as the independent variable, the regression equation F value was remarkable ($F = 18.54$, $p < 0.001$), while the standard regression coefficient was -0.37 ($t = 7.14$, $p < 0.001$). Further Sobel test showed that job satisfaction played a partial intermediary role between hierarchical plateau and turnover intention ($z = 4.76$, $p < 0.01$). The analysis results are shown in Table 2.
Table 2. Mediating Effect of Job Satisfaction in Hierarchical Plateau and Turnover Intention

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>R²</th>
<th>Change of F value</th>
<th>Standard regression coefficient β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Hierarchical plateau</td>
<td>0.18</td>
<td>32.55e</td>
<td>0.41</td>
<td>8.52***</td>
</tr>
<tr>
<td>Step 2 Hierarchical plateau</td>
<td>0.26</td>
<td>22.16e</td>
<td>0.35</td>
<td>7.34***</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-0.29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** P<0.001

Job Satisfaction as a Mediator between Content Plateau and Turnover Intention

The research further studied the relationship among content plateau, job satisfaction and turnover intention, which was found to be in line with the basic analysis condition of intermediary effect. Making a regression analysis on the job satisfaction with content plateau as the independent variable, the regression equation F value was remarkable (F=33.92, p<0.001), while the standard regression coefficient was -0.30 (t=-5.82, p<0.001). Further Sobel test showed that job satisfaction played a partial intermediary role between content plateau and turnover intention (z = 3.72, p < 0.01). The analysis results are shown in Table 3.

Table 3. Mediating Effect of Job Satisfaction in Content Plateau and Turnover Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>R²</th>
<th>Change of F value</th>
<th>Standard regression coefficient β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Content plateau</td>
<td>0.08</td>
<td>28.69e</td>
<td>0.28</td>
<td>5.38***</td>
</tr>
<tr>
<td>Step 2 Content plateau</td>
<td>0.14</td>
<td>27.05e</td>
<td>0.22</td>
<td>4.29***</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** P<0.001

Job Satisfaction as a Mediator between Centering Plateau and Turnover Intention

The research further studied the relationship among centering plateau, job satisfaction and turnover intention, which is found to be in line with the basic analysis condition of intermediary effect seeing from correlation matrix. Make a regression analysis on the job satisfaction with centering plateau as the independent variable, the regression equation F value is remarkable (F=33.92, p<0.001), while the standard regression coefficient is -0.24 (t=-4.70, p<0.001). Further Sobel test showed that job satisfaction plays a partial intermediary role between centering plateau and turnover intention (z = 3.05, p < 0.01).The analysis results are shown in Table 4.

Table 4. Mediating Effect of Job Satisfaction in Centering Plateau and Turnover Intention

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>R²</th>
<th>Change of F value</th>
<th>Standard regression coefficient β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Centering plateau</td>
<td>0.04</td>
<td>14.82e</td>
<td>0.20</td>
<td>3.85***</td>
</tr>
<tr>
<td>Step 2 Centering plateau</td>
<td>0.08</td>
<td>15.60e</td>
<td>0.16</td>
<td>2.94**</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-0.21</td>
<td></td>
<td></td>
<td>-3.96***</td>
</tr>
</tbody>
</table>

Note: ** P <0.01; *** P <0.001.

Analysis of Mediating Effect between Career Plateau and Turnover Intention

To further test and verify the conclusion that job satisfaction plays a mediating role, the research constructed the structural equation model for matching assuming career plateau affects turnover
intention via job satisfaction. Looking at the analysis results in Table 5 and Figure 1, the data in this model matches very well which supports the theoretical assumption.

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>GFI</th>
<th>CFI</th>
<th>IFI</th>
<th>NFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>32.74</td>
<td>12</td>
<td>2.73</td>
<td>0.97</td>
<td>0.95</td>
<td>0.95</td>
<td>0.93</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Discussion

A number of important discoveries were made through data analysis: three dimensions of career plateau had an important impact on the quality of individual psychology of young teachers which have been verified in the study in the data model with degree of job satisfaction and turnover intention as outcome variables. It’s confirmed that the three dimensions of career plateau not only directly affect the turnover intention of young teachers, but also may affect indirectly theirs' intention to leave by way of influencing one or several factors in the job satisfaction of teachers, with consistent scores in terms of direction and level of such influence as career plateau. That’s to say, compared to the non-career plateau teachers, those in the state of career plateau have lower job satisfaction, and higher turnover intention. This is probably due to the awareness of the teachers that the organizations no longer recognize or attach importance to their competence and skills, or their work results brought about by their hard work, thus psychologically they become bothered, and this is what career plateau is, and such kind of situation will reduce their work engagement and generate more turnover intention. In other words, the higher their awareness of the fact that they are in the state of career plateau, the lower their job satisfaction degree, which at the same time will increase the tendency to leave the organization. It shows that the self-awareness and evaluation of their own professional development of young teachers will directly affect their turnover intention, and meanwhile affect indirectly the change in the turnover intention by impacting on job satisfaction. Such results are consistent with the research findings of Burke (1989, 2006), Stout (1988), and Hall (1985), etc., and correspond with the psychological processes in the relative studies carried out by Shao Hong, etc. on the medical staff about job satisfaction.

Although some study by the scholars abroad thinks career plateau as positive (Andreas, 2002), the results of this study do not agree with it. With a similar view as most of the scholars, the research results support the effect of career plateau is negative. What is consistent with the study of Andreas and others
is the job satisfaction of teachers who are in career plateau will significantly reduce, and what is inconsistent is the study of Andreas thinks whether they are in career plateau has very little to do with turnover intention; what this study is consistent with the study of Tremblay and others is both studies think the job satisfaction of teachers in career plateau will decrease, but this study thinks job satisfaction will increase when being in career plateau for long time, while turnover intention will decrease (Tremblay, & Roger, 1993, 2004). Just like in the study by Chao (1990), it reveals that significant negative correlation relationship is existing between the career plateau and job satisfaction.

Because of the design of the research, this study did not explore methods to adjust career plateau condition or test and verify the adjusting methods, but it is learnt from literature that foreign scholars have proposed approach of career plateau phenomenon, which Chen Jian in his review summarized as individual coping strategies and organizational strategy. In follow-up studies, the focus will be put on how to reduce the rate of youth teachers' career plateau phenomenon, and verify the feasibility and reliability of the methods through empirical study.

References
Research on the Public Responsibility-Oriented Performance Evaluation System of Civil Servants

Bi Juan
Beijing Academy of Social Sciences, Beijing, China
Email: janebi@126.com

[Abstract] Civil servants are the main provision of public services. It is an effective way to fulfill public responsibilities by promoting their performance evaluation. Therefore, the performance evaluation of civil servants should reflect the public responsibility-orientation, i.e. a positive response and effective realization of the public’s needs and promotion of the public interest. Guided in public responsibility, combined with 360-Degree Performance Feedback, we can construct a Civil Service Performance Evaluation System that includes the following: the public nature of the core principles of evaluation, multiple subjects of evaluation, scientific index system designed for the needs of the public, social full supervision mechanism, results feedback, and incentive mechanisms.

[Keywords] public responsibilities; performance evaluation system; civil servants; 360-Degree Performance Feedback

Introduction
Since the end of 1970 to early 1980, a new public management movement began to rise. The value of performance became one of the core values of the new public management movement (Zhang, 2006). Western countries were not only active in the public sector performance evaluation, but they also improved the public sector HR performance evaluation. Civil servants are important parts of public sector HR, who can manage social public affairs on behalf of the State, exercise administrative authority and fulfill official business. The core of the management of civil servants is how to evaluate their performance fairly and scientifically. The performance evaluating of civil servants is an important part of national civil servants system. It is not only the judgment of choosing, promoting, awarding, training and the adjustment of wages and welfare, but also is an important way to improve the government performance.

At present, the civil servants system reformation of western countries belongs to the field of the new public management. This is an overall reform framework. It is a basic trend that can be generalized as under the basis of government publicity, sufficiently bringing in the modern company’s HR management experience, and stimulating the civil servants’ competition to improve the efficiency of government operating (Yang & Tang, 2007). On the foundation of government publicity positioning, civil servants should be authorized for public duty at first; this is the essence of their function and value. Hence, the orientation of public duty is not only the very beginning of civil servants, but also even the core principle of the performance evaluation of the civil servants.

With the new public management theory, using the company’s HR management experience and methods, to establish a public servant performance evaluation system is valuable and meaningful. Therefore, the goal of this article is in the company’s HR management 360-degree performance evaluation method to establish civil servant performance evaluation system under the guidance of public responsibility. The contents include taking publicity as a core principle of evaluation, multiple subjects of evaluation, scientific index system designed for the needs of the public, social full supervision mechanism, feedback of results, and a reward and punishment mechanism.
The Core Principle of the Performance Evaluation of Civil Servants

Since the 1970s, western government began to become concerned with how to react facing public demand and benefit. The subjective and objective description of the supply of government services, and the measurement for citizen and service object’s attitude have been paid attention to by scholars (Brown & Coulter, 1983). A public organization can enhance public confidence through the performance management, and rebuild the image of public organization in public (Benowitz & Schein, 1996). Gregg G. Van Ryzin used the customer satisfaction index model, through a telephone survey of New York citizens, for driving and consequences of the local government the overall satisfaction of citizens (2004).

New public management advocates a kind of new conception of responsibility management, according to which the civil servants should take personal responsibility for their behavior and results. This is the so called public responsibility (Chen, 2003), which means the administrative personnel from the country’s public management department should be responsible for the body of their national power when doing their jobs. The carrying out of personal responsibility must be improved, so to seek benefits for country. This requires public servants to keep an active reaction to meet the social public demand and promote public advantages.

The narrow sense of public responsibility refers to the country’s public servants in violation of the provisions of the administrative organization and its management, in violation of the obligations and responsibilities stipulated in the administrative legislation must bear the responsibility. Public responsibility consists of administrative responsibility, legal responsibility and moral responsibility.

From the view of administrative organizational structure, administrative responsibility refers to the government civil servants responsible for the internal system, for dereliction of duty, malfeasance, and acceptance of administrative responsibility investigation. Legal responsibility refers to the dereliction of duty, malfeasance of civil servants by laws and regulations of the liability that shall be investigated. Moral responsibility refers to the civil servants, the moral introspection of dereliction of duty, malfeasance, condemned by their conscience and punishing themselves.

Public responsibility not only determines the evaluator selection of civil servant performance evaluation, the selection of indicators, and supervision mode, but also determines the performance evaluation result feedback, and reward and punishment, as well as direct targets. The realization of public responsibility has a close relationship with evaluators, who decide if public responsibility has come into practice or not, and who can determine the correct responsibility that should be taken, showing who is responsible for the main responsibility.

At present, in the democratic nations, the people are masters of the country and public management are responsible for the people. It should be judged by the people if the servants can carry out the responsibility they undertake and implementation level of the public responsibility; evaluation criteria and indicators should be determined by the people, and it can ensure the realization of public responsibility.

Referencing 360-Degree Performance Evaluation

The so-called 360-Degree Feedback, also known as Full-Circle Appraisal or Multi-source Assessment (Sun, 2003), is at all levels in an organization, understood and familiar with the evaluated person (such as direct superiors, colleagues, and subordinates, etc.), and the internal and external often keep in close contact with the customer who provides feedback on its performance to provide objective and real information, helping the organizations and individuals in these aspects of strengths and development needs.
By introducing 360-degree performance assessment, the assessment body can collect various assessment information internally and externally, and from positive and negative perspectives; thus, to put forward a relatively fair and suitable actual assessment standard and result for civil servants' performance.

Among them, the most important thing is to introduce the social public to evaluate the performance of civil servants’ entire service, which will fully reflect the principle of public responsibility of civil servants' performance evaluation. Multiple evaluators can be divided into an external body and internal body, the inner including who is evaluated, superiors, laterals, and subordinates; the eternal body includes service object, the public, experts and professional appraisal agency. For an example, see Figure 1.

**Figure 1. 360-Degree Feedback System**

**Design Indicator System**

First of all, the performance evaluation of civil servants should be aware of the rights and duties of the evaluated and analyze their position. Then, according to this, they should set some quantify and qualitative assessment indicators. The design of servant’s evaluation indicator must obey the government departments’ duty, function and target. This is because performance management itself is a process of organization goals and personal practice coming into action and management. Thus, servant’s performance responsibility and goal should allow for the organization orientation.

One things that differs is the servant’s specific requirements and responsibilities. Thus, the performance indicator system needs to identify the actual position statement, working aim of servants, and the assessment indicators during the estimate design when facing these goals. If we want there to be some effects, the indicator design must obey relevant principles (Mei, 2012).

The first principle is the validity that is the effectiveness and accuracy of the evaluation indicators. The second is the reliability that is the stability and reliability of the results in performance indicator. The third is the participation that allows civil servants to fully participate in the development of indicators, so that all the civil servants not only understand the organization’s strategy and goals, but they also have a
voluntarily effort for the realization of organizational goals. Scholars think that participation can make the organization members learn their work objectives and responsibilities (Diaoen, 1969). The fourth is the manoeuvrability and measurability that is the convenience of the evaluation information acquisition and the measurability of indicators.

In addition, dimensionality and weightedness of indicators are also important parts of an indicator system (Fang, 2003). On one hand, servant performance does not depend on a single factor, but objective and subjective reasons. So the civil servants performance evaluation should be carried out in all kinds of dimensionality. According to the public responsibility theory, the civil servants performance should take into account the administrative responsibility, legal liability, and moral obligation. The servant’s work performance, work behavior, work ability, and attitude, etc., should reflect the practice of these works. So the indicator design can be started in these aspects. On the other hand, the evaluation performance system consists of multiple dimensional indicators. Different indicators play different roles, thus, it needs weighting to evaluate the differences and treat them differently. The total indicator is 1.

According to the above analysis, the index system of performance evaluation of civil servants is shown in Figure 2.

**Figure 2. The Index System of Performance Evaluation of Civil Servants**

**The Process of Performance Evaluation System of Civil Servants with the Whole Social Supervision, Feedback of Results and the Mechanism of Rewards and Punishments**

The main factors of a performance evaluation system include the scientific evaluation system, the training of relevant personnel, and channels of information. The key factor is to ensure an objective and fair of evaluation. Design of a civil servant performance evaluation system must consider the characteristics that civil servants bear the public responsibility, in order to achieve objective and fair evaluation and in accordance with the public interests. So the total social supervision is crucial to the performance evaluation. Therefore, the total social supervision needs to be involved in the civil servants performance evaluation system in the entire performance evaluation process. It needs not only to be the internal...
supervision and restriction mechanism of the government, but also the external public supervision mechanism.

At the same time, the key goals of the civil servant performance evaluation system are to evaluate the abilities and levels of civil servants undertaking public responsibility, to further stimulate the enthusiasm of public service, to realize public value and to promote their ability and performance. So, the feedback and application of performance evaluation results is very necessary. The feedback of the results can not only make the government understand the working performance of the departments of civil servants, and make different compensation plans, training programs and personnel recruitment plan according to the different results, but also make civil servants understand their achievements, grasp a clearer look at their responsibilities and objectives, and provide references for further improvement. To a great extent, the application of results is reflected on the reward and punishment system. According to the civil servants performance evaluation results, civil servants are classified as excellent, good and poor. Different performance levels will correspond to the different rewards and punishments. Only in this way, the performance evaluation system can be more effective in order to realize the strategic target of civil servants performance evaluation system better.

On the basis of above, the performance evaluation process includes the whole social supervision, feedback of results, and the mechanism of rewards and punishments. The following graph is the process of the civil servants performance evaluation system. It includes the whole process from the planning to the implementation and the application of the performance evaluation results. It also includes the feedback process to adjustment and improves the performance plan and the process. At the same time, as an organic part, the internal and the external public supervisions will take parts in the whole process. For example, see Figure 3.

![Figure 3. The Process of the Performance Evaluation System of Civil Servants](image-url)
Conclusion

According to public responsibility orientation and 360-Degree Feedback system, this paper constructs a complete system of the civil servants performance evaluation, which includes performance evaluation plan, evaluation implementation and application of the results, and determines the evaluator of the internal and external and index system framework. Through 360-Degree Feedback system and quantitative summary of evaluation results, we can apply evaluation results in the management of civil servants. And also we can get feedback and adjustment the plan in the process. So, we can constantly perfect the performance evaluation of civil servants on the basis of internal supervision of the government and external supervision of the public.

Of course, this paper explores only a possible mode and thought of the performance evaluation of the civil servants. It still needs further exploration and improvement in practical ways. On the one hand, the evaluation operation needs to further complete the implementation plan, and on the other hand, it needs differential methods according to the different civil service jobs and responsibilities. The above problems should be further studied on the basis of this paper.

References


A Study on Influencing Factors of Adaptive Performance

Jin Dong Mei, Lu Yue, Zhang Ying Feng, Li Hua
Beijing Technology and Business University, Beijing, China

Wen Zhi Yi
Ministry of Human Resources and Social Security, Beijing, China
Email: jin_dm@163.com

[Abstract] Using the questionnaire method, we studied the effects of individual and organizational factors on employee adaptability. Using descriptive statistics, and an F-test to analyze the data, this study finds Individual Factors, and Adaptive Performance on gender; age, education and work experience are significantly different. Organizational Factors, and Adaptive Performance of their duties have significantly different innovative problem solving and Adaptive Performance posts on a continuous learning. Organization industry types have significant differences.

[Keywords] adaptive performance; individual factors, organizational factors; influence factors

Introduction
Defining the current academic to this concept of adaptive performance did not reach a unified result; there are several perspectives: 1) a universal, for various types of adaptive behavior (Campbell, 1993); 2) “quickly convert role” (Murphy, 1999) that the transformation ability of individuals is in a variety of different roles; 3) individuals learn new knowledge, new skills and effectiveness. London (1999) felt that adaptive performance is the efficiency of individual learning by self-management of new knowledge, and new skills; 4) it is an act of adaptation in the broad sense, that is, when there is a change, the individual can effectively be used in other tasks of knowledge and skills transfer, applied to the current task (Allworth, 1999).

Through the analysis and conclusion of several scholars on the Adaptive Performance description, this study suggests that Adaptive Performance is in a dynamically changing environment, and units at various levels within the organization respond effectively to work various types of conduct requirements and environmental changes. The object of the study is employee performance adaptation at the individual level.

At present, the main measurement tools of Adaptive performance include: ① Pulakos (1999) proposed the work adaptability scale. The scale of each adaptive performance dimensions all have a scale; each of the subscales have 8-9 projects, with a total of 68 measurement items. ② Hesketh (1998) included proactive, and reactive, such as adaptability, tolerance of type a behavior in a three dimension scale. ③Tao Qi, and Wang Zhongming (2000) put forward in the Pulakos theory, adaptive performance with eight dimensions based on the structure, and through empirical analysis of the adaptive performance scale, included pressure and emergency treatment, innovation, and continuous learning to solve the problem of post interpersonal and cultural adaptation of four dimensions.

The Research Methods
Test and Measurement
This research adopted the questionnaire survey method. Questionnaire for this study is a network tool questionnaire issued in electronic form, from the web site: http://www.zhijizhibi.com/questionnaire/249964310. Respondents were staff from all over the country.
300 were issued questionnaires, with a recovery of 200 copies of the questionnaire. The recovery rate was 67%, of which 163 effective questionnaires, and an effective rate of 81.5%.

**Measurement Tools**

The Tao Qi, (2006) the adaptive performance scale, includes four dimensions: Pressure and response processing, interpersonal and cultural adaptation, job skills, and creative problem solving – a total of 25 projects. The scales use a five-level Likert scale, from “totally inconsistent” – 1, to “fully comply with” – 5, respectively. The four dimensions have a high internal consistency coefficient of: 0.91, 0.92, 0.85.

**Statistical Analysis**

We used the Excel input data, and then used SPSS16.0 statistical software package, descriptive statistics, t test and F test on the input data.

The Results and Analysis

**The Staff Around the Performance Analysis on Differences in Individual Factors**

**Analysis of gender differences in dimensions of Adaptive Performance.** Gender staff in Adaptive Performance differences were found across dimensions; both men and women in all dimensions of Adaptive Performance did not differ statistically significant (Table 1). This may be because, with universal access to basic education and transformation of traditional gender stereotypes, women and men in the areas family culture, level of education, receiving on-the-job training, and in areas such as equality of opportunity, result in quality of thinking ideas, modes of behavior, such as acquired immunodeficiency syndrome, all have a lot in common.

**Table 1. Adaptability of Employees of Different Sex in the Comparative Analysis of the Performance Difference of Each Dimension**

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Gender</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (M±SD)</td>
<td>Female (M±SD)</td>
</tr>
<tr>
<td></td>
<td>(M±SD)</td>
<td>(M±SD)</td>
</tr>
<tr>
<td>Pressure and emergency treatment</td>
<td>(3.66±0.67)</td>
<td>(3.53±0.57)</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td>(3.41±0.73)</td>
<td>(3.27±0.67)</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td>(3.68±0.68)</td>
<td>(3.71±0.50)</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td>(3.69±0.67)</td>
<td>(3.68±0.48)</td>
</tr>
</tbody>
</table>

**Age differences in all dimensions of Adaptive performance analysis.** In this study, there were five stages of sample employees in F test, according to table statistics results displayed. There were significant differences in the level of 0.01 in different age groups of employees in the Adaptive Performance of each dimension. The mean in all dimensions of the aged 20 and below staff was significantly lower than the other four age stages. Between the ages of 20-40 the staff’s overall Adaptive Performance level was less than 40 years old and above. This shows that as the men grew older, employees’ work experience and life experience were richer, their capacity to respond to emergency situations and pressure was stronger, and they were better able to adapt to the changing work environment. It is worth mentioning that, because of the age distribution of the vast majority of the research objects in the study, of the 20-40 age range, under 20 years less, and over 40 years of research the number of objects, the research results have yet to be further tested for future research.
Table 2. Employees of All Ages in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Age 20 and below (M±SD)</th>
<th>21-30 (M±SD)</th>
<th>31-40 (M±SD)</th>
<th>41-50 (M±SD)</th>
<th>Above 50 (M±SD)</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure and emergency treatment</td>
<td>(2.33±1.07)</td>
<td>(3.59±0.58)</td>
<td>(3.72±0.37)</td>
<td>(4.36±0.51)</td>
<td>(4.43±0.81)</td>
<td>5.33</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td>(1.75±1.30)</td>
<td>(3.33±0.65)</td>
<td>(3.52±0.58)</td>
<td>(4.13±0.18)</td>
<td>(4.50±0.71)</td>
<td>6.92</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td>(1.61±1.06)</td>
<td>(3.72±0.51)</td>
<td>(3.75±0.47)</td>
<td>(4.25±0.35)</td>
<td>(4.50±0.71)</td>
<td>13.8</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td>(1.96±1.66)</td>
<td>(3.71±0.51)</td>
<td>(3.69±0.42)</td>
<td>(4.25±0.35)</td>
<td>(4.50±0.71)</td>
<td>9.73</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Educational attainment in all dimensions of Adaptive performance analysis. Results displayed according to the table in terms of qualifications on a variable, pressure and emergency treatment, innovative problem solving, job skills, interpersonal and intercultural adaptability of four performance dimensions are the existence of significant differences (p<0.01). Specifically, doctor and above education level of staff have optimum adaptive performance. Description of the higher education, enterprise staff continued to show the ability of learning and innovative problem solving is better with strong pressure and emergency treatment, culture and interpersonal promotion, post, but in this law, the College graduate, undergraduate, and masters range could not be established. According to College and degree of Adaptive Performance of master’s degree of personnel is higher; this may be because College and Bachelor work experience is generally greater than master of education personnel, and they experience more rich and have poor stability in the work environment. This factors in the development of their ability to adapt.

