An Explorative Study of Emotional Intelligence in Education Industry: Schutte's Self Emotional Intelligence Test on Management Students and Technology Acceptance during COVID-19 Pandemic

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[Abstract] Educationists in India facing heat in terms of changing competency requirements and challenges. The quality of education depends on effective teaching methods and the efficiency of learning. The application of emotional intelligence in and outside the classroom improves teaching-learning processes, as it involves positive psychological behaviors and active interaction to speed up the emotions involved in the learning process. With the arrival of the COVID-19 pandemic crisis, it is more challenging to balance online classes and personal interaction to realize, understand, and regulate the emotions of the students. Therefore, the study explored and analyzed the literature on emotional intelligence in the education industry concerning students. Additionally, the study aimed to measure the emotional intelligence of management students on an instrument based on 33-items measured on a 5-point Likert scale from seven management colleges including both bachelor's and master's degrees. The responses were collected from 450 students of various management colleges of Pune city using an online survey questionnaire. The study also put some light on demographic traits and digital tools used by them during the COVID-19 pandemic lockdown to maintain online classes conceivable and includes suggestions for academic institutions in the context of emotional intelligence and technology acceptance by the students.

Introduction

Emotional intelligence (EI) came from the psychology domain and refers to "affection" (emotion) and intellect (intelligence), but its root nowadays has accelerated into the service industry, education, healthcare, human resources, and sports psychology. Emotions exist in every human being. Emotions affect us in every phase of our social, personal, and professional life. Emotions shape our behavior, reaction, and response in social settings. When these emotions are coupled with intelligence, they can transform and strengthen one's emotional experience.

Educationists in India are facing heat in terms of changing competencies requirements and challenges. The quality of education depends on effective teaching methods and the efficiency of learning. The application   of emotional intelligence in and outside the classroom improves teaching-learning processes because it involves positive psychological behaviors and active interaction to speed up the emotions involved in the learning process. The concept was introduced in the mid-90s, and it is considered an important organizational factor to predict change and high performance. Later on, Gardner (1983) came up with the term "social intelligence" in his proposed "Theory of Multiple Intelligence." Goleman in 1995 and 1998 predicted that work performance is a strong outcome of EI.

Salovey and Mayer (1990) came up with four abilities that set up emotional intelligence: observing emotions, using those emotions, making them understandable, and regulating them. In 1998, Daniel Goleman propounded five variables in his model which explain emotional intelligence as knowing self-awareness, managing the self's emotions, empathy, social awareness, and managing relations with others. Emotions can be either be harmful or helpful, depending on how a person recognizes, regulates, and learns from emotions. Therefore, teachers must understand students' emotions and act accordingly. Palmer (1993) recommended that teachers must be aware of his/her self-awareness, values, and behaviors and, also, how others perceive them.

Literature Review

Mo, Dainty, and Price (2007) assessed the level of EI of 184 first-years graduate students pursuing various courses of construction disciplines and how EI can be incorporated into the future curriculum of the construction program. Authors adopted SSRI-the Schutte Self-Report Inventory (1998) to measure EI. The outcomes revealed that there is an inconsequential association of emotional intelligence with the type of program they are enrolled with, but architecture and design management students scored the highest EI compare to civil, construction, and commercial students. The study concludes that a lack of proper EI level would directly affect their educational development and professional skills set. Similar findings on management students can be relative with Chopra and Jyotsna (2014) study, where the effect of emotional intelligence on the academic performance of students of the Delhi NCR region was investigated and the role of their demographic factors (age and gender) on EI. The sample consists of 250 students from the 2nd and 4th semester of MBA on which chi-square test was administrated to test demographic difference based on EI. Authors found that students' EI is not dependent on age and gender, and it, also, has no significant impact on academic performance.