Table 3. Different Academic Staff in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Educational Status</th>
<th>Educational Status</th>
<th>Educational Status</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School and below (M±SD)</td>
<td>Junior College (M±SD)</td>
<td>Undergraduate Course (M±SD)</td>
<td>Master (M±SD)</td>
</tr>
<tr>
<td>Pressure and emergency treatment</td>
<td>(2.98±1.11)</td>
<td>(3.69±0.56)</td>
<td>(3.68±0.54)</td>
<td>(3.45±0.59)</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td>(2.53±1.12)</td>
<td>(3.59±0.64)</td>
<td>(3.30±0.66)</td>
<td>(3.37±0.58)</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td>(2.63±1.10)</td>
<td>(3.76±0.59)</td>
<td>(3.79±0.50)</td>
<td>(3.63±0.46)</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td>(2.55±1.06)</td>
<td>(3.88±0.53)</td>
<td>(3.74±0.47)</td>
<td>(3.65±0.47)</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Work experience factor. Statistics show that in the working age population statistics on a variable, innovative problem-solving Adaptive Performance has significant differences (F=2.83, p<0.05); on the other three dimensions there is no significant difference. Specifically, in work experience of more than 5 years, the group has the best innovation to solve the problem of Adaptive Performance, longer the note length, employees respond to various emergency situations and challenges with more experience, and are more familiar with various resources within and outside the organization; they demonstrate strong creative problem-solving skills. Needs to be made is, as this research investigation work experience they tend to concentrate on the first three stages; a very small number of samples of more than 5 years, and this may affect the reliability of the conclusions, so the subsequent further remains to be seen.
Table 4. Different Working Staff in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>In the present organization of working life</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Under 1 year</td>
<td>1-3 years</td>
</tr>
<tr>
<td>Pressure and emergency treatment</td>
<td>(3.55±0.67)</td>
<td>(3.53±0.60)</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td>(3.32±0.74)</td>
<td>(3.24±0.69)</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td>(3.61±0.67)</td>
<td>(3.75±0.54)</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td>(3.66±0.65)</td>
<td>(3.65±0.57)</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Staff Performance in Organizations Around Differences in Factor Analysis

Departments in analysis of Adaptive performance difference across dimensions. Employees in different departments of Adaptive Performance comparison of various dimensions found that there are no statistically significant differences in Adaptive Performance on each dimension (Table 5). This is because the performance of Adaptive performance is a broad dimension, and organizations for each department of personnel have Adaptive performance requirements.

Table 5. In the Different Sectors of the Organization Staff in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Product</th>
<th>Research &amp; Development</th>
<th>Sales</th>
<th>Financial</th>
<th>Human Resources</th>
<th>Other</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M±SD)</td>
<td>(M±SD)</td>
<td>(M±SD)</td>
<td>(M±SD)</td>
<td>(M±SD)</td>
<td>(M±SD)</td>
<td></td>
</tr>
<tr>
<td>Pressure and emergency treatment</td>
<td>(3.51±0.89)</td>
<td>(3.39±0.42)</td>
<td>(3.62±0.69)</td>
<td>(3.70±0.21)</td>
<td>(3.63±0.71)</td>
<td>(3.63±0.54)</td>
<td>0.52</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td>(3.11±0.87)</td>
<td>(3.41±0.36)</td>
<td>(3.36±0.65)</td>
<td>(3.65±0.46)</td>
<td>(3.30±0.84)</td>
<td>(3.38±0.66)</td>
<td>1.08</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td>(3.55±0.98)</td>
<td>(3.54±0.29)</td>
<td>(3.78±0.63)</td>
<td>(3.65±0.40)</td>
<td>(3.73±0.58)</td>
<td>(3.76±0.48)</td>
<td>0.71</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td>(3.53±0.91)</td>
<td>(3.68±0.34)</td>
<td>(3.90±0.53)</td>
<td>(3.64±0.32)</td>
<td>(3.68±0.55)</td>
<td>(3.72±0.53)</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Functions in differential analysis of Adaptive Performance on each dimension. Statistical results showed that job title variable, pressure and emergency treatment, innovative problem-solving, job skills, interpersonal and intercultural adaptability of four performance dimensions had significant differences, and is showed the same pattern as post grades grow, and had an increasingly higher adaptability of personnel performance.
Table 6. Different Positions of Employees in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Duty</th>
<th>Staff Member (M±SD)</th>
<th>Business Supervisor or Mgr. (M±SD)</th>
<th>Supervisor, Manager or Dept. Director (M±SD)</th>
<th>Company Vice President and above (M±SD)</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure and emergency treatment</td>
<td></td>
<td>(3.51±0.61)</td>
<td>(3.80±0.58)</td>
<td>(4.01±0.60)</td>
<td>(4.39±0.55)</td>
<td>5.78</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td></td>
<td>(3.24±0.67)</td>
<td>(3.55±0.74)</td>
<td>(3.84±0.54)</td>
<td>(4.31±0.47)</td>
<td>6.47</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td></td>
<td>(3.62±0.59)</td>
<td>(3.89±0.60)</td>
<td>(4.02±0.48)</td>
<td>(4.38±0.48)</td>
<td>4.33</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td></td>
<td>(3.62±0.56)</td>
<td>(3.86±0.66)</td>
<td>(4.03±0.53)</td>
<td>(4.25±0.65)</td>
<td>3.94</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Organizations dimension different types in Adaptive performance analysis. Employee adaptability in different types of organizations in the performance differences found across dimension and there are no statistically significant differences in Adaptive Performance on each dimension (Table 7). This is because in the current era of knowledge competition, any type of organization is faced with the same economic environment. Efforts were needed to enhance the adaptive capacity of individuals and organizations within the Organization as a whole and enhance their competitive edge.

Table 7. Different Types of Organization Adaptability of Employees in the Performance of the Comparative

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Pattern of Organization</th>
<th>State-owned or state-owned holding (M±SD)</th>
<th>Private Enterprises (M±SD)</th>
<th>Wholly Foreign-owned (M±SD)</th>
<th>Sino-Foreign Joint Venture (M±SD)</th>
<th>Other (M±SD)</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure and emergency treatment</td>
<td></td>
<td>(3.58±0.76)</td>
<td>(3.63±0.54)</td>
<td>(3.73±0.48)</td>
<td>(3.48±0.58)</td>
<td>(3.45±0.61)</td>
<td>0.58</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td></td>
<td>(3.29±0.79)</td>
<td>(3.33±0.69)</td>
<td>(3.52±0.52)</td>
<td>(3.46±0.81)</td>
<td>(3.38±0.62)</td>
<td>0.36</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td></td>
<td>(3.68±0.74)</td>
<td>(3.76±0.49)</td>
<td>(3.78±0.53)</td>
<td>(3.25±0.74)</td>
<td>(3.61±0.49)</td>
<td>1.23</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td></td>
<td>(3.69±0.69)</td>
<td>(3.73±0.50)</td>
<td>(3.79±0.49)</td>
<td>(3.52±0.54)</td>
<td>(3.52±0.63)</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

Type of organization industry analysis of Adaptive performance difference across dimensions. Statistics showed that organization on industry type variable, creative problem-solving performance of Adaptive performance and post learning adaptability the existence of significant differences (p<0.05), little differences in the other two dimensions. Specifically, in traditional manufacturing industries in both dimensions on average significantly lower than other tissue types, this is because the traditional manufacturing industry in three major industry types belong to the secondary industry, working with "high strength and low brain power" feature, while more single working environment, work line, relatively low adaptive capacity requirements of personnel.
Table 8. Different Types of Industrial Employees within the Organization in All Dimensions of Adaptive Performance Comparison Analysis

<table>
<thead>
<tr>
<th>Adaptive Performance Dimensions</th>
<th>Industrial Organization Types</th>
<th>Traditional Manufacturing (M±SD)</th>
<th>Trade and Commerce (M±SD)</th>
<th>Service (M±SD)</th>
<th>High and New Technology (M±SD)</th>
<th>Education (M±SD)</th>
<th>Other (M±SD)</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure and emergency treatment</td>
<td></td>
<td>(3.26±1.02)</td>
<td>(3.69±0.35)</td>
<td>(3.66±0.58)</td>
<td>(3.66±0.60)</td>
<td>(3.44±0.66)</td>
<td>(3.68±0.48)</td>
<td>1.66</td>
</tr>
<tr>
<td>Innovation solutions</td>
<td></td>
<td>(2.83±1.07)</td>
<td>(3.52±0.70)</td>
<td>(3.36±0.65)</td>
<td>(3.48±0.54)</td>
<td>(3.25±0.74)</td>
<td>(3.43±0.61)</td>
<td>2.44</td>
</tr>
<tr>
<td>Job continuous learning</td>
<td></td>
<td>(3.25±1.05)</td>
<td>(3.77±0.59)</td>
<td>(3.78±0.63)</td>
<td>(3.75±0.55)</td>
<td>(3.66±0.51)</td>
<td>(3.76±0.47)</td>
<td>2.38</td>
</tr>
<tr>
<td>Interpersonal and intercultural</td>
<td></td>
<td>(3.38±1.01)</td>
<td>(3.73±0.54)</td>
<td>(3.72±0.46)</td>
<td>(3.74±0.57)</td>
<td>(3.63±0.58)</td>
<td>(3.76±0.48)</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Notes: **p<0.01 *p<0.05

The Type of Organization Factor

F Test was used on each dimension of contextual performance for different types of organization. The results are shown in Table 9.

Table 9. The Comparison and Analysis of Differences in Employee Contextual Performance of Each Dimension on the Type of Organization Factor

<table>
<thead>
<tr>
<th>Dimension of Contextual Performance</th>
<th>Type of Organization</th>
<th>State-owned or state-owned holding (M±SD)</th>
<th>Privately-operated Privately-owned (M±SD)</th>
<th>Exclusively Foreign-owned (M±SD)</th>
<th>Sino-Foreign Joint Venture (M±SD)</th>
<th>Other (M±SD)</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Facilitation (M±SD)</td>
<td></td>
<td>(4.13±0.52)</td>
<td>(4.14±0.45)</td>
<td>(4.17±0.40)</td>
<td>(4.29±0.39)</td>
<td>(3.89±0.55)</td>
<td>0.792</td>
</tr>
<tr>
<td>Job Dedication (M±SD)</td>
<td></td>
<td>(3.84±0.79)</td>
<td>(3.90±0.58)</td>
<td>(3.75±0.53)</td>
<td>(4.15±0.49)</td>
<td>(3.50±0.44)</td>
<td>1.945</td>
</tr>
</tbody>
</table>

Discussion

Regarding Adaptive Performance through employee performance analysis of differences in individual and organizational factors, we believe that:

Organization of Adaptive Performance Levels Show the Need to Pay More Attention to Young Workers.

This study found that employees under 20 years of age in various dimensions are significantly less than the other four age groups – between 20-40 and the adaptive performance levels below the employees over the age of 40. As they grow older, employees’ work and life experiences become richer, their capacity to respond to emergency situations and pressures is stronger, and they are better able to adapt to the changing work environment. In management practice, organization management should pay more attention to young employees with respect to employees of Adaptive Performance management.
Organizations Need Different Employees with Different Education Backgrounds of Adaptive Performance Management

With regard to education, up to the high school level, staff in the four dimensions are significantly smaller than the other four options. College degree and Bachelor of Adaptive performance of master's degree of personnel is higher, and this may be because college graduate and undergraduate personnel work experience generally greater than the master's degree personnel, and they experience richer and poorer stability in the work environment. We found during the research, that the qualifications of the staff on a variable, pressure and emergency treatment, innovative problem solving, job skills, interpersonal and intercultural adaptability of four performance dimensions have significant differences. We also found that the higher the qualifications, employees showed more intense pressure and emergency treatment, cultural and interpersonal promotion, job skills, and creative problem-solving skills. Management practices, organization employees in different positions, different academic backgrounds with different Adaptive performance management policies and training programmers.

Employees of the Organization Should be Concerned about the Comparatively Short Length of Creative Problem-Solving Skills

Our study found those employees working longer respond to various emergency situations and challenges with more experience, they are more familiar with various resources within and outside the organization, and they demonstrate strong creative problem-solving skills. This explains why the group with work experience of more than 5 years has the best innovation to solve the problem of Adaptive performance. Organizations need to be more concerned about the comparatively short length of creative problem-solving abilities of the employee.

Organizations Should Focus on Post Grades rather than Lower Levels of Adaptability of Staff Performance

Regarding the job title variable, the Adaptive Performance of four dimensions show there are significant differences, and renders the same law that, with job growth, have an increasingly higher adaptability of personnel performance. In the management process, organizations should pay more attention to post grades rather than a lower level of adaptability of staff performance, staff further training, to facilitate the employee's level of interpersonal relationships.

Adaptive Performance of Traditional Manufacturing Industry Should be Concerned with Staff Levels

Regarding the employee organization industry-type variable, creative problem-solving performance of Adaptive performance and the post learning adaptability, there is a marked difference. In traditional manufacturing industries it is, on average, significantly lower than other tissue types in both dimensions. This is because conventional manufacturing industries in three major industry types belong to secondary industries, working with “high strength and low brain power” feature, while more single working environment, work lines, of personnel adaptability of competency requirements are relatively low.

Conclusion

The individual factor, Adaptive Performance on gender, age, education and work experience are significantly different. Organizational factors, and Adaptive Performance of their duties have significantly different, innovative problem solving, adaptive performance post on a continuous learning, and organization industry types have the significant differences. In addition, the study on the sampling, low sample size, affect the external validity of the study, whether the findings in the context of a broader
representative needs to be further researched and verified. On the research methods, the study mainly used the questionnaire method, some in the form of a single, and it would be supported by other research methods, such as interviews with law.

**Acknowledgement**

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Inner Conflicts are the Key Factors that Affect the Chinese Civil Servants’ Mental Health

Huang Fang and Ma Jianqing
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
Email: majq2007@163.com

[Abstract] Psychological conflicts will lead to psychological problems. Civil servants’ competitiveness and creativity depend on a good psychological quality. Civil Servants’ Mental Health is the critical influence to public management. Caring about the civil servants’ mental health and promoting their psychological quality is an important part of public management. This paper tries to research the causes of civil servants’ mental problems from the view of their inner conflicts. Through a sampling survey of civil servants in China, we found now Chinese civil servants’ inner conflicts are mainly for the following five aspects: Publicity and Privacy, Collectivity and Individuality, Expectation and Ability, Sophisticated relationship and Lonely heart, Seeking justice and Hard to be just. These conflicts have a negative impact on their official activities.

[Keywords] civil servants; mental health; psychological conflict; reason

Introduction
In December 2011, the Commission for Discipline Inspection of the Central Committee of the CPC, the Organization Department of the Central Committee of the CPC and the Ministry of Supervision jointly issued a document, which was about caring for the mental health of cadres, and improving the psychological quality of cadres. The document made important instructions on strengthening the mental health of cadres. The document pointed out, “caring the mental health and improving the psychological quality of cadres were important parts of building a contingent of high-quality cadres. At present, cadres’ psychological states of health and psychological qualities are good overall. But we also must be aware that few cadres’ psychological states can’t adapt to the situation and task. Some of them are under too heavy a psychological burden and unstable emotions, which lead to serious anxiety, depression, and even non-normal deaths. These things not only bring misfortune to the individuals and families, but also detrimental to the party and national business.” Through the survey about the civil servants' mental health in China, we find that civil servants' mental problems always have close relationship with their inner conflicts. The paper tries to research the causes of civil servants’ mental problems from the view of their inner conflicts.

In summary, Chinese civil servants' inner conflicts mainly embody the following five aspects at this stage: “Public Serving” and “Self-serving” – the conflict between professional requirements and human nature; “Collectivity” and “Individuality” – the conflict between bureaucracy and human freedom. “Willing to Take Responsibility” and “Able to Take Responsibility” – the conflict between external requirements of high quality and self low ability; “Sophisticated relationship” and “Lonely heart” – the conflict of bureaucratic culture’s dual character; and “Seeking for Fairness” and “Hard to Fairness” – the conflict between ideal and reality.
Conflict One: “Public Serving” and “Self-serving” – Between Professional Requirements and Human Nature

Value is the core of public administration, the process of whose behavior is also the process of value assignment. Public administration is more than technical or management issues. It would be unfair if we treat the policy-making process by the government only as the expression of value, thereby separating administration with policy-making. Not to mention the discretion in the administration of administrative staff as expressly stated in our current administrative law that provides a chance for them to express value, even if there is no space for discretion on some issues, we still can not assure whether or not they would neglect, even defy, the law in the administrative process to express their own values. Therefore, studying administrative issues will unavoidably involve value issues, while values about public politics are generally related closely with ethics.

Jobs that the civil servants are engaged in belong to the very stated public administration, which, as an occupational field related to public power, sets the public interest as the final value pursuit, namely, aims at the value maximization of public interest for everything. As public employees, civil servants represent more than themselves, and more importantly, the government and country. Thus, their every word and action at work is required to be more reasonable and cautious, and must conform strictly to the relevant regulations and code of conduct. That is to say, the professional requirements of civil servants demand the conformity of their words and actions with public interest. As representatives of public interest, during work, civil servants must abandon selfish motives to maintain their public serving character. However, civil servants are still human, and every human has the nature of pursuing his own private interest. Nicholas Henry, a famous administrative expert of America, pointed out, in reality, no one can survive being separated from his private interest, and self-serving character is human nature, all things people striving for relate to their interests (2001). The public serving requirement of this occupation conflicts with the nature of civil servants as natural people. When the jobs of civil servants relate to public power, they will get the opportunity that can never be achieved by employees from other fields, namely, to steal, possess and misuse public power. For example, some civil servants may be competitive participants in the forming process of public policy, or, some, though they are not influential participants of that process, relate closely to policy implementation and have overwhelming impacts. Then, as human beings, from private interests, they will have the motive to serve themselves by using the public power at hand, maximizing their private interests in the expenses of public administration. Civil servants, as common people, are also faced with pressures in such aspects as housing, living and family. Nowadays, civil service is not a highly paid occupation; the wage level varies among different civil servants, and some even face the difficulty in living. Then, the conflict between professional requirement and human nature will arise from their hearts.

This conflict has been seen clearly in investigation. In 2006, it was found in the mental health investigation of civil servants in Guangzhou areas made by Zhu Jinfeng from the First Military Medical University, that 90% of them admitted to have been in a dilemma when making moral choice at work. This moral dilemma has become a significant factor affecting their mental health (2006).
Conflict Two: “Collectivity” and “Individuality” – The Conflict Between Bureaucracy and Human Freedom

As before, the man has his own nature, and the civil servant also has the qualification requirement of working for the good of the citizens. The conflict between the two directly determines the system arrangement of the government. In order to overcome the human self-interest doing harm to the public interest, Weber designed a system of hierarchical bureaucracies. When creating the reasonable design for the hierarchical bureaucracies, Weber completely ruled out the factor of human thoughts and emotion. This mechanism, which takes a strictly institutionalized management method and builds rigorous public services, praises the independent and professional official system making an effect in organization. The hierarchical bureaucracies reflect an impersonal personnel relationship, and that the relations between higher and lower posts are command and obedience. This relationship depends on the position difference. Each position is endowed with some power, which decides who are commanders and who are obedient, rather than individuals. The organization disciplines and rules apply to all situations without any personal feelings. In order to let everyone in the organization exercise their functions correctly and avoid conflict within the organization, the organization will make a clear the scope of their work. Weber believes that his designing administrative organization is most efficient and conforms to the rule of reason (1968).

At present, the Chinese government is still learning and attempting the bureaucratic management system designed by Weber. In the current government administrative organizations, civil servants must strictly be in accordance with the orders of their superiors and observe all the rules and regulations as “organization men”. Even if they don't accept the order, they still obey it at any cost (Hock, 2008). The rational requirements and normative spirits emphasized by bureaucracy have made some civil servants who are individualized and initiative feel depressed and helpless. Because they see the realization of their value as impetus and aspiration, but in the bureaucratic system, they can’t give out the initiative sufficiently and achieve self-value. What’s more, the public generally has high expectations of civil servants, which make them withstand more pressures compared to the other people.

When we conducted psychological interviews of Chinese civil servants, many people talked about that the position of civil servants requires them to act rationally, treat people carefully and obey orders. The survey (Ma, & Huang, 2011) also showed that 59.7% of civil servants thought this system suppresses their own personalities and makes them feel not free. When their ideas disagree with their superiors’ orders, 73% of civil servants would suppress their own ideas and execute the instructions of their superiors. In the survey, 30.2% of civil servants thought themselves upset and had nowhere to pour out the sufferings. In the long-term work, if the civil servants’ negative emotions can’t be released, it will affect their physical and mental health seriously and hinder their work.

Conflict Three: “Willing to Take Responsibility” and “Able to Take Responsibility” – Between External Requirement of High Quality and Self-Low Ability

Chinese economic development brings changes in such aspects as social structure, living patterns, behavioral patterns, and value concepts. The resulting social structure conflicts, social mechanism friction, material benefits contradiction and social order turbulence, compared with before, will be fiercer. A series of problems due to the great lap of political system reform behind economic system reform lead to the non-institutionalized politic involvement actions like group petition, which is becoming increasingly frequent and intensified. Particularly with the development of network, everyone can spread information on the net. Certainly, this is helpful for people to know and take part in public affairs and
monitor government administration. Undeniably, however, there will be someone posting some unreal news and misinformation intentionally or unconsciously, which leads to misunderstandings and irrational scolding of the civil servants and has negative impacts within a short period of time. This will inevitably pose heavy pressure on civil servants.