Shetty, Venkatappa, Parakandy, M, and Das (2013) assessed emotional intelligence among medical students enrolled in the first year of Mangalore University and its effect on the social and educational performance of the students. A total of 150 medical students were interviewed separately. The 30-item scale on assessing self-emotion quotient from Sterrett was administered. The results state that the EI score is high in those students who opted for medical studies by their own choice. The study also affirmed that female students are more expressive and display more emphatic and social skills than male students. Furthermore, 33.6 % of the students were poor in the overall EI domain. The study concludes that EI is higher among those who have a higher ability to adjust, have time for one's self, and have a choice of career. In 2016, Arbabisarjoul, Zare, Ghoreishinia, and Shahrakipour conducted a descriptive-analytical study among 120 nursing and midwifery students to measure the level of EI and impact of demographic factors (age, gender, and marital status) on EI. The findings showed that age, gender, and marital status are not significantly related to EI, and EI is higher for midwifery (112) than for operating room (111) and nursing students (109) students. The authors suggested that conducting a training program could improve the social and life skills that help them cope with academic pressure and reduce failures in studies.

The engagement of students is positively associated with emotional intelligence levels according to Joshi, Srivastava, and Raychaudhuri (2012). King, Chung, and Chen (2020) found that in a higher education context, emotional intelligence significantly predicts all student engagement and learning outcomes, such as GPA, student satisfaction, and generics. This academic achievement can be attained by self-efficacy, followed by an authoritative parenting style, according to Valehzaghard, Khodaei, and Chegini (2013). The personal traits of students are also a major deciding factor in academic achievement. The sympathetic emotions help gain the confidence of managing unwanted situations, emotional crises, and coping with past accomplishments said Kaur and Pathak (2020). Dehyadegary, Divsalar, Shahsavari, Nekouei, and Sadr (2012) posits cross-sectional research and emphasize that the relatedness to teachers, parents, and peers are the significant predictors of emotional intelligence.

The emotional intelligence level does not have much difference with respect to gender. In a study conducted on 200 clinical students by Ravikumar, Rajoura, Sharma, and Bhatia (2017), the EI scores of students were not related to creating any difference in gender, specialty, or residential status. EI scores decrease as the number of hours per week increases. Based on the above-detailed literature, it is true and

relevant that in educational settings, students' EI plays a very vital role in motivating them and shaping their career goals. Today's millennials' competitive edge is only self-belief on which they can bank on when outside stress and academic performance have surrounded them so tightly that they cannot breathe but must observe in an unadulterated manner. EI skills that a student should possess include self-motivation, showing empathy (Rao, 2012), and transformational leadership (Rahman & Ferdausy, 2012).

The Rationale of the Study

With the onset of COVID-19, the use of and exposure to new technology systems are very common and necessary to apply the changes in the education industry. Students' attitudes towards information and communication technology (ICT) can affect emotional intelligence concerning their emotional and mental state of effort. Technology acceptance refers to "the degree to which a person believes that using technology would be free from effort and enhance their job performance" (Davis, 1989). The disparities in the external environment with the advent of the COVID-19 pandemic forced and challenged technology acceptance of the education industry. Online classes, webinars, and virtual internships changed the perception and usage of technology among digital device users. In India, an online screen is the new normal (Ayedee & Kumar, 2020). Students simulate their digital skills with the help of video teleconferencing software, such as Microsoft Teams, Zoom, Google Meet, WebEx meetings, and many more. In contrast to this, Ayedee, Kumar, and Shaikh (2021) stated that information streaming is fairly uneven, which may disturb technology acceptance. The core variables are as follows: familiarity, digital tool usage, feeling regarding digital usage, purposes of each digital tool available and their practicality, and actual comfort of use.

1. Is there any association between emotional intelligence concerning students' demographic characteristics?
2. Is there any important association of technology acceptance (online classes) with emotional intelligence during COVID -19?

H_a-1. There is an important association between technology acceptance and emotional intelligence during COVID -19
H_0-1. There is not an important association between technology acceptance and emotional intelligence during COVID -1

Research Methodology

The study conducted is quantitative and explorative. A total of 450 questionnaires were distributed; after scrutiny of missed and incomplete forms, 401 questionnaires were used, an 89 percent response rate. Management students from different graduation and post-graduation colleges from Pune city are being considered for the study to reach the stated objectives. The researcher used a structured questionnaire of Schutte et.al. in 1998' it contains 33 questions on a five-point Likert scale. The preliminary part of the questionnaire measures the demographic characteristics of the students, such as gender, age, education current, the digital device used, living background, and online time duration. The second part of the questionnaire measures self-measuring EI. The last part of the instrument consists of a blended learning scale (BLS) developed by Lazar, I. M., Panisoara, G., and Panisoara, I. O. in 2020. The authors adapted and extended the technology acceptance model (TAM) by Davis (1989). The scale consists of 32-item measure seven dimensions on digital tools, computer anxiety, familiarity with modern and classical digital tools, perceived comfortableness and usefulness of digital tools, and purpose of using digital tools. The five-point Likert scale was established to measure technology acceptance. The internal reliability coefficient was 0.89 and 0.80 for the emotional intelligence scale and technology acceptance (blended learning scale), respectively.