All-around social development proposes a higher requirement for the management level of government. As a member of government and backbone of social management, civil servants, especially those in leading positions have to deal with those complicated situation, facing significant tests in the aspects of leading ability, leading level, decision methods and leader’s performance. Their work is not to convey and execute orders from superior departments under the planned economy system any more, but to handle problems with their own competencies. This, on the one side, provides space for them to display autonomy, and on the other hand, presents greater challenge for them. To do these well and fulfill public duties, they must possess necessary knowledge and competences. For knowledge, they should not only possess the knowledge in politics and economics, but also that in such fields as management, public administration and public relations; for competencies, they should have leading and decision making abilities, as well as qualified abilities in execution and communication. Knowledge and competence requirements for civil servants by society are both in profundity and breadth. But at present, most of the civil servant groups of our country are still deficient in those knowledge and competences. The conflict between external high quality requirement and self-deficient competencies of civil servants makes them keep learning for enrichment, which poses heavy pressures on the civil servant group. Once these work pressures become mental pressures, they will be strained, anxious and depressed psychologically.

It was found in our psychological health investigation for civil servants in China, that 31.6% of them felt difficulty to adapt due to variety of social value concepts, and 30.2% of them thought they bore heavy responsibilities and were expected to change current situation for public good through their own competences. In practical work, however, many of them found, with their personal competences strictly limited, that they could never change the current situation. In particular, those new at work reacted strongly, felt depressed, hopeless and lost. They are keenly aware of their heavy responsibilities, and at the same time they also feel helpless, which makes them fall into a psychological dilemma in which, on the one hand, they are willing to bear public duties, but on the other hand, they doubt whether they are able to bear it. Under this condition, for a civil servant who has higher overall quality and is strict with himself, quite serious inactive feelings will arise easily once he encounters frustrations. The psychodynamic believe that symptoms of anxiety disorders derive from underlying psychic conflicts or fears (Gerrig, & Zimbardo, 1996). In our investigation, 44.4% of civil servant admitted that they often felt anxious, strained and restless.

Conflict Four: “Sophisticated Relationship” and “Lonely Heart” – The Conflict of Bureaucratic Culture’s Dual Character

China is an “acquaintance society” in history. The characteristics of an acquaintance society are that there is a personal relationship between the people. People connect with each other through this relationship, and then form networks. Background and relationship are the typical words of an “acquaintances society”. Under this tradition, people in our country attach a great importance to interpersonal relationships. Because of this particular social culture, when managing social affairs, the government must pay high attention to how to deal with the interpersonal relationship. The maintenance of social relations, and the communication with all aspects are the problems that the civil servants have to face. Human burdens put
the civil servants are always in a state of mental fatigue, even psychological panic. While in practical communication, the closed traditional culture affects people's behavior deeply. Endurance is taken as a virtue in China since ancient time. These concepts, “A little impatience spoils great plans” and "A while toleration makes a nervous situation eased, and a step backward gives you more spacious room to play", give Chinese people a self-enclosed character. Some civil servants are used hiding their real thoughts and emotions, showing strong defense with each other.

In the survey of civil servants made by the author, 54% admitted that they are used hiding their inner thoughts at work. Some civil servants close the psychological door with their real thoughts hidden from view, leading to the undesirable situation where everyone can’t communicate smoothly and the work are hard to coordinate. These interpersonal relations often make civil servants upset and strained. Civil servants, if stay in this low trust working environment for a long time, will easily feel depressed and dejected, and easily bring psychological problems for them. At present, many civil servants are stuck with the subtle interpersonal relations. In our survey, 69.4% think the interpersonal relations at their working units are complex, and 40.3% think they are easily upset about it. Therefore, the conflicts between these two cultures place civil servants in complex relations where they feel lonely and isolating. Moreover, this loneliness can hardly be explained to others or families.

Conflict Five: “Seeking for Fairness” and “Hard to Fairness” – Between Ideal and Reality

Fairness and justice are important symbols of a country's civilization level, also indispensable part of Chinese dream. On April 28, 2013, General Secretary Xi Jinping said in the speech of the national labor model representative seminar, “We must uphold social equity and justice, eliminate the obstacles that impede laborers to participate in the development and share the achievements of development, and give full efforts to help the laborers to do decent work and realize all-round development.” If we want to map out the beautiful Chinese dream picture, fairness and justice will be the impression of the picture, without which, the so-called Chinese dream will drift away.

As we are now in the course of social transformation, marketization reform of China is a gradual process. The distribution of resource before mainly depended on administrative distribution, while now, it has slowly transferred to be distributed by market, during which, and there will be coexistence of administrative and market distribution. Ways of economic regulation are mainly represented by government and market regulation. If the development of the commodity market has quite matured, then the government should release regulations of economic activity to some degree, leaving more determinations to the market. Otherwise, if the development of the commodity market has not matured, then the government should have more interventions in the economic activities. In terms of our current situation, some markets, like the land market and the finance market, have not matured, so the government is needed to take necessary interventions. But the government’s regulating actions are always accompanied with the rent-seeking phenomenon of administrative power, which causes unfairness and injustice like inequality. While on the other hand, excessive marketization of some markets may also cause unfairness and injustice. For example, irrational development of markets causes such problems as unfair competitions, polarization of wealth and vulnerable groups. Thus, nowadays, due to a series of problems like our lag of politics system reform, unfairness and injustice exist inevitably in all fields like politics, economy and society. Civil servants, as direct managers and executors of all national affairs, may see and encounter these unfair and unjust acts in society more easily than the general public. As shown in the investigation, the major factor impacting psychological health of civil servants is a feeling of
“unfairness”. Some unfairness and injustices are caused objectively, namely by the imperfection of systems and limits of history development. Faced with this unfairness and injustice, their ambivalences generally manifest as helplessness. Some other unfairness and injustices are caused subjectively, namely, caused by competence limits of civil servants, failing to be fair and just when dealing with affairs. Or by their selfish ideas, showing unfair favoritism intentionally when dealing with affairs. Faced with this unfairness and injustice, their ambivalences generally manifest as guilt and self-accusation. Fairness is always the theme pursuing tirelessly by human society, and civil servants are not exception. They pursue fairness and hope to become the founder, maintainer and executor of fairness and justice. However, when they are faced with the unfairness and injustice in reality and feel helpless for it, or even if they are forced to be unfair, they often feel very struggled and miserable.

**Conclusion**

Most of the above psychological conflicts are common problems, which are normal conflicts and psychological reactions to fierce competition and heavy pressure, and also unavoidable conflicts and confusions in dealing with their various issues in life. The psychological conflicts are objective, which has an obvious effect on the civil servants’ behavior. If they are not eliminated, these psychological conflicts will affect the civil servants’ emotional states and life qualities, and turn into psychological obstacles, even leading to mental illnesses and mental crises (A few are already in this state). These problems not only cause serious threats to civil servants’ personal health and life, but also hinder the improvement of the whole public human resources’ competitiveness and innovation, and ultimately affect the civil servants’ working enthusiasm and the administrative efficiency of the government. In this sense, we must attach importance to the civil servants’ mental health. In order to promote the civil servants' mental health effectively, we should establish a work mode that the government promotes, the expert guidance, the professional service, the civil servants actively participate in, and the all-round cooperate. (Ma, 2011) so as to improve the competitiveness and innovation of public human resources in China.

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**References**


Corresponding Author: Ma Jianqing, E-mail: majq2007@163.com
Chinese College Students’ Satisfaction with World Heritage Destination Tourism

Li Shu-xin
Department of Tourism Management, Shanghai Minyuan Vocational College, Shanghai, China
Email: iceshuxin@126.com

Qiu Fu-dong
Tourism Department, School of Business, East China Normal University, Shanghai, China
Email: fdqiu@tour.ecnu.edu.cn

[Abstract] Based on the previous studies on college students’ tourism and World Heritage destination tourism, this research has constructed a tourist satisfaction measurement index model for World Heritage destination tourism, and used an expert evaluation method to build an index weight in this model. Data collected from a sample of college students were analyzed to examine whether college students’ satisfaction of World Heritage destination tourism varied across grade, gender, major, colleges’ location and trip mode. Moreover, some recommendations were suggested to improve college students’ satisfaction with World Heritage Destination Tourism.

[Keywords] World Heritage; World Heritage destination tourism; tourism satisfaction.

Introduction
In China, undergraduates and graduates were more than 22,850 thousand until 2010, and among them 51.6% were undergraduates. At present, conditions influencing the tourism market of college students, including travel intention, economic status and travel time are ripe. But up to now, college students' tourism has not received much attention practically and theoretically. There has been a lack of research on college students’ tourism. Many studies were conducted in the sample of youth group. Considering college students as a subgroup of youth group, the related research findings of youth group tourism can be used to conceptualize ideas about the holiday behavior of college students (Carr, 2005). Travelling is an educationally enriching way for college students. Much of the personal benefit of travel comes not from what students learned about the places or cultures they visited, but from the need to continuously make decisions and deal with the demands of daily life in new and unfamiliar settings. It is suggested that these experiences foster personal development in several ways (Gmelch, 1997). Travelling can broaden youth’s perspectives, enrich knowledge, ease mood, cultivate their healthy lifestyle and improve their quality of daily life (Yu & Shen, 2002). Chinese college students’ travel behavior is affected by monthly living expenses, price, and attention on the tourist attractions’ distance (Yang & Bai, 2008). Based on the survey of college students in Guilin, Qu discovered those factors influencing tourism destination choice of college students are characteristics, expense, popularity, transportation and location (2006). Local residents’ hospitality and services, opportunities for entertainment and drink, relaxation and sports activities, difference with the day-to-day environment, and destination safety factors were also proved to be main factors influencing college students travel destination choice significantly (Sirakaya, & Mclellan, 1997). Considering the growing number of college students, college student travel market should be considered as an important segment of the tourism industry markets (Carr, 2003).

World Heritage is regarded as one of the most significant and fastest growing components of tourism. Heritage tourism attraction is divided into four classes: world class, national class, local class
and individual class. Many factors have been revealed to influence the travel intention of the tourist. Some studies have demonstrated that sense of personal attachment influenced travel intention. World class may attract a lot of tourists, but it also makes them have a fear of feeling without a sense of personal attachment. However, national class, local class and individual class could gradually enhance personal sense of attachment, which can promote visitors form travel experience of different depths (Timothy, 1997). The feeling of truth or the pursuit of authenticity also impacted the depth of travel experience of World Heritage Destination. Moreover, Interpretation is the key to ensure the high quality of visitors experience in World Heritage site. Success in interpretation is an effective way to manage and protect tangible heritage (Gianna, 1996). Among heritage tourism, cultural heritage tourism was reviewed as the most important way of expanding urban economic development and urban space (Chang & Milne, 1996).

Tourist’s demographics such as age, education level, occupation and income, and travel characteristics have significant influences on tourist perceptions of World Heritage site, motivation and actual travel behavior. Tourists in China have different perceptions towards China’s World Heritage sites. It should be noted that being a World Heritage site does not mean absolute power. Developing tourism at World Heritage site should depend on rational planning, proper publicity so as to promote all-round development of tourism rather than resting on the obtained reputation (Zhu, Li, & Wu, 2005). For example, an empirical study on tourists’ perception and attitude toward ropeway transportation facility in WULINGYUAN scenic spot, a famous world nature heritage site found out that the effect of group characters of tourists by ropeway on tourist satisfaction, in which most of tourists were fond of taking ropeway in the scenic spot, while at the same time they felt uncomfortable to line up and wait before they could take ropeway or elevator, which influenced their sightseeing perception. The level of tourists’ satisfaction transportation facilities has been related to their level of satisfaction with tourist destination (Zhang, Xu & Bao, 2005).

Until now, there were a few studies to analyze the current situation and influential factors of world Heritage destination tourism of college students. This study aimed to explore this topic.

Methods

Participants
268 college students participated in this study (Females were 120, age from 18 to 22).

Measures
Based on the literature review, this study set up a tourist satisfaction measurement index model for World Heritage destination tourism, which includes seven variables including world heritage site image, tourist expectation, perceived quality, perceived value, tourist satisfaction, tourist complaints and tourist loyalty. This model consisted of 49 indexes that may influence tourist satisfaction with World Heritage destination tourism. Expert evaluation method was used to build the each index weight. The modified model includes 38 indexes (Figure 1), and the other 11 indexes were removed because of the low weight.

A self-report questionnaire was designed to survey college students’ satisfaction with World Heritage destination tourism. The questionnaire consists of three parts: the first is about socio-demographic information (college location, gender, grade, major, monthly living expenditures for consumption). The second is about information about their visit to World Heritage destination (which World Heritage destination(s) they’ve ever visited during their college life, their expectations before visit, average daily consumption during their stay in World Heritage destination(s)). The third part included
questions about college students’ satisfaction with the 38 indexes and overall satisfaction with their
tourist experience to World Heritage destination(s), and likelihood of re-visiteding and recommendation.
Subjects were asked to rate their level of agreement/disagreement about each statement on 5-point
Likert-type scales ranging from ‘very strongly disagree’ (1) to ‘very strongly agree’(5). The instrument’s
face validity wa s tested by asking six local experts (four tour operators and two tourism professors),
minor revision were made as a result.

Results

The Characteristics of College Students’ Tourist Behavior of World Heritage

As for their expectation before their visit to World Heritage destination, the two top choices were
“Broaden my horizon, increase life experience” and “enjoy the beautiful and marvelous natural
landscape”, and the least two choices were “Religious worship” and “Make new friends in the process of
tourism”. These results suggested that college students attached great importance to the improvement and
upgrading of their quality.

The college students’ visit situation to 41 World Heritage destinations in China varies widely. In the
268 valid samples, 134 had visited the same one World Heritage destinations-West Lake in Hangzhou;
the second largest number of visits is the Great Wall in Beijing. However, there are 18 World Heritage
destinations that were visited by no more than 10 respondents. This result suggested that their choice of
tourist destination is closely related with the popularity of World Heritage.

Almost 40% travelled with schoolmates and only 5% of them travelled alone. Possible reasons may
be that travelling with others is safer and could take care of each other during the visit. As for the ways to
get travel information, 60.1% of college students reported they sought for tourist information online, and
the second way for them to get information from relatives’ and schoolmates’ recommendations, which
meant that college students online and word of mouth are the major ways to get information about World
Heritage travel.
Tourist Satisfaction Measurement Index System for World Heritage Destination Tourism

- World Heritage site image
- Tourist expectation
- Perceived quality
- Perceived value
- Tourist satisfaction
- Tourist complaint
- Tourist loyalty

Satisfaction with core attractions
- The beautiful and marvelous degree of natural landscape
- Unique degree of geological landscape
- Richness of natural species
- Conservation of natural resources
- Scientific and Archaeological value
- Cultural characteristics
- Experience of the regional folk customs
- Authenticity degree of Cultural exhibitions and activities
- Science popularization education
- Maintenance of cultural relics

Satisfaction with service
- The website information abundant degree
- Interpretation
- Touring line
- Publicity material
- Inquiry
- Service attitude
- Services staffing adequacy
- Service staff knowledge and skills

Satisfaction with facilities
- Internal traffic
- External traffic
- Accommodation convenience
- Catering characteristics
- Catering hygiene
- Commodity characteristics
- Guiding markers
- Public toilets and public place of rest

Satisfaction with environment
- Overcrowding
- Local residents hospitality degree
- Climate comfortable degree
- Air quality
- Environmental health status
- Aforest status
- Safety status
- Coordination with surroundings

Figure 1. Tourist Satisfaction Measurement Index System for World Heritage Destination Tourism
College Students’ Satisfaction with Each Indexes and Overall Satisfaction

This study used Mean as index to rank college students’ satisfaction with each indexes. The results are shown as follows: cultural characteristics (3.7), the beautiful and marvelous degree of natural landscape (3.68), and unique degree of geological landscape (3.65). Thus, it can be seen that college students’ approval of the cultural characteristics and the natural landscape quality is fairly high.

College students’ satisfaction with World Heritage site overall image scored 3.60. Their perceived quality scored 3.29 (core attractions got the highest score, the remaining items’ score from high to low were facilities, environment and service). Their perceived values scored 2.90. This study also revealed that 41.4% of the college students were satisfied or very satisfied with their visit experience to World Heritage. Tourists’ complaints scored 2.66, and tourist loyalty scored 3.33.

Difference Analyses on College Students’ Satisfaction with World Heritage Destination Tourism

This study also examined the differences of satisfaction with World Heritage destination tourism of the college students across gender, college location, grade, major, monthly living expenditures for consumption, the number of World Heritage they’ve ever visited during their college life, average daily consumption during their stay in World Heritage destination(s), their travel mode, and access to travel information. Significant difference was revealed among college students from different college’s location, in that college students from Eastern China colleges were more satisfied with perceived value than others. The reason may be that students from Eastern China colleges were more likely from the rich areas in China, which made them have more monthly living expenses than other students. There was a significant difference across their average daily consumption on their stay in World Heritage destination(s), as well as perceived value. In addition, the results also showed that there were significant differences between travel mode on the students’ satisfaction, world heritage site image, tourist expectation, tourist loyalty, perceived quality and tourist complaints.

Discussion

This study constructed a tourist satisfaction measurement index model for World Heritage destination tourism consisting of seven variables. The modified model included 38 indexes, such as beautiful and marvelous degree of natural landscape, unique degree of geological landscape, richness of natural species and so on. Data analyses showed diversity in the college students’ expectation for visit to 41 World Heritage in China. The numbers of World Heritage they’ve ever visited during their college life are quite different. Most of them visited World Heritage with their schoolmates, and their main access to travel information is the internet. College students’ satisfaction with World Heritage destination tourism got 3.29 scores, and their satisfaction with most of 38 indexes is between 2 scores and 3 scores. There were significant differences between these variables when the respondents were divided by different standards, as shown in this study.

According to the empirical research, some ways should be taken to improve college students’ satisfaction with World Heritage destination tourism. Cultural heritage management authorities should focus on cultural characteristics protection of the World Heritage. In addition, the World Heritage site information display should be emphasized by full use of network as promotional platform. Improvement in World Heritage interpretation system must take into consideration the educational function. In order to improve tourist satisfaction with their travel experience in World Heritage destination, adding value to tourism services and experiences should also be considered. It is also suggested that World Heritage
management authorities should guide college students’ travel behavior by forming a reasonable pre-tour
epectation and expanding their travel funds sources.

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Research on Incentives for Scientific and Technological Personnel in Public Scientific Research Institute

Zhang Yun and Li Zhibin

Beijing Academy of Social Sciences, Beijing, China
Email: lyzhibin@126.com

[Abstract] At present, as result of development concepts and old management mode of industrial economy do not conform to research law in the knowledge economy times, and contradiction between market-oriented research project and research personnel of government staff status is hard to coordinate, so outstanding problem in the current research funds management is that regulation on personnel funds management is incompatible with production law of knowledge product and incentive mechanism for human capital, it is reflected in the following three aspects: a) Intellectual input is not linked to research project funds and research project funds fail to provide enough positive incentive effects; b) Regulation on personnel costs which does not conform to reality needs is difficult to implement; c) The lack of intellectual input compensation mechanism results in unspoken rules rife in use of research funds. For this purpose, we should strengthen design of Incentive Mechanism for scientific research personnel in research projects.

[Keywords] scientific research funds; incentive; intelligence input

Introduction

With the further implementation of the strategy of building an innovative country, research institutes have played more important role. Scientific and technological personnel and their innovation team are not only core resources of research institutes, bust also constitute an important source of national science and technology competitiveness. It has become the top issue how to select and make the best use of scientific and technological innovation talents and build an outstanding scientific and technological innovation team. Scientific research and technological innovation process is not easy to observe; scientific research progress and the brain work of science and technology personnel are difficult to supervise; scientific and technical personnel has the absolute information advantage in the scientific research while regulators are at an information disadvantage position (Ma Jian, 2005). How can we mobilize the initiative of such innovative brain workers that are difficult to be supervised? One important way is motivation.

Outstanding Problems of Insufficient Incentives in the Current Management of Research Funds

Outstanding problem in the current research funds management is that regulation on personnel funds management is incompatible with production law of knowledge product and incentive mechanism for human capital (Li, 2013).

Weakening Organization Incentives and Constraint Capabilities Due to Lack of Basic Security

At present, undertaking expenses from government finance account for approximately 30% -40% of the total revenue of China’s public research institutions and funds of various research projects obtained by researchers through competition account for about 60% -70%. Institutes must also solve by themselves the expenses for free medical services of their personnel and retirees’ wages and benefits. It makes the limited fund from government finance further from being adequate. Scientific research institutions are less competent in providing their researchers with compensation, benefits, research conditions and other basic guarantee. About 30% of the researchers’ revenue comes from their project funding. Besides,
expenses of office and experiments and graduate grants all come from researchers’ project funds, thus weakening the researchers’ dependence on the organization and sense of belonging. Meanwhile, research institutions make the project funding, income from technology or training and revenue contribution as important tasks and evaluation indicators of scientific and technical personnel under the pressure of the economy. Some institutions even assign “capitation fee” to scientific and technical personnel.

These have led to failure to provide basic guarantee to scientific and technical personnel. Due to insufficient basic guarantee in income and welfare, income of science and technology personnel is generally low, resulting in low demand levels of scientific and technical personnel and the difficulty for them to live a decent life through research. Forced by the pressure of life, scientific and technical personnel have to get themselves engaged in various income-generating activities and busy activities for “project approval and fund allocation” and neglect basic research and research for public welfare. Generally speaking, the top contradiction and problem of scientific research safeguard mechanism in China lies in the fact that scientific research activities and personnel compensation and subsidies are highly dependent on competitive project fund, but according to the fund management system, it is not allowed to get personnel expenses from the fund, labor costs of external staff hired and graduate student cannot exceed 5% -10%, and overheads cannot exceed 5% of the fund (Kou, 2008).

Research Projectization Suppresses Researchers Interest and Direction

Project team leader responsibility system improves the autonomy of researchers and its effect is obvious in mobilizing the enthusiasm and initiative of researchers. It can achieve the purpose of getting more results faster, but the project-based system makes it difficult to produce high-quality results and foster academic masters. The reason is that project-based system turns research into short-term tasks driven by interest. There lacks necessary motivation and guarantee mechanism for result research and development after the project conclusion. Especially for young researchers who cannot get project through application to conduct independent research, they have to “work” for research “bosses” who have sufficient project fund and bear onerous "task-type" work. This greatly restricts the development of their personal research interests and training of independent research ability and creativity.

Meanwhile, in the current system where individual career and economic interests are highly dependent on project fund, the project team leader responsibility system can be easily transformed into exclusive ownership and distribution power of research resources, making scientific and technical personnel focus on “Project PR” instead of “Technological breakthrough”. Project groups have become "self-employed" getting themselves involved in research market competition. Similar research topics and research repeatability are very common. Technology integration and systematic innovation become very difficult. In order to achieve maximum benefits, researchers vigorously form “academic trust” to exclude those with different opinions. In some project application and assessment, “academic community” degrades itself into “community of interests” aiming at funds and reputation. They exaggerate importance of projects and the value of research results through mutual touting in order to gain more project resources and honors and awards. Relationship among scientific and technological personnel in the same field is mainly featured with competing for project resources or getting united to share project resources. Cooperation for innovation doesn’t exist indeed. In addition, this government task-oriented research management can easily lead to convergence of research activities, strengthen the competition among researchers but weaken the development of diverse innovation.
Rigid Evaluation Mechanism Restricts the Development of Scientific and Technical Personnel

At present, evaluation criteria of public research institutes and universities are too simplified, mainly focusing on such indicators as articles, patents, national or provincial research projects, international cooperation projects, international conferences, and lessons. Assessment, promotion, honors and awards are based on these so-called “research results”. Existing science and technology assessment and evaluation systems of universities and research institutes also reinforce this assessment trend, a deviation from scientific value-oriented guideline of scientific and technological personnel themselves. It will directly affect the promotion, development, reward and honor of the scientific and technological personnel. Under the existing evaluation mechanism, industrialization development and achievement transformation are not easily recognized in professional title appraisal, career development and academic achievement in public research institutes and universities, which has greatly restricted the input of scientific and technical personnel in engineering technology and industrialization research, making it difficult to form a reasonable talent structure for technological innovation.

The result is that researchers in universities and research institutions are busy with writing articles for awards and application for projects instead of doing research with practical application value. Some researchers who devote themselves into industrialization research and achievement transformation are often marginalized within the organization without effective support in personal and career development. Such a mechanism “cultivates” a large number of talents who are good at writing articles and packaging academic achievements, causing general decline in researchers engineering and technical level and making it difficult for huge technological investment to translate into effective productivity and benefit of nationals.

Meanwhile, frequent assessment and extremely detailed and quantitative indicators are also very unfavorable for basic research and innovation. Appraisal pressure will inhibit researchers devoting into long-term and basic scientific research, and make them more willing to choose research direction and pattern which can churn out results faster. In addition, the appraisal objective contradicts sustainable economic development. The majority of scientific and technological personnel suffers dual pressures of writing “articles” and generating “income” and has to struggle between promotion and “survival”, making it difficult to effectively play the role of incentive and restraint.

Official Position-Based” Administration Strengthens the Academic Bureaucracy

Scientific and technical personnel should win respect with their own genuine talent and substantive contribution to science and society instead of the so-called titles and positions. But currently, it seems that we are lack of effective measures and mechanisms in creating the atmosphere and environment of “respect knowledge and talent” in China and we have to improve the social status of scientific and technological personnel with the help of "official power" and "money power". This also reflects that the whole society respects wealth and official positions more than technology talents. This kind of awards based on money and official positions are not real incentives aimed at researchers’ innovative efforts and interest, but a kind of pursuit of fame, money, and promotion under the guise of scientific research. More seriously, the social respect backed by "money power" and "official power" actually undermines the inherent academic values held by scientific and technological personnel and integrates bureaucracy into the research system, making it increasingly difficult to advocate scientific ethics, establish scientific values and to construct academic community. Under the official standard system, research project approval and distribution follows the will of administrators rather than the orientation of scientific value,
making researchers either engaged in networking in official circles or striving to be “officials”. In order to maintain the relationship, many researchers abandon objective academic judgment but support the will of administrators one-sidedly. They become “review specialists” and “Queen’s researchers” and even pay for administrators’ extra budgetary activities with money from research funds.

Cause Analysis of Insufficient Incentives under the Current Research Fund Management System

China’s social economy has entered into the critical period of structural adjustment and transitional development, with improvement of an independent innovation system a current top priority. The existing research management system is decoupled with socio-economic development and technological innovation practice. Its deepen reform is in the urgent need in order to adapt to objective requirements of the market economy and the knowledge economy. One outstanding problem is the vague definition of government authority and government functions in the process of research management, as well as the malicious interaction between administrative force and market force (Yan, Li, & Peng, 2012). So the contradiction between administrative subordination identity and market-oriented technological resource allocation followed by project-based system is more prominent and sharp in Beijing. The same kind of scientific research management system applies to such diverse and complex research subjects will inevitably produce a huge difference in effective management. Interaction between marketization and administerization inevitably generates the result that marketization creates conditions for administrative power-renting seeking, and that administratorization provides shelter for lack of market efficiency. Specific analysis is as follows:

Neglect of Human Capital Value Results in Backward Management Philosophy

In innovative work and production of innovations, intellectual capital represented by human capital is the primary element above the financial and physical capitals. Neglect of the value of human capital is the problem in China’s current science and technology project management. The decoupling of intellectual input with research fund results in the latter being lack of positive incentive. Backward concepts restrict work dynamism and innovative impetus of technology professionals.

Currently, research funding budget generally does not contain labor costs. It can be found in either Defense Research Project Pricing Management Approach ([1995] Pricing No. 1765 ) issued by the Ministry of Finance and State Commission of Science and Technology for National Defense Industry or Management Approach Concerning Three Costs for Science Development ([1996] Cai Gong Zi No. 44 ) jointly issued by the Ministry of Finance, State Development Planning Commission, State Economic and Trade Commission and the State Science and Technology Commission. In fact, these systems are a product of history, manifesting the past routine work management philosophy. In today’s increasingly globalized economy, competition of technological strength is not the competition of material and financial resources any longer. It is the competition of intellectual capital, reflected in the competition of talent strength across the world.

Existing Scientific Project Approval Mechanism Inhibits Innovative Impetus of Technology Personnel

Quantitative study found that there exists no obvious correlation between organizational climate and innovative behavior, namely, organizational climate of applied scientific research institutes has little effect on innovative behavior of scientific and technological personnel, which is inconsistent with existing authoritative research findings. Under the current scientific management system and scientific
research project approval mechanisms as well as in the project management, the right of research project approval is often concentrated in the hands of certain so-called “experts circle”. It is difficult for common researchers to apply for approval of large and important projects in their own name. To some extent, it restricts the innovation enthusiasm of frontline researchers, especially those young researchers with high academic competence and the ability to work independently.

**Allocation and Management of Funds Show No Adequate Respect to the Autonomy of Researchers**

Statistics of researchers work values show that “self-directed” is much valued by technicians. It verifies that researchers have “high creativity and autonomy”. Thus, it can be seen adequate autonomy is generally valued by researchers. However, free control of project fund as an important incentive doesn’t get enough attention currently. At present, supporting funds from the state and local governments are the main source of innovation input for research institutions. In the process of project implementation, the project research team does not have enough control over the funds that are controlled by the state finance and administration departments at all levels. But technological innovation involves the development, production, and marketing and other aspects, during which the research team bears the brunt of greater cost and risk. Therefore, imbalance exists between rights and obligations on the fund control.

**Innovation Performance Evaluation System to Be Improved**

Research found that the current simplified appraisal system has seriously restricted the development of scientific and technological innovation. Based on the diversification in terms of fields and types concerned in technological innovation in research institutions, simplified appraisal system and assessment rules are unlikely to accommodate all technical innovation performance appraisals. In particular, researchers’ innovative behavior is greatly restricted and misled by such indicators of innovation performance appraisal as the number of research projects, research funds and the number of papers as well as the too short appraisal cycle (mostly 1 year). Currently, there exist three basic technological innovation fields in the vast majority of research institutions: basic research, applied research, industrialization research. At present, there still lacks of a scientific and comprehensive evaluation system for the effective and objective technology innovation evaluation in the three fields.

Based on the above analysis, we believe that the framework and basis of the national scientific research system are the underlying factors that affect innovative vitality of researchers in research institutes. The concepts of “technological innovation lies in the people” and “human costs are the main cost of technological innovation” have not been established in the entire national research environment. The majority of researchers have not got enough incentive for creativity in the current research system.

**Design of Researchers Incentive Framework in the Use of Research Funds**

**Nature and Demand Characteristics of Innovative Talents in Science and Technology**

What the talents for technological innovation do is innovation of knowledge and technology, i.e. the process of creating new knowledge, new technology, and new products through the learning and use of existing knowledge and technology. This creative work requires not only a certain expertise and wisdom, but also extraordinary passion and perseverance. Talents for technological innovation have different characteristics and motivation from ordinary workers, so development of reasonable and effective incentive policies requires understanding and grasp of their characteristics and needs at first. The pursuit aimed at enhancement of understanding and the truth exploration represents the essential of scientific attitude in the highest measure. So talents with the dedication spirit for such pursuit are scientists and
devotees in the real sense. Inherent requirements of research and innovation activities determine that they generally have the following similar characteristics and need preferences:

1. Have a strong personality and firm scientific values.
2. Have a strong demand for work autonomy.
3. Have a strong thirst for knowledge and capacity development needs.
4. Keen on innovation and expect to practice their own ideas.
5. Have the desire to achieve success and value, and expect to get social recognition and respect.

**Incentive Model of Innovative Talents in Science and Technology**

Herzberg first proposed the concept of “motivating factor”. He classified all factors affecting individual’s satisfaction with work into “motivators” and “hygiene factors” based on their relationship with individual’s work. For example, factors related to job contents and closely linked to active and positive emotions are “motivators” such as work achievements, social recognition, nature of work, job responsibilities and career development. Just because of the special attributes and needs above, Peter Drucker, the management guru and knowledge management expert Tampoe M believed that knowledge workers must have a different mode of management and incentives.

Tampoe M (1993) found through empirical studies that the same motivating factors have different impact on knowledge-based talents: for knowledge-based talents, individual growth (33.74%), job autonomy (30.51%) and business success (28.89%) all have a very important role of motivation, and impact of wealth (7.07%) is very small. Drucker (2001) also pointed out that it is necessary to strengthen their sense of responsibility and give them high degree of autonomy at work in order to improve the efficiency of knowledge-based workers. He also stressed the importance of rational evaluation. Based on learning and absorption of relevant personnel incentive theories, this article, taking into account of the nature and demand characteristics of innovative talents, proposes the following incentive model of innovative talents in science and technology.

So, incentives for innovative talents in science and technology can be roughly divided into three levels: self-motivation, organizational and social incentives, and a range of guarantee factors (Cheng, Wang, 2010).

**Self-motivation** is endogenous driving force and any other incentives are achieved through reinforcement of self-motivation. Technological innovation is highly unknown activity, with the innovation direction, time and results being uncertain. Only simple inputs and motivation cannot generate valuable innovation. It needs researchers’ long-term concentrated study. The most important motivation for researchers’ innovation is their own interests and scientific ideals. Thus, the selection of the right people is the most important prerequisite for effective incentive, and only people with scientific moral and scientific research ability get together, can they work together to build up scientific values featured with “advocating innovation, pursuing truth and being pragmatic”, and such is the fundamental factor to influence and motivate talents of technological innovation.

**Organization**, as a platform for implementation of a variety of incentive policies, plays a vital role in the promotion and guarantee of researchers’ innovation. At the organizational level, the traditional incentive theory is mainly focused on performance evaluation, compensation, post setting, promotion and other mechanisms and measures. It is a very important incentive for the organization to give a fair evaluation of the researchers’ innovative performance, and award researchers corresponding rewards and promotion accordingly.
Social Incentives. Although social incentives are the most external motivating factor, they are the most important factor to strengthen the researchers’ sense of achievement. Social incentives mainly include various types of scientific and technological innovation incentives, peer review, academic reputation and influence, social respect and honor as well as a wide range of innovation applications and the realization of social values, etc. These can most effectively strengthen researchers’ sense of self-worth achievement and feedback to researchers to enhance their spontaneous interest and motivation. But effective incentive of these factors are based on fair evaluation, which in turn is highly dependent on establishment of scientific values and construction of scientific community. It must be noted that, although social respect needs to be manifested by material treatment such as incentives and reputation, it is not touting, and excessive touting can only strengthen various opportunistic behavior and academic "hegemony".

Technological innovation requires a series of guarantee factors, including salaries of researchers, research funding, housing, medical care, social security and welfare. Judging from the demand characteristics of talents of technological innovation, such factors cannot give them a sense of accomplishment or enhance their sense of responsibility, but without such factors, researchers cannot maintain normal working conditions. According to Herzberg’s two-factor theory, these factors are just guarantee factors for talents of technological innovation rather than motivating factors. Thus, these factors should be adequately guaranteed, but cannot be served as a means of motivation; otherwise, researchers’ enthusiasm for innovation cannot be really inspired, instead. Moreover, it may make researchers become impetuous and contribute to a variety of academic opportunist behavior.

Policy Recommendations on Improvement of Incentives for Innovative Talents

As can be seen from the analysis of this study, the incentive problem of innovative talents in China cannot be solved through one or two “mending ” policies. It requires reform and improvement of a series of systems and mechanisms instead.

1. Cultivate the scientific spirit, and strengthen the sense of social responsibility of technology talents. Define the rights and obligations of researchers in public institutions in the form of law, stipulating that they are entitled to guaranteed life and scientific research, and that they undertake an obligation to feedback society with scientific results at the same time. Strengthen research integrity and study style, purify the academic community to enable it to play an important role in restricting scientific misconduct, strengthening scientific awareness of social responsibility, and promoting the spirit of science.

2. Further promote people-oriented scientific management system reform. With the deepening of reform in scientific and technological system, the contradiction between researchers of government staff status and market-oriented principle of resource allocation followed by research project system is increasingly more prominent. Therefore, research management system must be able to motivate and guide input of intelligence elements for technological development, and to reflect the value of scientific research personnel at the same time. Respect the law of human capital value, get personnel costs disbursed from research funds conditionally. Allowing personnel costs disbursement from funding for science and technology projects conditionally in the wage system framework of national public institutions. Acknowledge creative premium of intellectual efforts, establish results-oriented research reward system, improve the level of scientific research personnel incentives to improve input-output effect of research funds.
3. Correctly handle the relationship between research fund management and marketization

- Develop differentiated fund management methods based on features of three different types of research, that is, basic research, applied research, and experimental development.
- Promote translation of applied research achievements into practical productive forces. As for management of this type of research projects, enterprises should be allowed and encouraged to apply for government research funding.
- Achievement evaluation and research incentives should not simply focus on economic efficiency but should take into account the scientific, cultural and social values so as to avoid simple and rigid quantitative measures without scientific basis and practical significance as well as formalism.
- Reform assessment and reward system. Government departments and research institutions should improve assessment and reward systems applicable for different academic fields and institutions with different nature in order to play the role of the scientific community and improve review, supervision and management mechanisms of research projects. Establish an evaluation index system compatible with science and technology development and the growth law of the scientific and technical personnel.

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Effectiveness Analysis on Performance Evaluation of China Local Government: A Case Study

Wu Xiangyang
Beijing Academy of Social Sciences, Beijing, China
Email: 999wxy@163.com

[Abstract] With the aim of analyzing the effectiveness of performance evaluation of local government in China, this paper takes a certain province in China as its case study by specifying subjects for in-depth interviews and sampled questionnaire survey for which ultimately 358 valid questionnaires are collected. Based on PCA (Principal Component Analysis) of SPSS, main factors and effect weights concerning implementation process and functioning process are taken into close consideration, composite score calculated, with which cluster analysis is conducted for both process. This paper explores the effectiveness in implementation process (IPE) and functioning process (FPE), specifies their correlation and discusses the affecting factors.

[Keywords] government performance evaluation; effectiveness in implementation process (IPE); effectiveness in functioning process (FPE)

Introduction
Along with the campaigns of Britain’s New Public Management and America’s Reinventing Government Movement in the 1980s, Performance evaluation has emerged as an essential part of New Public Management Theory, which dominates the western administration reform. Modern government performance evaluation in China, originally called Target-Oriented Responsibility System, was initiated at the earlier stage of Reform and Opening-up, stressing the realization of individual responsibilities (Zhou, 2007). Entering into the 21st century, especially after the construction of service-oriented government was put forward, performance evaluation in public sectors has gradually highlighted by local governments (Sheng, 2008). As a short history since performance evaluation was introduced to China, many critical problems arise in carrying out performance evaluation by local government, such as lack of public participation, unreasonable evaluation index system, and inaccurate evaluation results etc., which are seriously affecting the effectiveness of government performance evaluation (Ni, 2008).

Reviewing on the development and current situation of government performance evaluation in China, there are many things remained to be improved, among which, factors influencing government performance evaluation is intensely focused. As a tool borrowed from the west, academics and practical workers don’t quite agree on the value and effectiveness of government performance evaluation in promoting administration reform and government construction, some even believe that unsuccessful promotion of it would lead to formalism, black-box operation, false performance and image project etc. (Xie, 2009). Meanwhile, government performance evaluation is, in essence, a modern management tool, the effectiveness of which would largely determine the value of itself allowing for its management tool nature, and to some extent, determines the development prospects and direction of government performance evaluation as a system. Reviewing on domestic research on government performance evaluation, most of them are confined to how to evaluate government performance (Ji, 2007), and stay on the perceptual level when effectiveness of it is concerned. Currently, systematic and reasonable studies on effectiveness of government performance evaluation are still rare, even fewer when it comes to case study based on quantitative analysis (Gao, 2008), regularity exploration of implementation mechanism is not
common, neither researches on the original factors influencing effectiveness of government performance evaluation.

The paper will strive to define concepts of effectiveness of government performance evaluation, analyzing relevant dimensions of it. Besides, the paper carries out case study of performance evaluation system of a certain province of China, adopting constraint factors as well as correlations in both implementation process (IPE) and functioning process (FPE), testing validity and reliability of government performance evaluation system in the above two aspects. In general sense, the paper also tries to explore restraining factors, seek out rational recognition and set up strategies securing effectiveness of government performance evaluation.

**Defining Effectiveness of Government Performance Evaluation**

Current academic studies on effectiveness are focus on effectiveness of system, policy and management tool etc. In defining effectiveness of system, American scholar Oran Young (2001) referred to effectiveness of international regimes as that it would be defined from the following aspects, whether it can be executed, complied and maintain for a long period. As long as a system survived the test of time and space, it would be rendered as effective. In defining effectiveness of policy, western scholars conducted extensive and in-depth studies based on theory criterion analysis and empirical study. Studies on effectiveness of system, policy and management all can be approached from process and result, in addition, those studies, in principal, center on instrument rationality and value rationality, the former can be interpreted as whether the system, policy and management tool is effective and remain effective in long terms, the latter can be interpreted as whether and how much the system, policy and management tool functions (Xie, 2009).

Effectiveness of government performance evaluation consists of effectiveness, economy and efficiency, illustrated in the following three aspects: firstly, evaluation subjects acknowledge and accept the information conveyed; secondly, evaluation subjects internalize the information to be personal idea and belief when being exposed to or exposed to government performance evaluation, personal values experiencing changes toward what evaluator has guided or expected; thirdly, the evaluation is handy and feasible, achievements made with little input, in other words, low cost generates high outcome (Guo & Chu, 2003).

In simple sense, effectiveness of performance evaluation can be approached in two levels. Level one refers to accuracy of evaluation results, agreement between goals and results, which we might call it effectiveness in implementation process (IPE). Level two refers to functions fully activated, we might call it effectiveness in functioning process (FPE), for example, if evaluation results are properly used to encourage or punish evaluation subjects concerned.

From the perspective of macro operation mechanism of government performance evaluation, objective factors (such as outer conditions), perfection of system and human factors jointly influence operation status and functioning activation of each internal factors in the system (effectiveness in functioning process), when effectiveness in functioning process is fully attained, core functions of government performance evaluation are achieved (effectiveness in implementation process).
Case Study on Effectiveness of Government Performance Evaluation

To systematically analyze the effectiveness of performance evaluation, the paper initiated a case study in a certain Province of China. The questionnaire consists of 41 questions related to the IPE and FPE, and 358 valid ones are collected.

**Project Design**

**Questionnaire Design.** Based on literature review, the case study and questionnaire are designed to inspect and test the following two hypotheses. Firstly, effectiveness of government performance evaluation contains IPE and FPE. The former is composed by 5 aspects: index system, evaluation procedure, evaluation method, evaluation results and results applications (21 questions for this part); the latter refers to accuracy of measuring sectors performance, influence on workflow, sectors performance improvement, relationship improvement between government and the public, organization construction improvement etc. (18 questions for this part). Questionnaire also allows for overall feelings of evaluation subjects on effectiveness of government performance evaluation (2 questions for this part).

Secondly, the paper assumes that IPE and FPE are correlated. The paper focuses on FPE of government performance evaluation, assuming remarkable influence from IPE, in other words, index system, evaluation procedure, evaluation method, evaluation results and results application etc. pose influence to FPE. Hence, questionnaire emphasizes the correlations between IPE and FPE, attempting to collect relevant data based on the correlations.

**Sample selection and allocation.** The case province mainly adopts target-oriented responsibility system, the paper takes leading cadre and staff from all levels and sectors. Sectors are selected via random sampling, subjects are selected randomly. 91 administration sectors of different levels are covered.

**Data Analysis Methodology**

There has reliability analysis for data of survey. It is the principal method testing reliability and stability of measuring tool (Xue, 2013). Its result is indicated by reliability coefficient, default model of system is Cranach’s alpha. Testing reading is $\alpha=0.919$, which favors high reliability of research data. The research collected as many as 41 indexes, in its effort to cover the whole performance evaluation. the paper won’t cope with the entire 41 indexes or assign different weights to each of them, for the following two reasons: firstly, abundance of variables add to analysis workload, extremely complicating literally simple analysis process; secondly, information overlap generated for high correlations among variables, making it hard to set weight coefficient. Besides, removing indexes might lead to information loss.

Therefore, the paper adopts methodology of factor analysis. Prior to it, the paper carries out KMO and Barlett test, ensuring a favorable result for factor analysis. Afterwards, the paper utilizes PCA (Principal Component Analysis) to respectively analyze prime factors (principal components) and weights (variance contribution) influencing effectiveness in both implementation process and functioning process. Calculate overall score on the basis of factor score of each sample (weight of each prime factor). Take overall score as variable; classify research subjects into 3 categories for cluster analysis to discuss the insufficiency of IPE and FPE. Eventually, the paper conducts varimax rotation on factor loading, assess index through top loading of each common factors, and nominate factors to clarify information conveyed by common factors, discussing major reasons causing insufficiency of effectiveness in implementation process and functioning process.
Analysis Results

General Assessment of Performance Evaluation

In order to assess general effectiveness of performance evaluation, the questionnaire ends with the last question: how do you comment on the practical effectiveness of current government performance evaluation. 61.6% responses feel unsatisfactory, 51.2% takes it as mere formality, only few subjects confirm the value. It is obvious that formalism exists in performance evaluation, quite a few feel unsatisfactory about its effectiveness, the paper draws a basic conclusion that effectiveness of government performance evaluation is insufficient.

Effectiveness in Implementation Process and Reason Analysis

Factor analysis for implementation process. High correlation among variables, as tested, enables factor analysis. The paper identifies factor variables via PCA, utilizes two-step cluster to classify 332 valid subjects (26 abnormal samples removed) into 3 categories. Analyzing mean values in mass centre table, we can see: subjects in category 1 tends to approve the effectiveness in implementation process, subjects in category 2 are quite neutral about it, whereas category 3 are negative about the effectiveness. Category 1 contains 116 subjects, covering 35.8% of valid subjects or 32.4% of total subjects, which demonstrates the insufficient effectiveness in implementation process of government performance evaluation.