Findings

After assessing the reliability analysis of both the variables, descriptive statistics of demographic characteristics (illustrated in Table 2) were conducted on SPSS version 23. Table 3 presents intercorrelation ($r = 0.78$, $\rho = .002$) between emotional intelligence of management students and their technology acceptance.

However, the value reveals an important and positive association between emotional intelligence and technology acceptance. Hence, our null hypothesis is failed to reject.

Table 2
Descriptive Statistics of Demographic Characteristics

Demographics		Number	Mean	%	ANOVA
Gender	Male	95	3.48	24	F = .109 Sig= .955
	Female	306	3.58	76	Insignificant
Level of current education	Bachelor's	224	3.60	56	F = 1.35 Sig= .246
	Master's	177	3.51	44	Insignificant
The digital devices mostly engaged with for online classes	Desktop	4	3.68	1	F = .409 Sig= .746
	Laptop	100	3.56	25	Insignificant
	Smartphone	290	3.55	72	
	Tablets	7	3.83	2	
Age	20-22	260	3.57	65	F = .266 Sig= .787
	23-25	105	3.57	26	Insignificant
	25 and above	36	3.48	9	
Living background	Urban	264	3.58	66	F = .482 Sig= .618
	Semi-urban	86	3.52	21	Insignificant
	Rural	51	3.50	13	
Average time spend on learning online	1hrs -2 hrs	82	3.58	20	F = .109 Sig= .955
	3 hrs - 4 hrs	171	3.56	43	Insignificant
	5 hrs -6 hrs	94	3.53	24	
	Above 6 hours	53	3.58	13	
Source: Output of SPSS 23 Software					

Table 3
Descriptive Statistics, Reliability, and Inter-correlations between the variables

	Mean	SD	Reliability (α)	No. of items	Pearson Correlation
Emotional Intelligence	3.56	0.708	0.89	33	r = .078*
Technology Acceptance (BL scale)	3.21	0.824	0.80	32	P value=.002
* 2-tailed at 0.01 level					

Conclusion

The research conducted primarily highlights that the COVID-19 pandemic has undoubtedly changed the face and nature of the education industry. It has emerged as a catalyst for realizing the acceptance of technology, tools, and devices usage, sentiments, and reactions of management students towards accompanying online classes. The ease of ICT tools and devices are the most important factor behind developing emotional intelligence skills and resilience while experiencing the COVID-19 pandemic mental stress and emotional disturbance. Even, the role of an educator is also advanced and reformed. Now, the educators must also be aware, apply, and adopt new technologies to provide smooth remote learning. On the other hand, it has amplified the change in education methods, internet connectivity, absence of physical interaction, the low span of attention, increasing health issues (like obesity), eyesight problems, backache,

no physical activity, and insomnia as some of the common difficulties faced by both the students and educators. The first objective of the research showed no statistical connection between emotional intelligence and demographic characteristics. To measure the second objective, a hypothesis was tested which exhibited a significantly positive association between emotional intelligence and technology acceptance.

Research Scope and Limitation

The research is limited to the education industry, and only management courses were considered. The study was limited with only one variable with relation to EI, i.e., technology acceptance. Furthermore, the scope covers students who had experienced online classes during the COVID-19 pandemic episode in which only online classes were available. It is recommended that to balance the long-term negative repercussions of online classes, blended rotation classes can be involved and both offline and online can be used on a rotational basis. The foremost benefit of this technique is that we are accepting the technology to move forward in an organized manner; also, we are interacting, communicating, socializing, and collaborating with teachers, peers, and colleges for personal and academic development.

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