Reason analysis for insufficient effectiveness in implementation process. The paper sets up five dimensions, index system, evaluation procedure, evaluation method, evaluation results and results application, calculating their average score, so as to find the reasons toward insufficient effectiveness. Research indicated that evaluation results and results procedure pose greatest influence to effectiveness in implementation process, the rest influencing factors are index system, evaluation method and result application with decreasing influence.

However, PCA only accounts for influence on effectiveness in implementation process from factors variables, fails to inform us of what factors causing insufficient effectiveness. This paper conducts cluster analysis, taking principal components as variables. Based on category table and mass centre table, the paper has the following conclusions:

Firstly, according to research statistics, 55.6% subjects hold negative attitudes toward performance analysis, over half interviewee are not in favor of the system, skeptical about practical effects, doubting it about improving government performance.

Secondly, there are still problems to be solved. Insufficient effectiveness of evaluation procedure and evaluation results, such as authenticity, fairness of evaluation result, openness, specification of evaluation procedure, is the major reason toward insufficient effectiveness in implementation process. Index system is unreasonable in terms of comprehensiveness and rationality. Evaluation results are, more often than not, considered as basis for punishment instead of encouragement, negative effects overwhelming positive encouragement.

Thirdly, performance evaluation is accredited by the public. Although few subjects approve of the government performance evaluation system itself, the majority affirms influence and operability of target-orientated responsibility system on government sectors, showing their high expectations for functions of current performance evaluation system, highlighting the large gap between ideal and reality of effectiveness of performance evaluation system.
Effectiveness in Functioning Process and Cause Analysis

**Effectiveness analysis in functioning process.** Similar analysis is adopted to classify 332 valid subjects, with abnormal values removed, into three categories. Based on mean values analysis in mass centre table, the paper has following conclusions: subjects in category 1 are in favour of effectiveness in functioning process, subjects in category 2 are quite neutral about it, subjects in category 3 display negative tendency. 92 subjects in category 1, covering 27.7% of valid subjects or 25.7% of entire subjects, which demonstrates the insufficient effectiveness in functioning process for government sectors.

**Cause analysis.** Set up question dimensions including direct effectiveness, such as accurate reflection of performance, influence on implementation process, government performance improvement, public trust improvement, indirect effectiveness and negative effectiveness, calculate average score. Based on the above 6 variables, conduct cluster analysis on interviewee. correlation coefficient analysis shows that whether improving performance and accurately reflecting performance is of great positive relevance with effectiveness in functioning process (with values 0.934, 0.648 respectively). Whereas, the majority believe that performance evaluation cannot accurately reflect and improve government performance, and show great negative effectiveness, which is the main reason for insufficient effectiveness in functioning process. Meanwhile, the majority believe performance evaluation is capable of improving working attitude, amending work concentration, optimizing working methods and relations with the public, posing positive influence on organization culture, system and personal development.

**Correlations between Effectiveness in Implementation Process and That in Functioning Process**

Implementation process and functioning process compose complete performance evaluation process. Understanding overall conditions of performance evaluation necessitates research on relationship between effectiveness in both implementation process and functioning process. Analysis illustrates that evaluation result and result application have greatest influence on effectiveness in functioning process, the rest factors are index system, evaluation procedure and evaluation method by their relative importance. In implementation process, however, the majority of subjects doubt about authenticity, fairness of evaluation results, openness, and specification of evaluation procedure. As far as result application concerned, leader recognition has stronger effects than performance evaluation. Promotion, bonus, training opportunity etc. are not so much linked to evaluation results. The above problems in implementation process greatly reduce the effect of performance evaluation.

**Conclusion and Discussion**

The effectiveness analysis of the chosen local government’s performance is insufficient. Evaluation process and evaluation results rank the first in affecting effectiveness in implementation process, followed by index system, evaluation method and results application. Evaluation results and results application are the most influential factors in functioning process’ effectiveness, followed by index system, evaluation procedure and evaluation method. Firstly, ineffectiveness in the implementation process is mainly attributed to ineffectiveness of evaluation procedure and evaluation results, such as authenticity, fairness of evaluation results, openness, and specification of evaluation procedure. Secondly, index system is not reasonable. Finally, evaluation results are, more often than not, referred to as basis for punishment but not for reward, leaving negative effects overwhelming positive encouragement. Many people blame the insufficient effectiveness in the functioning process as the performance evaluation fails to reflect and improve government’s performance precisely. With limited amount of questionnaire, and being restricted
to only one province, conclusions in this paper cannot represent overall effectiveness of government performance evaluation in China; further work remains to be done to extend scope and depth of research.

References


Development of Organizational Health Scale for Elementary School Teachers

Fanxing Meng and Zijuan Huang

Department of Psychology and Behavioral Science, Zhejiang University, Hangzhou, China

Email: xingfanmeng@163.com

[Abstract] Teachers’ work efficiency is easily affected by the overall environment of elementary school. It is necessary to develop an organizational health scale for elementary school teachers. In the present study, 16-item scale of organizational health was established for elementary teachers. The EFA result showed 4-factor structure, which was including management atmosphere, career development, sense of self-value and cohesion. The model fits were good. Whereafter, factor loadings, Cronbach’s alpha, composite reliability and average variance extracted were estimated. Strengths and limitations, future orientations and disappointing study result were discussed.

[Keywords] organizational health; elementary school teacher

Introduction

Public service staffs often give people the impressions of low income, low efficiency and work loose. The causes of this phenomenon are worth to explore and reflect. Do public service employees naturally like this working state? With the urgent needs of the social transformation in China, the improvement of present situation is particularly prominent. Nine -year compulsory education is one of the most important contents in public services of China. The elementary school last first six years. Because there is no entrance pressure to next education stage, teachers’ work efficiency is easily affected by the overall environment of elementary school. Thus, it is necessary to develop an organizational health scale for elementary school teachers.

Literature Review

Concept of Organizational Health

The health metaphor hiding behind the organizational climate was initially figured out by Miles in 1965 to examine the properties of schools. He considered that a healthy organization was one that not only survives in its environment, but continues to grow and prosper over the long term (Miles, 1969). Then organizational health for public schools was described as a stable characteristic conceptualized as the physical and psychological characteristics of the school that influence the behavior of teachers, staff, and students (Hoy & Miskel, 1987; Ringeisen, Henderson, & Hoagwood, 2003). Inspired by Miles’ theory, Clark (1982) tried to extend the understanding of organizational health of public school into the research field of non-school organization. He regarded that the organizational health was the organization members keeping consciously in accordance with the behavioral patterns of the group. This was supported by other researchers.

They implied that healthy organizations have a congruence of values and rules with everyday practices reflecting these values and rules (Cooper & Cartwright 1994, Cox & Leiter, 1992). It is ignored, however, to take into account the interactive process between the organization and the external environment. After that, researchers combining both the ability of organization and the environment adaptability considered that the organizational health referred to an organization to function properly, focus on internal ability of the development, cope with environmental changes effectively and entirely.
and carry out the reasonable change (Hoy & Miskel, 1991; Shi & Zheng). Although highlighting the
effect of person-environment matching in the organization and taking the adaptive capacity of
organization itself into account, this statement neglects the impacts of employee health, social
responsibility and social morality of an organization.

Later on, the connotation of organizational health became more solid. Organizational health, defined
by Lindstrom et al. (2000), implies that an organization is able to optimize the effectiveness and the
well-being of its employees, and cope effectively with both internal and external changes. Nadkarni and
Lovey (2003) proposed a more complete framework. In their view, the organizational health refers to the
whole state of balance between the principal organizational objectives, creation of belonging sense, the
minimizing of entropy, creation of customer’s satisfaction, organizational growth and living in harmony
with the environment.

Corbett (2004) indicated explicitly that the organizational health depended on the dynamic
relationship and balance of business leaders’ understanding among the employee, customer and
shareholder. Meanwhile, Zwetsloot and Pot (2004) emphasized that healthy organizations should not only
have the financial success, but also healthy staff and healthy environment. They attached importance of
social responsibility linked to health closely. In fact, health of organization plays a very constructive role
in effectiveness of behavior of any system in terms of physical, mental, security, meritocracy and
valuation to knowledge, specialty and personality of beneficiaries and boosting their capabilities and
fulfilling duties delegated by its ultra-systems (Biswas & Biswas, 2010).

In a nutshell, the definition of organizational health can be divided into two categories: one is as a
state variable; the other is as process variables. The researches above depict an outline of the concept
development about organizational health briefly. Although the frameworks obtained from different
countries, cultures and sections, these research results provide a wealth of reference resources for the
organizational health of elementary school in China, because few literature of empirical research could be
found in this field.

**Dimensions and Measurements**

After the concept of organizational health proposed, Miles developed a configuration of healthy
organization that consists of ten important properties, including goal focus, communication adequacy,
power equalization, resource utilization, cohesiveness, morale, innovativeness, autonomy, adaptation and
effective problem solving (Miles, 1969). The first three aspects reflect the task needs of a social system;
the second set of the properties describe its maintenance needs; and the last four aspects are growth and
development needs. According to Miles’ theory, Kimpston and Sonnabend (1975) attempted to develop
and report one of the earliest scales to measure school health, named “Organizational Health Description
Questionnaire (OHDQ)”. There were five statement developed for measuring each of the ten Dimensions.
A factor analysis, however, was disappointing. Only five interpretable factors were identified and, of
Miles' dimensions, only the autonomy and innovativeness were found in pure form. The other three
factors were combinations of Miles' properties. Clearly, its efficacy is suspected.

Hoy and his colleagues (1991) developed the construct of organizational school health by combining
Parsons’ (1967) view of schools as social systems and Miles’ (1965) construct of school health. Parsons
(1967) considered that schools had three separate levels of control over these needs which were technical
(teaching-learning process), managerial (internal administrative), and institutional (connect the school
with its environment). This broad Parsonian perspective provided the theoretical underpinnings for
defining and operationalizing school health (Hoy & Feldman, 1987). Then, Hoy and his colleagues (1991) developed Organizational Health Inventory for Elementary Schools (OHI-E) and Organizational Health Inventory for Secondary Schools (OHI-S). From then on, both of them were applied widely in the research field of school organization. Pan (2000) made a Chinese version of the OHI-S revision. The Cronbach's alphas are all above 0.8 for revised OHI-S and the subscales. And seven factors are also well with corresponding to the original. As to the OHI-E, 37 items distribute over five subtests. The dimensions are teacher affiliation, integrated leadership, resource influence, institutional integrity and academic Emphasis respectively.

Moreover, Klingele & Lyden (2001) supposed that the dimensions of organizational health in Academia including communication, participation and involvement, loyalty and commitment, morale, institutional reputation, ethics, performance recognition, goal alignment, leadership, development, and resource utilization. Puplampu (2005) presented a framework by drawing on practitioner interventions in six organizations in an emerging economy of Africa. The findings suggested six main indicators of organizational ill health which were executive delusions of grandeur, procedural weakness, employee alienation of the malicious and redundant forms, organizational hemorrhaging or constipation, and corporate directionlessness. Through literature collecting and related structure of organizational health and the measurements, we summed up the common features of organizational health, that is: the environment adaptability, self regulatory, innovative learning, continuous development, and integration of employees’ health and social standards.

**Methodology**

**Participants and Procedure**

Participants were 189 teachers from 5 elementary schools in Hangzhou city. Teaching subjects were including mathematics, language, science, P.E., music, painting, morality and society. The majority of participating teachers were females and account for 86.3%. The ages were from 21 to 49 (M=33.2, SD=6.7). They were made an appointment into small groups at the offices in their off-class time. But the investigating procedure and researcher requirement were equal. A researcher read the introduction loudly and clearly. After understanding the introduction exactly, participants filled in the blanks about their demographic characteristics and were asked to finish the questionnaire in 20 min. And, it was an anonymous filling in.

**Scale Development**

The original questionnaire of perceived organizational health was developed for Chinese teachers. It consisted of 29 items and referenced to Hoy’s scale and other researcher’s dimensions mentioned above. Participants were asked to marked befitting degree with 5=extremely consistent, 4=very consistent, 3=consistent, 2=a bit consistent, and 1=not consistent at all. After item analysis, 8 items were no significant difference between high and low group, after t-test. 5 items had the similar factor loadings between two or three factors, which were expelled after EFA. Finally, 16 items were retained. Four factors were management atmosphere, career development, sense of self-value and cohesion. Specifically, management atmosphere was about management fairness, efficiency, and evaluation of leaders in elementary schools. Career development mainly related to teachers’ career development space and approach. Sense of self-value was to indicate whether there were chances to achieve career self-realization. Cohesion referred to the collaboration degree of teacher groups to achieve work target.
Results
The result of exploratory factor analysis suggested that half the sample (n=95) was factorable (KMO=0.86). Four factors explained 61.58% of the total variance. They had good internal consistency, which were management atmosphere ($\alpha=0.88$), career development ($\alpha=0.72$), sense of self-value ($\alpha=0.76$) and cohesion ($\alpha=0.71$) respectively. Total Cronbach’s alpha was 0.89. Factor loadings were between 0.41 and 0.83. The composite reliability was between 0.62-0.87. And the average variance extracted was between 0.35-0.49 (see Table 1). These three indicators showed that convergent validity was accepted reluctantly. The model fits were $\chi^2=150.88$, $df=97$, $\chi^2/df=1.55$, RMSEA=0.08, CFI=0.92, TLI=0.90, NFI=0.81.

Table 1. Factor Loading, Cronbach’s alpha ($\alpha$), Composite Reliability (CR) and Average Variance Extracted (AVE)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor Loading</th>
<th>$\alpha$</th>
<th>C.R.</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management atmosphere</td>
<td>0.53-0.79</td>
<td>0.88</td>
<td>0.87</td>
<td>0.49</td>
</tr>
<tr>
<td>Career development</td>
<td>0.70-0.79</td>
<td>0.71</td>
<td>0.70</td>
<td>0.44</td>
</tr>
<tr>
<td>Sense of self-value</td>
<td>0.69-0.73</td>
<td>0.69</td>
<td>0.66</td>
<td>0.42</td>
</tr>
<tr>
<td>Cohesion</td>
<td>0.41-0.83</td>
<td>0.68</td>
<td>0.62</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Discussion
Among the measurements of organizational health for elementary school teachers, Hoy’s inventory was widely used in western countries. So far, there has not been a pure version to test organizational health of elementary school teachers for eastern culture yet. Elementary school in China belongs to the compulsory education stage, and is one of the most important content of public service, which often lasts for six years. Teachers' perception of organizational health is more likely to affect job efficacy, satisfaction, performance and burnout, etc. in public elementary schools. Thus, there is positive theoretical significance to explore in this field.

This study surveyed 189 Chinese elementary school teachers, trying to develop the organizational health scale for public elementary school teachers' and confirm its dimensions. The result showed that factor loading and model fitness were fitting well. Thus, dimensions of the questionnaire were clear and definite. However, the representation of internal consistency reliability, composite reliability and average variance extracted was no more satisfactory. The main reason might come from two aspects: small sample size and few items for a dimension, which led to the poor convergence degree of cohesion dimensions. Therefore, subsequent research should expand the sample size, while continuing to adjust the items and dimensions.

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An Analysis of the Impact of Group Counseling on the Level of Trust of Freshmen

Liao Shen
Teaching and Research Institute of Political Theory, Zhejiang University, Hangzhou, China
School of International Studies, Zhejiang University, Hangzhou, China
Email: Sl01@zju.edu.cn

Lingling Zheng and Fengbin Wu
Qiushi College, Zhejiang University, Hangzhou, China
Email: zhengll@zju.edu.cn and wufengbing1988@163.com

Abstract] The popularization of group counseling in Chinese colleges and universities has benefitted the healthy development of undergraduates. As theoretical and literature studies have shown, group counseling is an effective approach to improve the undergraduate's sense of trust. The outcomes of a series of experiments and measurements have shown that group counseling has a great influence on the level of trust of freshmen. This study is based on the hypothesis of three major dependent variables of the trust scale, which are predictability, dependability and faith. It has shown that there is a close relevance between group counseling and its intervention effect on the sense of trust. Effective group counseling can improve the overall credibility among freshmen.

Keywords] group counseling; interpersonal trust, intervention

Introduction
There is typical and universal significance in China to select college students as the study objects of group counseling. The experience and results have promotional value in the application of group counseling in various social groups. The research of Xin Ziqiang and Zhou Zheng (2012) show that currently, Chinese university students’ levels of trust is on the decrease, which indicates that there is a severe crisis of confidence among university students. Group counseling offers its answer to the topic of trust from the perspective of psychology. The experiment and research of Song Dali and Yuan Hongbo (2011) show that group counseling is an effective way to improve university students’ sense of trust.

Literature Review
Research Status at Home and Abroad on Group Counseling and the Trust Issue
Group counseling is a form of psychological service carried out in a group context. Through the interaction between group members, it’s a helpful process to prompt individuals to adjust and improve relationships with others, as well as learn new attitudes and behaviors, so as to stimulate individual potential and enhance the ability of adaptation through observation, study, experience, self-understanding, self-study and self-acceptance in the exchanges with appropriate counseling strategies and methods (Baidu Encyclopedia, 2013).

Group counseling is exotic. It can be traced back to 1950 when H. Pratt founded the first group of the lung handicapped to encourage and inspire them to overcome their disease by lectures, discussions, and giving a demonstration in person. He achieved good results and created a precedent for group therapy (Peng, 2009). The application of group counseling to the growth and improvement of normal people was derived from Lewin's “National Training Laboratory” in the United States in the 1930s. Lewin published “A Group Guidance Curriculum in the Senior High School” in the Journal of American Education in
He believed man was a field, and one’s psychological phenomenon was of a spatial attribute so that human behavior was determined by the field. Later, after C. R. Rogers set up an encounter group, group counseling was welcomed by all social sectors and began to be applied to various fields, especially in corporate staff training, interpersonal processing, students’ adaptation study. Its theories also began to be a major concern (Peng, 2009). Group counseling gradually become a distinguished school and has had a broad impact in the world. In Western developed countries, the research results emerged endlessly, and a variety of new ideas and methods have continued to emerge.

Since it was introduced to China in the 1990s, group counseling has gone through several stages of development; in the introduction period, foreign scholars were invited to China to give guidance and enlightenment; in the exploration period, it focused on the prevention and treatment of psychological problems, counseling and training in psychological development, and promotion and popularization of mental health; in the development period, government and schools paid full attention to it and carried on related education extensively; in the localization period, the physical and spiritual holistic health counseling model was the most representative (Fan, & Guan, 2003). Currently by and large, the study shows a rising trend and is in the ascendant. Viewed from the number of academic researches in journals, nearly 4,000 articles have been published from 1983 to 2013. Viewed from the number of dissertations, nearly 300 have been published from 1987 to 2013. The representative researches on group counseling include research on interpersonal relationships and self-confidence training by Fan Fumian of Tsinghua University, group therapy research on students with self-abasement by Yang Ruili of East China Institute of Chemical Technology, researches on treating the university students who have inferiority complex by Liyan, Jia Xiaoming of Beijing Institute of Technology, and researches on group psychotherapy to people with depression and on self-confidence cultivation by Sun Shijin of Fudan University.

**Literature Research on the Group Counseling and Trust Linkage of Freshmen**

Since the 1950s, trust has been a very important research topic in psychological and social circles. Deutch (1958) studied the impact of “expectations” and “positive or negative motivation of participants” on trust behavior through the paradigm of two people’s “Prisoner's Dilemma”. The results showed that “expectations” and “motivation” enhanced the possibility of trust behavior. Deutch (1960) also found a significant correlation between trust and the individual personality traits. Whiteman (1966) found the high correlation between trust and people’s view of human nature. Roth (1967) proposed the Interpersonal Trust Scale. In the process of the Scale improvement, trust was defined as “a reliable expectation of an individual or team to other individuals or teams in speech, commitment, and oral or written statements”. Roth (1971, 1980) used this Scale a lot in his later studies of trust. Subsequently, many researchers (Macdonald, et al. 1972; Kaplan, 1973; Chun & Campbell, 1974) studied and confirmed the validity of Lott’s Interpersonal Trust Scale. Rotter’s Scale Test was primarily for people and society of general significance, rather than specific groups. Instead, Rempel and Holmes (1985) prepared a trust scale to test particular individuals in the circle of intimate relationships. This scale had a very solid theoretical foundation. In this model, trust was defined as the three elements: predictability, dependability, and faith.

In China, Yang Zhongfang and Peng Qiuqing (1999) believed that interpersonal trust was a sense of security, namely each of the two sides is able to fulfill his obligations and responsibilities to the other in interpersonal relationships. Zhang Jianxin, Zhang Miaqing and Liang Jue (2003) considered that interpersonal trust was a psychological expectation of an interpersonal party to the other party’s act
toward himself under the uncertainty condition of “either cooperation or competition”. There are plenty of scholars holding this opinion.

Many literature studies have shown that there is relevance between group counseling and college freshmen’s sense of trust. On the issue of freshmen’s adaptation, the study of Wang Juan and Li Yong (2004) showed that the new living environment, learning environment, interpersonal adaptation, and the formation of a new self-concept were the problems that freshmen often encountered in adaptation, while group counseling could effectively shorten their time of adaptation, enhance their learning motivation and efficiency, improve their interpersonal skills, help them form a positive self-concept and improve the cohesion of class groups in colleges.

Pei Wen and Huang Weiwei (2010) studied the influence of group counseling on mental health of college freshmen, and found that there were significant differences between the experimental group and the control group of freshmen in the scores of interpersonal relationships, anxiety, hostility and phobic factors after group counseling. Therefore, they considered that group counseling gave freshmen an opportunity to understand others and learn empathy, and gave students a better sense of belonging, expanded their opportunities to make friends, and even to some extent, provided them with new ways to solve problems in real life.

Wu Fang and Liu Shenyi (2009) carried out group counseling activities among the freshman classes and discovered that the relationships in the group members had been significantly improved after counseling, especially distress in social outing and interaction with the opposite sex had been reduced significantly. Other similar studies were quite convincing too.

**Method**

**Objective**

In the past, researchers in China basically used the Interpersonal Trust Scale to test the interpersonal trust of domestic college students (Tang, & Tian, 2005) when they tested the trust of the group members of college students (ITS – Rotter, 1967). However, few people had introduced and used the Trust Scale for the measurement of the intimate relationship within members of small groups (Rempel, Holmes & Zanna, 1985).

This study adopted the Trust Scale (TS) to examine the impact of group counseling on the mutual trust of the particular group members of freshmen. The TS used in this experiment was divided into 18 questions and 3 dimensions, namely predictability, dependability and faith. Each question has 7 rating scales, and the cumulative score of these questions is the total score. Predictability emphasizes that based on past experience, one has consistent and stable observation on some specific behaviors of their partners; dependability stresses that when faced with risks and potential harms, one believes in the personal qualities of his companions; faith means that when faced with an uncertain future, one has emotional trust and expectations in his companions (Rempel, Holmes, & Zanna, 1985).

**Participants**

In this study, the researchers first randomly selected 50 students from the freshmen enrolled in Qiushi Campus Zhejiang University in 2013 as the first test samples to test the rationality of internal consistency coefficient and divided dimensions of the TS. Among these students, there were 24 girls, and 26 boys; 30 of them were liberal arts students and 20 were science students. Then, the researchers randomly selected 378 freshmen from the campus as the formal test samples of the TS, including 255 girls, and 123 boys; 207 were liberal arts students and 171 were science students.
**Experiment Method**

According to the self-designed “Setting Sail with You”, a group training program of interpersonal trust among freshmen, group training was carried out weekly, for two weeks, and each time took three hours. It was divided into four phases. The first phase of ice-breaking training promoted mutual understanding between class members and eliminated interpersonal ice through the games like “Hand in Hand”, “I Love Smile”, and “Rolling Snowball”. The second phrase of mutual discovery designed “Rescue in Isolated Island”, “Escape Guidance” and other games. The activities of role playing and brainstorming promoted class members to understand each other’s ways to deal with the incident and interpersonal communication model, and to establish initial trust. The third phase of confidence-building adopted “Passing over Grid”, “Trust Tour”, “Four People and Five Legs” and other games. Such teamwork promoted the formation of team awareness among the class members, and achieved mutual understanding and trust among members. The fourth phrase was sharing and the end. Through experiencing these activities, sharing feelings and learning others’ coping models, they established a trust relationship among members and encouraged each other to continue growing.

**Hypothesis**

In order to verify the intervention effect of group counseling to the level of trust on freshmen, this research put forward hypotheses as follows based on the understanding of the three major dependent variables of trust scale:

- **H1**: The higher predictability of classmates, the better intervention effects of group counseling
- **H2**: The higher dependability of classmates, the better intervention effects of group counseling
- **H3**: The higher faith of classmates, the better intervention effects of group counseling
- **H4**: The higher overall level of faith in college freshmen, the better intervention effects of group counseling

**Test**

Despite the fact that trust scale is a very mature tool for measuring trust and has prevailed in the world for decades of years, because of the differences of languages, culture and social environment, this research made use of the samples of a preliminary survey to conduct an Alpha test and exploratory factor analysis of 18 questions in the scale to prove that the trust scale (TS), which measured intimate relationships among micro community members, still was an reliable and effective tool for measuring the level of trust of freshmen of the trust Scale (TS), and this particular measure the level of trust between groups of reliable and effective tools.

On this basis, the researchers conducted the test, namely, the pre-test of the level of mutual trust among the group members in order to obtain a baseline for comparison with first-hand information acquired. Then, the independent variable of group counseling was added into the test to play the role of intervention or influence by carrying out in-depth group counseling activities. Two weeks later, the formal post-test of the same group of freshmen was carried out. Finally, we validated our assumptions by analyzing the results of the post-test data.

The 18 questions contained in the trust scale in this experiment cover three dimensions, respectively: predictability, including questions 1, 3, 8, 11, 13; dependability, including questions 2, 5, 7, 9, 15, 17; faith, including questions 4, 6, 10, 12, 14, 16.
Result
By making use of the software SPSS16.0, the researchers used a preliminary test with 50 samples, finding the Cronbach coefficient $\alpha$ was 0.953, in which dependability was high enough to meet the requirement of wide range tests. On this basis, the researchers made exploratory factor analysis of the 50 samples, finding the KMO value in the trust scale was 0.847. Thus, the load factors in three dimensions were all quiet satisfying, proving that the trust scale is a reliable measurement tool of testing the level of interpersonal trust of the specific group of freshmen.

On the basis of conducting the pre-test, the researchers firstly conducted a wide range of pre-test of the data of 378 formal samples. Then, after group counseling, a post-test of the same sample group was carried out.

The data of the pre-test and post-test was list as follows for comparison:

**Table 1. Data of Pre-Test and Post-Test for Comparison**

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>$\alpha$</td>
<td>$\alpha$</td>
</tr>
<tr>
<td></td>
<td>.844</td>
<td>.861</td>
</tr>
</tbody>
</table>

It could be found in Table 1 that the $\alpha$ in the pre-test was 0.844 and the $\alpha$ in the post-test was 0.861. The Cronbach coefficient $\alpha$ in the 18 questions in both of the pre-test and post-text were between (0.8, 0.9), so therefore, we could judge that this scale has a quite high internal dependability.

**Dimension one: Predictability.** KMO value was 0.641. And of all the data of the pre-test, the information of question No.13 was severely lost (nearly 70%). Similarly, analysis of the five questions in the predictability dimension in the post-test was carried out and the KMO was 0.669. In the data of the pre-test, only 33.9% of the information has been extracted from question No.13. The lost was rather severe. After synthesizing the data of both the pre-test and post-test, question No.13 was deleted.

**Dimension two: Dependability.** In the pretest data, KMO was 0.730 when conducting its one-dimensional factor analysis, while that was 0.764 in data of the post-test. The information extracted from six questions all surpassed 50%.

**Dimensions three: Faith.** In the pretest data, KMO was 0.715 when conducting its one-dimensional factor analysis, while that was 0.720 in data of the post-test. The information extracted from six questions all surpassed 50%.

The overall KMO in the pre-test trust scale was 0.846 and the overall KMO in the post-test trust scale was 0.893.

The factor structure of trust scale (post-test) was as follows:
### Table 2. Factor Structure of Trust Scale (Post-Test) N=378

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 3-faith</th>
<th>Factor 2-Dependability</th>
<th>Factor 1-predictability</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>.501</td>
<td>.173</td>
<td>.488</td>
</tr>
<tr>
<td>6</td>
<td>.700</td>
<td>.132</td>
<td>.026</td>
</tr>
<tr>
<td>10</td>
<td>.729</td>
<td>.193</td>
<td>.240</td>
</tr>
<tr>
<td>12</td>
<td>.707</td>
<td>.094</td>
<td>.009</td>
</tr>
<tr>
<td>14</td>
<td>.191</td>
<td>.681</td>
<td>.274</td>
</tr>
<tr>
<td>16</td>
<td>.747</td>
<td>.091</td>
<td>.077</td>
</tr>
<tr>
<td>2</td>
<td>.272</td>
<td>.565</td>
<td>.448</td>
</tr>
<tr>
<td>5</td>
<td>.214</td>
<td>.698</td>
<td>.036</td>
</tr>
<tr>
<td>7</td>
<td>.092</td>
<td>.635</td>
<td>.175</td>
</tr>
<tr>
<td>9</td>
<td>.098</td>
<td>.780</td>
<td>.012</td>
</tr>
<tr>
<td>15</td>
<td>.297</td>
<td>.720</td>
<td>.038</td>
</tr>
<tr>
<td>17</td>
<td>.157</td>
<td>.679</td>
<td>.083</td>
</tr>
<tr>
<td>1</td>
<td>.070</td>
<td>.318</td>
<td>.660</td>
</tr>
<tr>
<td>3</td>
<td>.570</td>
<td>-.139</td>
<td>.540</td>
</tr>
<tr>
<td>8</td>
<td>.566</td>
<td>-.071</td>
<td>.446</td>
</tr>
<tr>
<td>11</td>
<td>.055</td>
<td>.455</td>
<td>.580</td>
</tr>
<tr>
<td>18</td>
<td>-.070</td>
<td>.239</td>
<td>.642</td>
</tr>
</tbody>
</table>

| Eigenvalue | 5.784 | 2.422 | 1.116 |
| Explanation rate % | 34.021 | 14.248 | 6.562 |
| Overall explanation rate % | 54.831 |

The degree of coincidence of the questions in the scale and the consistency of the pre-test and post-test is shown in Table 2. Therefore, the researchers hold that the trust scale has three dimensions, including predictability, dependability and faith. It could be approved that the three dimensions originally set have internal rationality and logic to the specific group members of Chinese freshmen.

The researchers also conducted one-way ANOVA of the data after group counseling by adopting SPSS16.0 in order to verify whether the change of a single controlling factor will have a great influence on the observed variables. The data we got is listed as follows in Table 3.

### Table 3. One-way Analysis of Variance (ANOVA) N=378

<table>
<thead>
<tr>
<th>Variable</th>
<th>df among group</th>
<th>df within group</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictability</td>
<td>1</td>
<td>754</td>
<td>175.513</td>
<td>.000***</td>
</tr>
<tr>
<td>Dependability</td>
<td>1</td>
<td>754</td>
<td>68.314</td>
<td>.000***</td>
</tr>
<tr>
<td>faith</td>
<td>1</td>
<td>754</td>
<td>911.160</td>
<td>.000***</td>
</tr>
</tbody>
</table>

* p<0.5, ** p<0.01, *** p<0.001

As could be shown from the data in the table, the three observed variables showed significant difference before and after group counseling. Therefore, our assumption could be approved. Based on the analysis of variance above, the researchers compared the pre-test mean values and post-test mean values of the variables one by one in order to judge whether has significant intervention effects or not.

### Table 5. Multiple Comparisons N=378

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test mean value</th>
<th>Post-test mean value</th>
<th>Mean difference</th>
<th>Significance</th>
<th>Intervention effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictability</td>
<td>25.31</td>
<td>29.08</td>
<td>3.77</td>
<td>.000</td>
<td>Obvious***</td>
</tr>
<tr>
<td>Dependability</td>
<td>29.05</td>
<td>31.90</td>
<td>2.85</td>
<td>.000</td>
<td>Obvious***</td>
</tr>
<tr>
<td>Faith</td>
<td>28.77</td>
<td>33.25</td>
<td>4.48</td>
<td>.000</td>
<td>Obvious***</td>
</tr>
</tbody>
</table>
By analyzing the data above, the researchers hold that by organizing group counseling activities, the level of trust among group members could be effectively improved and it has an obvious intervention effect in the three variables of predictability, dependability and faith.

**Conclusion**

This research proved that group counseling could effectively improve the level of trust among group members and has obvious and favorable influence and intervention effect. The specific features are listed below:

- Group counseling can effectively improve the level of trust among freshmen.
- Freshmen could have a positive experience of interpersonal communication with the help of group counseling.
- Group counseling takes an active role in promoting the growth and development of freshmen.

**Limitations**

- Due to various factors, the sampling range was only limited to the freshmen in Zhejiang University, which shares no distinct group representation.
- The confirmatory factor analysis of the trust scale has not been carried out, so there’s a lack of dependability and validity examination of the scale.
- The overall research lacks a complete theoretical framework and theoretical basis.

**Acknowledgment**

This research is part of the Zhejiang Provincial Education Department Political Theory special project: Y201018769 “The Establishment and Study of University Political Theory Education and Group Counseling Coupling Model”

**References**


The Relationship of Self-Esteem, Rejection Sensitivity and Social Anxiety among College Students

Pan Hongxia
Zhejiang University of Media and Communications, Hangzhou, China
Email: 174520323@qq.com

[Abstract] This research investigated the relationship of college students’ self-esteem, rejection sensitivity and social anxiety. The participants were 371 college students who completed three questionnaires: the Self-esteem Scale, the Interaction Anxiousness Scale and the Rejection Sensitivity Questionnaire. The results showed that 1) the self-esteem of male students was higher than female’s, and the social anxiety of seniors was higher than other grades; 2) the rejection sensitivity was positivity correlated with social anxiety, and the self-esteem was positivity correlated with rejection sensitivity and social anxiety; 3) the rejection sensitivity partially mediated the influence of self-esteem on social anxiety. Together, these results suggest that the self-esteem influence the social anxiety by the mediation role of the rejection sensitivity.

[Keywords] self-esteem; rejection sensitivity; interpersonal trust; social anxiety

Introduction
Numerous studies show that reduction of self-esteem will increase individuals’ anxiety (Mathes, Adams & Davies, 1985). Sociometer Theory posits that self-esteem is a gauge of interpersonal relationships that monitors how socially acceptable individuals’ behaviors are and promotes people to minimize the chances of rejection in society. Low self-esteem will decrease individual’s ability to adapt to social interaction situation and increase social anxiety. Thus, compared with persons with high level of self-esteem, individuals low in self-esteem are more likely to experience social anxiety when faced with setbacks in social interaction.

This research aims to investigate the potential mediating mechanism in the effect of self-esteem on social anxiety. As a monitor of interpersonal relationship, lower level of self-esteem will reduce individual’s ability to adapt to interpersonal relationship, thus increase the rejection sensitivity and social anxiety. Amounts of research prove that self-esteem is highly related to perceived social acceptance. Low self-esteem is correlated with the experience of being teased (Carlton-Ford, Miller, Nealergh, et al, 1997), negative feedbacks from others (Kernis, Cornell, Sun, et al, 1993), parental rejection (Morvitz & Motta, 1992), partners’ exclusions (Eskilson, Wiley, Meuhlhauer, et al, 1986), unstable social relationships (Brennan & Bosson, 1998) and estrangement from partners (Astra & Singg, 2000).

Self-esteem is an internal reflection of interpersonal relationship. As the level of self-esteem rises, the degree of individual’s perceived acceptance will rise too, and this will bring positive emotional feelings. Individuals with high self-esteem are more active and confident in social interaction, and they are more likely to be trusted by others. Moreover, self-esteem not only influences individual’s information processing process, but also influences interpersonal interaction and interpersonal trust at behavior level. Self-esteem is positively related to confidence, interpersonal liking and friendship (Gary-Little, Willialns & Hancock, 1997). Thus, present research suggests that rejection sensitivity is the psychological mechanism in the relation between low self-esteem and social anxiety.

People who are sensitive to social rejection tend to anxiously expect, readily perceive, and overreact to it. According to previous research, compared with people with low rejection sensitivity, people who are
high in rejection sensitivity are hyper-vigilant to signs of rejection. Those rejection-sensitive persons often have negative thoughts and self-concept, and easily experience emotional retreat and anxiety in the interpersonal situations (Downey & Feldman, 1997). In addition, high rejection-sensitive people appear to show more insecurity, dissatisfaction, jealousy and over-controlling about their romantic relationship. Compared with low rejection-sensitive people, those high in rejection sensitivity experience more loneliness and social anxiety. Meanwhile, it will decrease their self-esteem, impair cognitive reasoning ability and even result in less prosocial behavior and more antisocial behavior.

In summary, this research assumes that rejection sensitivity might mediate the relation between self-esteem and social anxiety. This study can not only explore the psychological mechanism that reduce social anxiety, but also provide a theoretical reference for the work of mental health education in Chinese universities.

**Method**

There are three hundreds seventy-one college students (155 men, 186 women) participated in the study, with an age ranging from 18 to 22.

**Materials**

**Self-esteem.** This study measured the overall feeling about self-value and self-acceptance of college students using the 10-item (with 5 positive statements and 5 reverse statements) Self-esteem Scale developed by Rosenberg (1965). The higher one scored, the higher self-esteem would have.

**Rejection sensitivity.** This study applied the Rejection Sensitivity Questionnaire (RSQ) developed by Downey (1996). The RSQ comprises 18 items. Each item depicts a hypothetical interpersonal situation involving a request directed by the respondent to a parent, professor, acquaintance, or romantic partner. Respondents indicate, for each situation: (1) the level of anxiety or concern about its outcome; (2) their estimate of the likelihood that the recipient will reject the request. Respondents answered each item on a 6-point scale. The \( \alpha \) coefficient of this questionnaire was 0.809 (\( p < 0.01 \)), and the split-half reliability coefficient was 0.789.

**Social anxiety.** Social anxiety was measured by the Interaction Anxiousness Scale (IAS; Leary, 1983) which comprises 15 items. A higher score indicates a higher level of social anxiety.

**Results**

**Descriptive Analysis and Correlation Analysis**

The results (table 1) revealed that the self-esteem was negatively related to rejection sensitivity and social anxiety (\( p < 0.05 \)), while the rejection sensitivity was positively related to social anxiety (\( p < 0.05 \)).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Self-esteem</th>
<th>Rejection sensitivity</th>
<th>Social anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>28.947</td>
<td>3.914</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Rejection sensitivity</td>
<td>145.100</td>
<td>37.238</td>
<td>-0.389**</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>41.815</td>
<td>7.971</td>
<td>-0.416**</td>
<td>0.288**</td>
<td>—</td>
</tr>
</tbody>
</table>

*Note: ** \( p < 0.01 \).*

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**Gender Differences**

The results of variance analysis for gender (table 2) revealed that the level of male’s self-esteem was higher than the female’s. Moreover, there was no gender difference in rejection sensitivity and social anxiety.

**Table 2. Gender Difference Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>SD</th>
<th>Female</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>29.445</td>
<td>4.389</td>
<td>28.532</td>
<td>3.427</td>
<td>2.156*</td>
</tr>
<tr>
<td>Rejection sensitivity</td>
<td>143.916</td>
<td>37.156</td>
<td>146.086</td>
<td>37.377</td>
<td>-0.535</td>
</tr>
<tr>
<td>Social anxiety</td>
<td>42.548</td>
<td>8.442</td>
<td>41.204</td>
<td>7.524</td>
<td>1.554</td>
</tr>
</tbody>
</table>

Note: * P < 0.05.

**Grade Differences**

There was a significant main effect of grade in social anxiety (see table 3). Follow-up test revealed that the social anxiety of freshman was significantly lower than sophomore and junior, but no significant difference compared with senior students. There were no significant differences among other three grades except the first.

**Table 3. Grade Difference Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Self-esteem</th>
<th>Rejection sensitivity</th>
<th>Social anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>29.738±4.167</td>
<td>143.066±38.699</td>
<td>39.213±7.785</td>
</tr>
<tr>
<td>Sophomore</td>
<td>28.570±3.677</td>
<td>145.399±36.352</td>
<td>42.323±7.608</td>
</tr>
<tr>
<td>Junior</td>
<td>28.776±4.180</td>
<td>145.408±29.835</td>
<td>41.898±8.315</td>
</tr>
<tr>
<td>Senior</td>
<td>29.219±3.976</td>
<td>145.945±42.669</td>
<td>42.836±8.357</td>
</tr>
<tr>
<td>F</td>
<td>1.474</td>
<td>0.077</td>
<td>2.826*</td>
</tr>
</tbody>
</table>

Note: * P < 0.05.

**Mediation Analysis**

Hierarchical multiple regression analysis was used to test the mediation effect of rejection sensitivity in the relation between self-esteem and social anxiety with social anxiety as dependent variable. Self-esteem was entered in step 1. Self-esteem and rejection sensitivity were entered in step 2. The results (see table 4) revealed a significant prediction effect ($F = 71.003$, $p < 0.001$), that is to say, the self-esteem can significantly predict the social anxiety ($\beta = -0.416$, $t = -8.426$, $p < 0.001$). Furthermore, this effect remain significant ($\beta = 0.149$, $t = 2.802$, $p < 0.001$) with a reduced prediction effect from -0.416 to -0.358 when the rejection sensitivity entered. A Sobel test indicated a significant indirect effect, $t = -2.725$, $p < 0.001$. This suggested that the rejection sensitivity partially mediated the influence of self-esteem on social anxiety.

**Table 4. Mediation Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Variable</th>
<th>$R^2$</th>
<th>$F$</th>
<th>$\beta$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Self-esteem</td>
<td>0.173</td>
<td>71.003***</td>
<td>-0.416</td>
<td>-8.426***</td>
</tr>
<tr>
<td>Step 2</td>
<td>Self-esteem</td>
<td>0.192</td>
<td>40.144***</td>
<td>-0.358</td>
<td>-6.750***</td>
</tr>
<tr>
<td></td>
<td>Rejection sensitivity</td>
<td></td>
<td></td>
<td>0.149</td>
<td>2.802**</td>
</tr>
</tbody>
</table>
Discussion

The variance analysis of gender revealed that the self-esteem of male students was significantly higher than female students, which is consistent with past studies (Harter, 1983; Bolognini, Plancherel, Bettschart & Halfon, 1996). There are many reasons to explain lower self-esteem in female college students. First, some research reveals that attributions are less favorable to female than to male. Second, female student attached more importance on appearance which maybe lower their self-esteem. In addition, cultural values also matters. This research also found that the difference of social anxiety of college students was significant among different grades. Specifically, social anxiety of the first year group students was significantly different from other year groups with a highest level in senior students. This result confirms previous findings. First of all, as the first group students, the freshmen in college just end the stressful high school life, and have much curiosity and confidence in the coming new college life.

That is why their social anxiety is the lowest. But when the novelty’s worn off, the second year group students begin to face some frustration such as dormitory interpersonal relationship, learning difficulties. So, the anxiety increases along with all these problems. After two years’ adjustment, the students of the third year group have been accustomed to college life and some even obtain some achievements which will relax their anxiety. Finally, it’s easy to understand why the senior students have the highest anxiety. That is because the senior students are faced with many difficult decisions: land a job, study abroad or go to domestic graduate school. It is the first turning point in their lives. So the anxiety is inevitable.

The research found that the persons with high self-esteem also had high self-value and self-acceptance while showed lower rejection sensitivity. When involved in social interaction, it is easy for people with have high self-esteem to feel be valuable and be worthy of love and it will further enhance the likelihood to explore outside world. This can effectively reduce the anticipation of tension and anxiety produced by social rejection. Thus, for high-self-esteem persons, the reduction of rejection sensitivity is helpful to promote interpersonal relationship and reduce social anxiety. The result also revealed that the rejection-sensitive people tend to show high social anxiety. One possible reason is that, as a hostile and defensive motivation system, rejection sensitivity will distort individual’s information processing procedure leading to hypo-vigilant and negative expectations for high-rejection-sensitive people. The anxious anticipation to rejection is often accompanied by anger or anxiety, which is more likely to appear aggression or emotional withdraw. Those with high rejection sensitivity tend to interpret others’ natural emotional responses as negative reaction and tend to interpret the partner’s fuzzy or negative behavior as rejection in intimate relationship. Additionally, the more sensitive to social rejection, the more problems one will confront. Hypo-vigilance and negative expectations to rejection clues will decrease the self-efficacy of those who have high rejection sensitivity. As a consequent, the psychological adjustment and interpersonal relationship of high-rejection-sensitive persons will be further deteriorated. Therefore, rejection sensitivity plays a mediation role in the relation between self-esteem and social anxiety.

In conclusion, self-esteem might be the motivator to produce individual’s rejection sensitivity. Moreover, the rejection sensitivity acts as a dispositional mediation mechanism to impact interpersonal trust and social anxiety. It is necessary to point out that, as a correlation research, this study cannot make the causality inference about the relation between low self-esteem and rejection sensitivity. For example, further longitudinal study is needed to test whether the rejection sensitivity will reduce the self-esteem of low-self-esteem person and in turn strengthen its rejection sensitivity. Besides, future research should
consider microscopic psychological mechanism that rejection sensitivity influence low-self-esteem person’s attention and memory bias.

Acknowledgement

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References


Business Models of Private Capital Involvement in Tourism Development of Ancient Villages and Towns

Wu Wen-zhi and Qiu Fu-dong

Tourism Department, School of Business, East China Normal University, Shanghai, China
Email: wuwenzhi1980@126.com and fdqiu@tour.ecnu.edu.cn

[Abstract] Private capital is becoming an important drive in tourism development of ancient villages and towns. Reasonable business models were proposed to analyze the sustainability of tourism development of ancient villages and towns. This paper summarizes theoretic progress on private capital involvement in tourism development of ancient villages and towns, and introduces three business models including Entire Leasing Model, Joint-stock Cooperative Model and Project Operation Model. Moreover, characteristics of each model is also described and summarized in this paper.

[Keywords] private capital; ancient villages and towns; tourism development; business models

Introduction
Since 1980s, ancient villages and towns have become tourist hot spots and their favorite travel destinations because of their distinctive characteristics of resources, beautiful natural environment, and the simplicity of the breath of life. As more and more ancient villages and towns attracted more and current tourists, there appears a large-scale, exploratory, extensive tourism development boom. After 20 years of practices on tourism development of ancient villages and towns, a variety of development models were proposed, such as Government-Dominant Model, State-Led Project Company Model, Transfer of Managerial Authority Model, Community Development Model, and Integrated Development Model. Some models like Transfer of Managerial Authority Model and State-Led Project Company Model focus on external forces involvement and emphasize the importance of private capitals. Investors, contractors and merchants are key external forces in the tourism development of ancient villages and towns. These business models now are followed as main theoretical models in tourism development.

As the involvement fields widen, the number of interventional way grows, the degree of intervention deepen, different contradictions emerged and new problems like community conflicts, short-term development and heritage protection ignorance are increasing. These contradictions and problems mainly came from the types of business model used in the tourism development of ancient villages and towns. Thus, how to choose reasonable business models to solve the current contradictions and problems is an important topic to be explored. Some business development models were proposed in this paper.

From the current practice of private capital involvement in tourism development of ancient villages and towns, three models: the Entire Leasing Model, the Joint-stock Cooperative Model and the Project Operation Model, were still not be paid enough attention to. Considering the practical significance of these models, this paper discussed these three models and analyzed the pros and cons of these models.

Analyses of Business Models

The Entire Leasing Model (ELM)

According to the ELM, the local government should authorize a private enterprise to control and manage an ancient village and town for a long period (no longer than 50 years), and sign a lease or contract or agreement with this private enterprise. This will allow the private enterprise to build and operate the ancient village and town by itself. The profits should be distributed among villagers based on the agreed proportion agreement. So, ELM has the following characteristics.

First, only one enterprise with the private capital is allowed to operate in the tourism development of ancient villages and towns, and the threshold of involvement was rather high. In this model, the single private enterprise signs a contract or agreement with the local government of ancient villages and towns. The cost of involvement usually consists of the operating cost of attractions, the cost of protection of heritage resources, the environmental protection fees and facility maintenance cost and so on. As for the length of the contract or agreement, the expense of the entire leasing model may be very expensive that increases the threshold of involvement consequently.

Second, the private capital gets revenue with bundled development. Generally speaking, the operating earnings of this model not only come from the gate receipts of ancient villages and towns, but also from operating income of commercial real estate projects, hotel projects and other related commercial development projects. These multivariate commercial projects can easily attract many visitors by excellent resources of ancient villages and towns.

Third, the supervision and regulation on private capital is being constantly enforced and strengthened. As the various constraint mechanisms and relevant laws issued, private capital of this model now is regulated and supervised increasingly by legal and supervision systems, including some relevant laws and regulations (such as Regulations of Scenic Area issued by the State Council), rules and regulations formulated by local governments or regulatory agencies, leases and contracts between private enterprises and local governments and pressure of the public.

For the private capital, the entire leasing model is such a business development model with relatively simple investment approach, higher profits and easy operating way. On the one hand, the model could solve financial barriers of tourism development in ancient villages and towns where tourism resources are rich but economy situation is relatively backward, and it also takes a good influence on the entire package and development operation of ancient villages and towns. However, on the other hand, the entire leasing model may easily cause competitions for resources and property of the ancient towns and villages and intensifies contradictions between the community members and private capital. Furthermore, there is a huge business risk in the model, which may cause instability in the tourism development of ancient villages and towns.

The Joint-Stock Cooperative Model (JCM)

The JCM is such a model in which under the regulation of the government, a modern joint-stock company was built by the one or more private companies and state-owned enterprises. Through the authorization of
the government, the joint-stock company charges the development and management of the ancient villages and towns. In details, this model has several characteristics as follows:

First, private capital is defined as the co-developers of the ancient villages and towns. Multiple capitals develop and manage the ancient villages and towns together based on their own capabilities and share benefits. Meanwhile, in this model, the private capitals involved in could not be only from the industrial corporation, but also from the investment corporation, the industrial company and the corporation with foreign capital and so on. Private capital often participates in the development of the ancient villages and towns due to their own interests.

Second, this model operates multiply together and has various ways to get benefits, so the profitability is much high. Compared with the entire leasing model, this model is involved with state-run capital which guides the joint-stock company reasonable integration of resources and helps the rapid ascension of ancient villages and towns. More than this, the state-run capital also plays a very important role in land requisition, the marketing and the finance sides of the ancient villages and towns for the joint-stock company, thus providing convenience for the commercial activity in the ancient villages and towns.

Up to now, JCM is the most popular business model and has been wildly adopted in the tourism development of ancient villages and towns. This model effectively solves the shortage of funds problem of tourism development in ancient village and towns. Meanwhile, it can maintain the heritage resources value of the ancient villages and towns, and avoid the external losses of heritage resources. But the management autonomies of the joint-stock companies are limited and the supervision and restriction are not been well developed.

**The Project Operation Model (POM)**

The POM is such a business model in which private capital gets involved in the business development projects and commercial operations of ancient villages and towns and gets operation profits under the planning and arrangements of the government and operator of ancient villages and towns. Compared with other business models, POM is a relatively simple model and the stakeholders involved are relatively a few. The model has the following characteristics.

First, the involvement threshold of private capital is low. In this model, the operation projects involved by private capital mostly are accommodation, catering, recreation and other commercial projects. So, compared with ELM and JCM, POM has lower requirements in which private capital only has to meet the requirements of the initial capital investment.

Second, private capital is developer of some business projects of ancient villages and towns. For heightening profit, the private capital make continued efforts to analyze market situation, conduct professional management, meet demands of market and tourism development, enhance product features and improve service quality gradually. And for the role of local government in this model, they should take the responsibility of guiding and regulating tourism investment of private capital, and what’s more, they also has the responsibility to carry out environmental impact assessment on the project development and promote social coordination.

Third, the model has a relatively simple profit mode. Private capital can only get operation income of commercial projects. In this model, the purpose of private capital is to maximize their self-interested benefits and the only way to obtain benefits is to get operating incomes of commercial project. Therefore, in the first time private capital often enhances its brand image and increase its influence among the
tourists through which provide a solid foundation for their brand image. With the development of project, through improving service quality, providing personalized services and meeting the diverse demands of visitors, private capital can achieve the goals of realizing their own brand value and getting higher operating income.

Currently, POM is a widely adopted in ancient villages and towns of south of the Yangtze River. This model can promote the mature of tourism development of ancient villages and towns. However, it can lead to excessive commercialization, and the protection of ancient villages and towns may be neglected in this model.

**Models Comparison**

Table 1 presents these three business models of private capital’s involvement in tourism development of ancient villages and towns:

<table>
<thead>
<tr>
<th>Business model</th>
<th>Entire Leasing Model</th>
<th>Joint-stock Cooperative Model</th>
<th>Project Operation Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement units</td>
<td>one single private capital</td>
<td>more than one private capital</td>
<td>profession private capital</td>
</tr>
<tr>
<td>Cooperative subjects</td>
<td>government</td>
<td>government</td>
<td>ancient town operators and residents</td>
</tr>
<tr>
<td>Involvement threshold</td>
<td>high</td>
<td>relative high</td>
<td>relative low</td>
</tr>
<tr>
<td>Revenue model</td>
<td>bundled development</td>
<td>composite development</td>
<td>single commercial revenue</td>
</tr>
<tr>
<td>Profitability</td>
<td>relative strong</td>
<td>strong</td>
<td>Normal</td>
</tr>
<tr>
<td>Supervision</td>
<td>leases and contracts</td>
<td>government</td>
<td>ancient town operators</td>
</tr>
<tr>
<td>Involvement risks</td>
<td>high</td>
<td>relative high</td>
<td>relative low</td>
</tr>
<tr>
<td>Range of application</td>
<td>limited</td>
<td>wide</td>
<td>relative wide</td>
</tr>
<tr>
<td>Development trend</td>
<td>replaced</td>
<td>mainstream</td>
<td>complement</td>
</tr>
</tbody>
</table>

Three business models, ELM, JCM and POM, now have been adopted to solve the problems arising by private capital involvement in the tourism development of the ancient villages and towns. As the governments pay more attention to the resource scarcity of ancient villages and towns, ELM will not be adopted by the government due to the competition for resources property rights, the barriers to involvement and high operation risk. Now ELM is gradually replaced by JCM and POM is becoming a very important complement to JCM.

**Conclusion**

How to choose the model to solve the problems arising by private capital involvement in the tourism development of the ancient villages and towns is a very complex process. This study introduces three models with their pros and cons. The future study should analyze the ways private capital used bases on the game theory and benefit-cost analysis of every model. Moreover, the key points and influential factors should be clarified clearly to help the private capital to make the right decision.

**Acknowledgement**

This study, on risk, mechanism and policy of private capital involvement in heritage protection and tourism development of ancient villages and towns, was supported with a grant from Foundation of National Social Science (No.11CGL111).
References


Interpersonal Problems of University Students are Linked to Dysfunctional Copying

Jie Li, and Huan Guo

Psychology Department, Wuhan University, Wuhan, China
Email: lijie@whu.edu.cn

[Abstract] The present study aims to explore the effects of coping styles and coping self-efficacy on interpersonal relationships in college students. Three Hundreds Ninety-five university students were assessed with Coping Modes Questionnaire, Coping Self-efficacy Scale and Comprehensive Diagnostic Questionnaire of Relationships. ANOVA and regression analysis were adopted to analyze the data. The results show that 1). There were 33.93% of the students with mild behavior problems when getting along with others and 7.59% of the students has serious interpersonal relationship problems. The students had less trouble in the attitude and conversation, while they had more troubles in making friends and communicating with the opposite sex. 2). There was significant negative correlation between positive coping strategies and interpersonal disturbance scores, and positive correlation between negative coping strategies and interpersonal problems scores. 3). Regression analysis showed that 26.4% of variation in interpersonal problems scores could be explained with positive coping as a negative predictor and negative coping as a positive predictor. The results suggest that some college students have different levels of interpersonal problems, which are mainly embodied in making friends and communicating with the opposite sex. Negative coping styles contribute to interpersonal problems, and positive coping styles help to avoid interpersonal problems.

[Keywords] coping styles; self-efficacy; interpersonal relationship

Introduction

Interpersonal problems (IP) during the college life become a significant public health concern with a variety of negative outcomes (Gong, 2013; Wang, 2005; Pizzolato, 2004). College students in China have to face all sorts of stressful events from the society, schools, families and themselves. Facing the pressure or stressors, individuals develop various strategies for coping. In this context, a functional coping strategy involves reducing anxiety in a situation. Dysfunctional coping strategies involve some form of escape from the situation and most likely induce various mental problems. Previous study indicated that the coping styles may affect the interpersonal relationships (Steiner, 2002; Yang, 2009).

Individuals with low coping efficacy may display a lack of confidence, and can not relieve all kinds of physical and mental symptoms caused by the stress, thus getting their health harmed (Dong, 2010). Previous study has found that low self-efficacy inclines the individual to using harmful coping style, which can also enhance the traumatic experience caused by social anxiety (Thomasson, 2010). Self-efficacy had been found correlated negatively with interpersonal relationship and social anxiety significantly, and has a marked predictive effect on the interpersonal disturbances (Gaudiano, 2003).

The purpose of the current study was to examine the relationship between coping self-efficacy, coping style and interpersonal disturbances. This study proposes the hypothesis as follows: Coping self-efficacy and coping style will have direct predictive effects on the interpersonal disturbances of college students.

Methods

Participants and Procedures

Data was collected from university students, in total 220 men and 175 women (N=395). Prior to the undertaking of the study, participants were informed that the purpose of the research was to examine
factors associated with interpersonal problems and that their privacy and anonymity would be fully protected. Consent was obtained from the participants before the actual administration of the questionnaires, which was conducted in group format. It took about 20–30 min to complete the set of questionnaires. Out of 420 sent questionnaires, 395 were returned correctly completed.

**Materials**

A self-administered questionnaire was put together, that consisted of three parts: Simplified Coping Style Questionnaire (Jie, 1998), Coping Efficacy Questionnaire (Tone, 2005) and Comprehensive Diagnostic Questionnaire of Relationships developed by Professor Richang Zheng.

**Statistical Analysis**

The data from the testing were first processed by the software package of SPSS13.0. Pearson correlation coefficients were used to assess the strengths of linear relationships between pairs of interest variables. Multiple regression analysis was then used to estimate the size of specific relationship.

**Results**

The present study shows that the average IP score of Comprehensive diagnosis of college students in relationship was 8.01 (SD=3.81). There were 33.93% of the students with mild behavior problems when getting along with others (11.20±1.84) and 7.59% of the students with serious interpersonal relationship problems (16.10±0.85).

There were significant negative correlations between positive coping (PC) strategies; coping self-efficacy (CSE) and IP scores (P<0.01). There was a significant positive correlation between negative coping (NC) strategies and IP scores (P<.01). CSE scores was positively related with PC strategies and negatively related with NC strategies and life events (P<0.01) (Table 1).

**Table 1. Correlation of IP, PC, NC and CSE**

<table>
<thead>
<tr>
<th></th>
<th>PC</th>
<th>NC</th>
<th>CSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>-0.500**</td>
<td>0.504**</td>
<td>-0.146**</td>
</tr>
<tr>
<td>PC</td>
<td>1</td>
<td>-0.909**</td>
<td>0.344**</td>
</tr>
<tr>
<td>NC</td>
<td>-0.909**</td>
<td>1</td>
<td>-0.330**</td>
</tr>
<tr>
<td>CSE</td>
<td>0.344**</td>
<td>-0.330**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: IP= interpersonal problems, PC= positive coping, NC= negative coping, CSE= coping self-efficacy
* p < 0.05, ** p < 0.01.

Stepwise regression analysis (Table 2) revealed that 26.4% of variance in IP scores was captured by PC strategies and NC strategies (P<0.01). Coping self-efficacy was a significant positive predictor on the PC strategies (P<0.01), and a significant negative predictor on the NC strategies (P<0.01).

**Table 2. Multiple Regression Analysis on IP, PC, and NC**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>IP</th>
<th>PC</th>
<th>NC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>R2 change</td>
<td>Beta</td>
</tr>
<tr>
<td>NC</td>
<td>0.283*</td>
<td>0.254</td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>-0.243**</td>
<td>0.264</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>0.344**</td>
<td>0.118</td>
<td>-0.330**</td>
</tr>
</tbody>
</table>

Notes: IP= interpersonal problems, PC= positive coping, NC= negative coping, CSE= coping self-efficacy
* p < 0.05, ** p < 0.01.
Discussion

The results show that the interpersonal problems are negatively related with positive coping strategies and coping self-efficacy and positively related with negative coping strategies. Positive coping strategies and negative coping strategies can explain 26.4% of the variation of interpersonal problems scores. More NC and less PC strategies have direct effects on the severity of interpersonal disturbance. Coping self-efficacy was a significant positive predictor on the positive coping strategies, and a significant negative predictor on the negative coping strategies.

Our findings indicate that individuals who exhibit more positive coping and less negative coping tend to report less interpersonal problems. Previous research has found the strong relationship between coping strategies and mental health (Dong, 2010; Wang, 2006; Yuan, 2007). The effect of complexity of personality constructs on interpersonal relationship is partly mediated by engagement in dysfunctional coping strategies (Yang, 2009). These findings suggest that coping styles have a profound role in interpersonal relationship, emphasizing the importance of further investigations on the ways in which perceived coping styles influence individual experiences of interpersonal difficulties.

There is a significant negative correlation between coping self-efficacy and interpersonal disturbances. However, coping self-efficacy has been not found to have a direct effect on interpersonal problems. The further analysis points out that the coping self-efficacy influences coping styles. This finding is in agreement with previous study, which revealed that students with high self-efficacy intend to use positive and mature coping style while students with low self-efficacy intend to use negative coping style (Li, 2006). What is more, results from junior school students have shown that the self-efficacy has a direct effect on the mental health significantly, and meanwhile influences the mental health indirectly by the coping style (Yuan, 2007). Individuals with low self-efficacy intend to use negative coping strategies, which could induce more interpersonal difficulties.

Based on the above, the positive coping strategies and negative coping strategies can influence the interpersonal relationship directly, and partly predict the interpersonal disturbance level. Negative coping strategies are a positive predictor on the interpersonal disturbance, and positive coping strategies are a negative predictor on the interpersonal disturbance. Individuals with lower coping self-efficacy make appears to use more negative and less positive coping strategies, which could eventually promote the occurrence of interpersonal problems.

The present study has some limitations that call for a careful interpretation of the findings and suggest a need for future research. First, our findings are based on a questionnaire survey and it is possible that its reliability is affected by a social desirability bias in participants’ answers. Second, we used simplified measure for assessing coping styles and coping self-efficacy. The questionnaires have high internal consistency and reliability, yet more assessments are necessary to get further conclusion. Finally, the present study can neither rule out the possibility of third variables causing covariation between our focus variables nor establish paths of causality. Rather, our results point to the necessity to further explore the causality between coping styles, coping self-efficacy and interpersonal relationships.

Acknowledgements

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A Qualitative Analysis of Forgiveness and Retribution in One-Trial Sequential Prisoner’s Dilemma

Huanu Xu
Department of Psychology, Wuhan University, Wuhan, China
Email: xuhuanu@msn.com

[Abstract] When the partner has defected in a sequential Prisoner’s Dilemma, will someone forgive the defector and “return good for evil”? Twenty undergraduates at a university in mainland China participated in this study. They were asked to read an explanation of the coming exchange (as a Prisoner’s Dilemma) and led to believe they were randomly assigned to a condition in which the partner chose first. After the partner’s defection, they were asked to make a decision of what to give back to the partner together with a written note, and give a reason of their decision in a short questionnaire. The results showed that not all the participants were “rational” players. Five male and three female participants forgave the partner’s defection and “returned good for evil”, suffering a loss. Other participants defected back. Why would some participants choose not to defect? Qualitative analysis of the reasons showed that “returning good for evil” was to help others accomplish their will, give happiness to others, maximize joint outcome, make a concession, not retaliate, and move others by kindness. Forgiveness (“returning good for evil”) might be triggered by altruistic or moral motivations, while retribution might be motivated by reciprocity or self-interest. Cultural implications were discussed.

[Keywords] sequential Prisoner’s Dilemma; forgiveness; returning good for evil; retribution

Introduction
Prisoner’s Dilemma is a hypothetical situation with conflict of interest. According to rational choice hypothesis, each one in the Prisoner’s Dilemma seeks maximization of self-interest and a rational player will choose to defect. But when people were actually placed in a one-trial Prisoner's Dilemma, about one-third to one-half chose to cooperate (Batson & Moran, 1999). “MaxJoint” (maximizing the joint benefits) was assumed to be the motivation of cooperation (Batson et al., 1999).

If a person in one-trial Prisoner’s Dilemma knows before making decision that the partner has already defected, how will he or she respond in return? In previous studies, the frequency of “returning good for evil” was very low, only 3% (Shaffer & Tversky, 1992), 5% (Batson & Ahmad, 2001), and 5% for individuals with a prosocial value orientation (Van Lange, 1999). For such a sequential Prisoner’s Dilemma, what motivates “returning good for evil”? The underlying motivations are valuable to explore.

“Returning good for evil” can be considered as a kind of behavioral forgiveness. Forgiveness was defined as an unjustly hurt person’s act of deliberately giving up resentment while fostering the undeserved beneficence and compassion toward the offender (Enright & Gassin, 1992; Freedman & Enright, 1996). Prisoner’s Dilemma has been used to investigate forgiveness. Exline and her colleagues (Exline, Baumeister, Roy, Bushman, & Campbell, 2004) adopted a 10-turn version of Prisoner’s Dilemma, in which a computerized partner was used. They set the program to defect on Turns 1, 7 and 10 to keep the game moderately antagonistic, and set it to follow a tit-for-tat strategy on the remaining 7 turns. The results showed that self-report negative attitude was related to the number of defection in the last five turns and the amount of rewards allocated to the partner.

From the perspective of Chinese traditional culture, there are some relevant sayings related to the decisions in one-trial Prisoner’s Dilemma. In simultaneous Prisoner’s Dilemma, cooperation can be attributed to “do not do to others what you would not have them do to you” in The Analects of Confucius.
While in sequential Prisoner’s Dilemma, both “returning good for evil” and “returning evil for evil” are in accordance with relevant moral principles. “Returning good for evil” may be attributed to the moral principle in Taoism, while “returning evil for evil” may be attributed to the Bronze Rule in Confucianism. Taoism claims “returning good for evil”, a relatively high moral requirement. In *Dao De Jing*, Laozi claimed that, “no matter for a kind or an unkind man, treat him kindly; it’s moral kindness”. But when someone asked Confucius for his opinions on “returning good for evil”, Confucius answered that “return justice for evil, and return good for good”. Obviously, Confucius did not agree with “returning good for evil”. He supported “returning like for like”.

In the present study, it was assumed that most participants would defect back. Would someone forgive the defector and “return good for evil”? If there are some forgivers, what motivated them to “return good for evil”? Their reasons for decisions and note communication with the partner will be explored by qualitative analysis.

**Methods**

**Participants**
Twenty undergraduate students (ten males and ten females) were recruited at a university in mainland China. Their average age was 19.07. They participated voluntarily and got the rewards according to their choice during the study.

**Procedures**
We adopted a similar procedure as used by Batson and Ahmad (2001). Participants were led to believe that a same sex partner (fictitious actually) from another university took part in the study at the same time in another laboratory, and they would not meet each other face to face. Each participant read the instruction individually in a laboratory and made their decisions without the presence of the experimenter. The instruction explained the rules (as a Prisoner’s Dilemma) of the coming exchange of a card (from three cards with face value of 5, 5, and -5) and indicated clearly that if one chose to give +5 or -5 card to the partner, how many points the two would get respectively. They would get a prize with the same value of their final points (one point equals to one yuan RMB). They were instructed that they were randomly assigned to a condition in which the partner chose first. After receiving a card (always a -5 card) from the partner, participants were asked to choose a card to give back (with face value of 5 or -5) and place it into an envelope. They were also instructed to write a note back with whatever they wanted to say to the partner and put it into the envelope together with the card. Then they completed a short questionnaire with an open question about their reasons of the decisions. After the experiment, participants received a written explanation of the aim and the deception in the experiment.

**Results**

**Reasons for Forgiveness (“Returning good for evil”)**
Not all the participants gave a -5 card back to the partner. Five male and three female students returned a +5 card back. They chose to “return good for evil” and therefore zero point was left for them and they got nothing. Why they didn’t just make retribution? From the reasons of their decisions reported in the short questionnaire, we can see several kinds of altruistic or prosocial reasons. In the code of each participant, taking “F-M-1” for example, the letters and number represent Forgiveness/Retribution, Male/Female, and Number of the participant respectively.
Two male participants would like to help others accomplish their will (ChengQuan). One thought that he needed to do so even if he could not get the ideal result. The other did not mind his loss and would like to give the partner more points.

“Even if I can’t get the desired result, I need to help others succeed.” (F-M-1)

“I have only two choices, choosing -5 card would get 5 points, and choosing 5 card would get 0 point. The difference is little. But the other can get 25 points because of my choice.” (F-M-2)

Two female participants would like to maximize the joint outcome though they would get nothing. One wished happiness to the partner and the other considered the partner as a guest to her university and she should treat the guest generously.

“25> 5 +5. Wish her happy.” (F-F-11)

“Because she chose -5 card at first, if I chose blue -5 card, each would get 5 points at most. She is a guest to our university and I am the host. I should be generous.” (F-F-12)

Other reasons for “returning good for evil” include giving happiness to others, making a concession, not retaliating and moving others by kindness.

“Even if I give the card first, I would give a +5, so that both of us would get more chance to win the prize...Because whether he can get the best prize is controlled by me, and it would be better to give happiness than pain, why not.” (F-M-3)

“If one (of the two) must make a concession, I'd rather be the one. This is my character.” (F-M-5)

“He gave me a -5 card, but I can not treat him as returning evil for evil.” (F-M-4)

“To move the other by kindness, let her know not everyone is selfish at this materialistic age. Although this action is trivial, it is what I can do currently to purify her behavior.” (F-F-13)

Reasons for Retribution (“Returning evil for evil”)

Five male and seven female students returned a -5 card back to the partner. They chose to “return evil for evil” and therefore both sides got the same 5 points at last. Their reasons for retribution were relatively predictable. Fairness or equality was the most reported reason. Five participants thought it an equal solution of returning a -5 card back and getting 5 points each. Some emphasized the equal relationship of “friends” and others valued reciprocity between strangers.

“Friends are equal. I would not expect my friends to give me much. If I pay too much for my friends, it is only due to the spirit of brotherhood. A hedge between keeps friendship green.” (R-M-9)

“Firstly, two persons got equal points. Go reciprocity. Secondly, it’s a pity that she did not give me +5, otherwise I would have responded with +5. After all, sincerity is reciprocal, especially for strangers.” (R-F-20)

Minimizing loss and maximizing benefit were also usual reasons.

“My loss will be reduced. At least I have some rewards.” (R-F-19)

“It’s equality of exchange, pursuing benefit maximizing.” (R-M-6)

Other reasons for retribution include the only choice for dual benefit, practical choice when a win-win solution is not possible, and preventing the partner from accomplishing selfish purpose.
“It’s the only choice in favor of both sides.” (R-F-14)
“I can not convince myself to give a +5 card to the partner. I am practical, expecting more of a win-win result. I can not foresee a win-win result if I give the other a +5 card.” (R-M-9)
"Although such a choice made mutual benefits minimized, when the other does not trust you or only seeks to maximize his own benefit, I can not let him achieve his desired result.” (R-M-7)

Forgivers’ Prosociality and Benevolence Shown in the Note Written Back
In the note written back to the partner, those “returning good for evil” showed kinds of prosocial behaviors: understanding, wishing, suggesting, welcoming and initiating friendship. From the sentences written by some forgivers, readers can also feel their benevolent attitude towards the partner. Two male students showed understanding of the other’s choice, and didn’t mind much whether they could get a prize. One told the partner his real name and wanted to make friends with him.

“Hello. I am LM (his name) in School of Foreign Language. I feel fortunate to participate in this experiment with you. In fact, receiving this card is within my expectation...We could have achieved a win-win solution. But I understand your choice. I gave you this card, because I want to make you get more rewards. As for me, it doesn’t matter. I have always believed in one sentence: giving happiness is the greatest happiness.” (F-M-1)

"Before opening the envelope, I could guess you chose -5. This is indeed the best choice. Since the prize is based on the points, I would rather one of us get a big prize (it’s more interesting) than both of us get small prize.” (F-M-2)

Other two male students considered the meeting as Yuan (predestined relationship) and showed very positive attitude towards their participation together.

“I am glad to take part in the experiment with you. Although we did not meet face to face, we still meet. Hope we can see each other and realize the predestination of glancing back 500 times in previous existence. Wish you happy!” (F-M-3)

“Yuan bring us together.” (F-M-4)

One female student welcomed the partner, treating her as a guest.

“Welcome to our university. Wish you a wonderful trip here!” (F-F-12)

One male and two female students made pertinent suggestions. Their attitudes were relatively neutral.

“Do not be tempted by the immediate benefit. We should have long-term vision.” (F-M-5)
“In fact, you should give me a +5 card, because the result is obvious.” (F-F-11)

“Future society needs more people with spirit of cooperation...Although you can get temporary interests, you may lose a sincere friend...Meeting your requirements with a blue +5 card, I hope it can purify your egocentric mind. I wish you happy everyday...You need pay more attention to trivial actions in the future, and make improvements. See you next time! Hope you will be more perfect then!” (F-F-13)
Retributers’ Attitudes Shown in the Note Written Back
Among those “returning evil for evil”, some participants responded with neutral attitudes towards the partner, without negative emotions.

“Obtaining same points and both are happy.” (R-F-5)
“I guessed you must choose a red -5, because it seems the most worthy.” (R-F-18)

Other retributors showed somewhat disappointed or unsatisfied attitudes.

“I hope to achieve a win-win result, but I can not foresee the benefit I will achieve if I give a +5 card to you. I am sorry. I hope we can make friends. QQ (chat tool): 43*****.” (R-M-9)

“Everyone has different position in interest. This is what I need to admit. You take the initiative at the beginning of the experiment. In part, you can decide our results. If you give me a -5, obviously I will give you a -5 back as I don’t want to get nothing...I have thought of giving you a +5, but I can not convince myself to seek benefit for others who doesn’t trust in me.” (R-M-7)

Still others showed relatively hostile attitudes in the note, mainly as accusations, contempt, irony and warnings.

“I never believe there will be pies falling from the sky, except traps.” (R-M-10)
“Be nice to others! You made me realize the current condition of the society and the reality.” (R-F-6)

“No one will always pay for others and seek nothing. If you have not yet realized it because of your good luck, you need to prepare for receiving different results. Otherwise your good luck today will become the largest misery tomorrow.” (R-F-14)

Discussion
Forgiveness and Retribution in Sequential Prisoner’s Dilemma
In this study, both forgiveness (“returning good for evil”) and retribution (“returning evil for evil”) are ethical and supported by corresponding moral principles. Even so, those “returning good for evil” seems more respectable and benevolent. “Returning good for evil” implies self-sacrifice and receiving benefit difference between partners although the loss is not large in an experiment. In the reasons for “returning good for evil”, most did not involve self-interest concerns; or even if self-interest was under their consideration, they did not mind much of their loss or the partner’s gain. In contrast, those “returning evil for evil” showed their concerns on fairness (e.g., fairness or equality, mutual benefit, reciprocity) and self-interests (e.g., minimizing loss, maximizing benefit, winning prize).

In the note written back to the partner, forgivers showed more positive emotions, benevolent attitudes and prosocial behaviors than retributors. In the attribution of responsibility, forgivers tended to consider choice first as a disadvantage. They thought making choice at last was more beneficial and they could decide the final results. So they showed understanding of the partner’s worries and distrust in strangers. While retributors tended to believe that the result was decided by the partner because he or she chose first, and they attributed the unsatisfied outcome (not a win-win) to the partner’s defection.

There were three kinds of motivations functioning in one-trial sequential Prisoner’s Dilemma in this study. They were (a) self-serving, (b) moral, and (c) altruistic motivations respectively. Forgivers’ reasons reflected altruistic motivation (e.g., motivation of helping others accomplish their aims and giving others
happiness) and moral motivation (e.g., motivation of making a confession, not retaliating, and moving others by kindness). While retributors’ reasons reflected moral motivation (e.g., motivation of fairness or equality) and egoism (e.g., motivation of minimizing loss, maximizing benefit, practical choice if win-win can not be realized), with less concern of others’ condition or benefit. Although both forgiveness and retribution could be triggered by moral motivation, forgiveness mainly follows the moral principle of moving others by kindness, while retribution mainly follows the moral principle of fairness. In one-trial sequential Prisoner’s Dilemma, fairness of the result and retributive fairness are mixed up. It’s not hard to find that forgivers were more ready to self-sacrifice to support their moral principles or give others happiness. People who had already forgiven (giving up retaliation and resentment, and developing benevolence and caring) other’s offence and distrust tended to “return good for evil”. Only if some people would like to “return good for evil” at first, the accumulated resentment can be reduced and the revenge cycle can be terminated.

Cultural Implications
The forgivers’ reasons (i.e., helping others accomplish their will, making a confession, moving others by kindness and considering meeting as Yuan) reflect Chinese traditional ways of interaction and Chinese philosophy used to deal with interpersonal conflicts. “Helping others fulfilling their will (ChengQuan)” focuses on others’ benefit and happiness, even if self-sacrifice is required. It’s not like Confucian ChengRenZhiMei (without giving up self-interest), because Confucius endorsed “returning justice (retribution) for evil”. Like the old saying “take a step back and you will find a bigger or brighter world in front of you”, making a confession and keeping peace with others are still important in contemporary Chinese values. In addition, the role of benevolent behavior in moving others has always been embraced in Chinese culture, with a belief of moving others by kindness and not taking revenge. The belief is beneficial to breaking the cycle of retaliation.

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References

A Moderated Mediation Model of the Relationship between Stress and Subjective Well-Being

Yi Wen
Department of Psychology, Zhejiang University, Hangzhou, China

Jiang-Tao Li
Beijing Academy of Social Sciences, Beijing, China

Tian Xie
Department of Psychology, Philosophy School, Wuhan University, Wuhan, China
Email: thanksky520@126.com

[Abstract] This study investigated the mediating effect of mental health on the relationship between stress and subjective well-being. We also examined how social support might moderate this mediated relationship. The participants were 500 college students who completed a questionnaire on stress, mental health, social support and subjective well-being. Results indicated that mental health partially mediated the effect of stress on subjective well-being, and moderated mediation analyses revealed that social support buffered the negative effect of mental symptoms on subjective well-being.

[Keywords] stress; mental health; social support; subjective well-being

Introduction
It is unavoidable to meet various events and challenges in our life, which exert great influence on our living environment and results in the change of our mentality and emotion. College life is a key phrase in students’ growth, during which they faces many big decision that may determine their whole direction of life. We often hear that some students suffered such setbacks and thereby become depressed, panic, despairing, and even experience serious mental issues. Due to these negative feelings, their life experience suffers, and they will complain that they are unhappy. However, if these students get some comfort and support from the people around them, they may see the light through haze.

Subjective well-being refers to people's evaluations of their lives according to their own standards (Diener, 2000). Recent years have seen a growing research on subjective well-being, and people are granting increasing significance to it. With college student is a special group that received widespread attention, it appears to be necessary for studying subjective well-being of them. For students with negative psychological feelings, their evaluations of their lives, that is subjective well-being, was moved down. Early researches discovered that individuals with poor psychological status reported lower levels of subjective well-being. For example, Xu, et al. (2005) found that level of depression can significantly predict subjective well-being. This indicated that psychological health exerts a profound effect on subjective well-being. Psychological stress results from the recognition of imbalance between self-adaptability and requirement of environment thus result in strain of the body and anxiety of the mind. Researchers have already accumulated evidence that stress have contributed significantly to mental health. For example, Wight et al. (2012) discovered that stress is harmful to mental health. In addition, psychological stress may be an influencing factor to subjective well-being. Wen et al. (2007) found that subjective well-being is associated to life events. Thus it can be seen that stress has an impact on both mental health and subjective well-being.
Synthesize the above results, we propose a preliminary hypothesis: Psychological health mediates the relationship between stress and subjective well-being. However, the mediating effect of mental health is unstable, as there are other factors also have effects on this relationship, such as social support. It has long been recognized that social connection with others and supportive force are essential to mental health; furthermore, social support can protect one against the effects of stress (Turner & Brown, 2010). And McHugh and Lawlor (2012) show that social support networks of family and friends are associated with good psychological well-being. Moreover, a study by Yan et al. (2011) revealed the positive correlation between social support and subjective well-being, social support can significantly influence subjective well-being. This shows that social support is beneficial to mental health as well as improves the subjective well-being.

But it has previously been shown that social support is not a stable resource. Life events are stressful to the extent that people regard the events as threats (Brian & Edward, 2011). Facing the same life events, students with different experience would have different response. Thus, the positive effect of social support always takes place after psychological problems appeared. Therefore, we hypothesis that social support only buffered the negative effect of mental symptoms on subjective well-being (see Figure 1).

![Figure 1. The Mediating and Moderating Roles of Mental Health and Social Support in the Stress-Subjective Well-Being Relationship.](image)

**Method**

**Participants**
Five hundred college students were selected by random inspection from four full-time undergraduate colleges in Zhejiang, Shandong and Hubei province. We received 469(74.7% female) replies, with the efficiency of 93.8%. The average age of participants was 20.4, and 35.1% of them were from city. With regards to class standing, the sample was 1.3% freshman, 68.9% sophomore, 29.6% junior and 0.2% senior.

**Measures**

**Stress.** Stress was measured with the 44-item College Senior Stress Scale developed by Jiang qianjin (1996), including 44 items and 3 factors: life event, emotion and coping strategy. With answers of no coded 0 and yes coded 1, the scale was constructed by the formula: \( TS = 15 + 2L + 3NE - PE + 5NC - PC \) (L is for life event, NE is for negative emotion, PE is for positive emotion, NC is for negative coping and PC is for positive coping). The higher scores indicate more stress. Cronbach’s alpha for the scale in this study was 0.791.

**Social support.** Social support was assessed with the ten-item Support Questionnaire made by Xiao shuiyuan (1986), which rated one’s subjective support, objective support and the utilization degree of
social support. A support score was constructed by summing the scores for the 10 items, with higher scores reflecting greater social support. Cronbach’s alpha for the scale in this study was 0.58.

**Mental health.** Mental health was measured using the Symptom Checklist 90 developed by Derogatis (1977), which is composed of 90 items. The SCL-90 has nine primary symptom dimensions: somatization, obsessive compulsive, anxiety, depression, interpersonal sensitivity, hostility, paranoid ideation, phobic anxiety, and psychoticism. The items were scored on a 5-point (1=not at all, 5=extremely) scale indicating how frequently the participant has experienced these symptoms in the last week. A mean score was calculated with higher scores indicating worse mental condition. Cronbach’s alpha for this scale was 0.958.

**Subjective well-being.** We used the Index of Well-Being developed by Campbell (1976) to measure subjective well-being. This questionnaire had 2 observed indicators: index of emotion and life satisfaction. The 8-item Index of Emotion Scale involved ratings of certain emotions participants had experienced within the last week. General life satisfaction was measured with a single item (“How satisfied are you at present with your life altogether?” 1 = very dissatisfied, 7 = very satisfied). We measured the subjective well-being by summing the score of life satisfaction and mean scores on emotion. In our sample, the total scale score demonstrated high internal consistency (coefficient= 0.925).

**Results**

**Description**
Means, standard deviations, reliabilities, and correlations of the focal variables are presented in Table 1. Stress was significantly positively related to mental symptom (r=0.522, p<0.01) and negatively related to subjective well-being (r=-0.344, p<0.01), mental symptom was negatively correlated to subjective well-being (r=-0.363, p<0.01), social support was positively associated with subjective well-being (r=0.265, p<0.01) and also showed small, significant negative associations with mental symptom (r=-0.127, p<0.01) and stress (r=-0.151, p<0.01), which provided preliminary support for the follow-up moderation analysis.

Table 1. Means, Standard Deviations, and Correlations of Study Variables (N = 469)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stress</td>
<td>50.8443</td>
<td>16.99</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Social support</td>
<td>37.31</td>
<td>5.68</td>
<td>-0.151**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mental symptom</td>
<td>146.206</td>
<td>39.85</td>
<td>0.522**</td>
<td>-0.127**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4. Subjective well-being</td>
<td>9.51</td>
<td>2.23</td>
<td>-0.344**</td>
<td>0.265**</td>
<td>-0.363**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. *p <0.05. **p <0.01.

**Mental Health as a Mediator**
To test the hypothesized mediation effects, we chose the approach outlined by Baron and Kenny (1986). First, the regression analysis with subjective well-being as independent variable, stress as dependent variable showed that level of stress significantly affected subjective well-being (b=-0.327, p<0.01). Second, the regression analysis with mental health as independent variable, stress as dependent variable indicated that the effect of stress on one’s mental condition is significant (b=0.529, p<0.01). At the last step, we estimated the indirect relationships of stress with subjective well-being via mental health, finding that the mediator exerted significantly effects on subjective well-being (b=-0.025, p<0.01) and association of stress and subjective well-being was reduced (by 0.126, from 0.327 to 0.199) when the mediational variables were accounted for in the model; however, a small statistically significant relationship between
them remained ($b=-0.199, p<0.01$). Thus, in general, mental symptom partially mediated the relationship between stress and subjective well-being.

**Social Support as a Moderator in the Moderated Mediation Model**

To test the hypothesized moderated mediation model, we use the three hierarchical linear regression equations specified by Muller, et al. (2005):

Subjective well-being = $b_{10} + b_{11}\text{stress} + b_{12}\text{social support} + b_{13}\text{stress}\times\text{social support} + \varepsilon_1$  \hspace{1cm} (4)

Mental health = $b_{20} + b_{21}\text{stress} + b_{22}\text{social support} + b_{23}\text{stress}\times\text{social support} + \varepsilon_2$  \hspace{1cm} (5)

Subjective well-being = $b_{30} + b_{31}\text{stress} + b_{32}\text{social support} + b_{33}\text{stress}\times\text{social support}$

+ $b_{34}\text{mental health} + b_{35}\text{mental health}\times\text{social support} + \varepsilon_3$  \hspace{1cm} (6)

In testing these three models, the predictor variables were centered (Marsh, et al., 2007). Table 2 presents the regression models that estimate Equations 1 through 3 with these variables. Presented here are the standardized coefficients ($b$) and their associated $t$ statistics. The results from Equation 4 revealed an overall effect ($b=-0.292, p<0.01$) of stress on the outcome variable, subjective well-being. The interaction between stress and the moderator failed to reach significance ($b=-0.020, p=0.671$). In Equation 5, with the mediator, mental health, as the criterion, there is a significant effect of stress ($b=0.526, p<0.01$). However, this is not moderated by social support ($b=-0.061, p=0.139$). The estimation of Equation 6 found evidence for the significant interaction between mental health and social support on the outcome variable ($b=0.114, p<0.01$). That is, the effect of mental health on subjective well-being is moderated by social support. These results as a whole made very clear that social support buffered the negative effect of mental symptoms on subjective well-being.

**Table 2. Least Squares Regression Results for Moderated Mediation**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Equation 1 SWB</th>
<th>Equation 2 MH</th>
<th>Equation 3 SWB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$t$</td>
<td>$b$</td>
</tr>
<tr>
<td>Stress</td>
<td>-0.292</td>
<td>-6.112**</td>
<td>0.526</td>
</tr>
<tr>
<td>SS</td>
<td>0.207</td>
<td>4.275**</td>
<td>-0.063</td>
</tr>
<tr>
<td>Stress$\times$SS</td>
<td>-0.020</td>
<td>-0.425</td>
<td>-0.061</td>
</tr>
<tr>
<td>MH</td>
<td>-2.42</td>
<td>-4.527**</td>
<td>0.114</td>
</tr>
<tr>
<td>MH$\times$SS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SS = Social support; SWB = subjective well-being; MH = mental health
*p < 0.05. **p < 0.01.

**Discussion**

The mediating analysis found that mental symptom partially mediated the relationship between stress and subjective well-being. On the one hand, stress directly affects subjective well-being. Upon occurrence of some major life events (such as bereavement, interpersonal disharmony), college students would produce negative emotional reactions, which lead to lower subjective well-being. On the other hand, stress can indirectly influence subjective well-being by changing the mental status of college students. This agreed with prior researches (Boardman & Alexander, 2011; Sirin, Ryce, Gupta & Rogers, 2012) showing that with the higher stress level, their psychological pressure increased accordingly, which may cause various psychological problems, such as depression, inter-personal sensitivity, obsessive and paranoid and so on. Once these problems emerges, the evaluation of their life quality, subjective well-being dropped markedly.
Our results of moderated mediation extend past researches demonstrating the association between stress and subjective well-being. For instance, Lu (1995) has shown that social support was related to happier life. Chen and Fan (2009) also found that stress and social support are important predictive variables of subjective well-being; especially, social support has a positive effect on subjective well-being (Mair & Thivierge-Rikard, 2010). In another study, Lee and Browne (2008) reported that mental health is conductive to subjective well-being. Our analysis shows that there are significant interaction effects between social support and mental symptom on subjective well-being. With high levels of social support, negative effect of mental health on subjective well-being could be alleviated; otherwise subjective well-being would decline as the mental health descended.

However, the moderating effect of social support on the relationship between stress and mental health is not significant. It is different from the results of the previous researches showing that higher social support is related to improved mental health (Ager et al., 2012) and may restrain negative physiological responses to stress (Cohen & Wills, 1985). The possible reason is that social support began to take effect after mental symptoms arise in China. Individuals respond differently to the same event, for instance, some people can easily handle with career setbacks while other people couldn’t. Generally, people would not ask for social support until psychological problems (like depression, anxiety) appear; and only when potential supporters realized that there is need to provide help would they give them a hand. Therefore, social support, as dynamic resource, buffers the effect of mental health on subjective well-being, but cannot moderate the relation between stress and mental health. Future research can also further investigate how social support has changed with the parties’ psychological status changing.

This study has several limitations. First, social support was measured using a social support questionnaire. Although past research has long used and validated this scale, its reliability in our study was not satisfied. It’s probably because this scale is the 1980’s revision and it is too old to adapt the change of our society. Future research can develop new scales that are more accorded with the need for the research. For example, we can test the social support associated to certain events; second, the analyses were conducted on cross-sectional data, lacking the time continuity. To advance our understanding of the mechanisms that influence subjective well-being, we can establish better causal relationship based on longitudinal studies in the future research.

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