Teacher Burnout: A Quantitative Analysis of Emotional Exhaustion, Personal Accomplishment, and Depersonalization

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[Abstract] Teacher burnout is a chronic phenomenon that causes high percentage of attrition in the education profession. If not handled effectively, burnout can increase absenteeism and counterproductive instruction which negatively impacts quality of learning for students. Teacher attrition cost school districts billions of dollars per year across the United States. In this quantitative research, the psychological breakdown of a teacher burnout experience was attempted to be quantified. Data was collected from 162 rural Ohio school teachers and measured teachers’ sense of personal accomplishment, emotional exhaustion, and depersonalization as three identified components of burnout. Results showed that burnout experience significantly varied by gender regardless of teaching experience. The results of this study may lead to gender specific intervention techniques to normalize the burnout effect.

[Keywords] Burnout, Depersonalization, Emotional Exhaustion, Personal Accomplishment, Teacher Attrition, Veteran Teachers

Introduction
Teacher burnout is a chronic phenomenon that continues to be a main cause of teacher exodus in the 21st century. Burnout is a precursor to teacher attrition (Lavian, 2012). Teaching is an emotionally draining and physically exhausting profession that causes many teachers to look for other occupations (Riggs, 2013). In addition, teachers who fail to handle burnout effectively are likely to experience poor quality student interaction, counterproductive instruction, increased absenteeism, which eventually leads to teacher attrition (Suh, 2015). Teacher turnover (30%) is higher than for other professionals, such as pharmacist (14%), engineers (16%), nurses (19%), lawyers (19%), architects (23%), and police (28%) (Ingersoll & Perda, 2014; Riggs, 2013).

In the United States, for the 2004-2005 school year, teacher attrition for first year teachers was 12.3%. Beginning-year math teacher attrition rates increased to 14.5%; science teacher attrition was the highest with 18.2% (Ingersoll, Merrill, & May, 2012). Moreover, 24.6% of teachers with little or no traditional teaching preparation left the teaching profession. The attrition percentage rate was lowest (9.8%) for teachers who earned their degree through the traditional comprehensive pedagogy (Ingersoll et al., 2012), which could be an indicator of traditional pedagogy preparing educators for their job requirements.

Within the first five years of novice teachers starting their professional paths in education, 50% or approximately half a million educators move to another school district or leave the education profession all together (Alliance for Excellent, 2014; Neason, 2014; Phillips, 2015; Riggs, 2013; Times and Democrat, 2014). According to Riggs (2013), 40% of undergraduate students who were once education majors change their majors before graduating. For those teachers who made it through education pedagogy and entered the profession, 9.5% of them left the classroom before the end of the first school year (Riggs, 2013).

Teaching is a disempowering profession (Riggs, 2013). The cornerstone of teachers’ frustrations comes from not having a voice in decisions within the environment, which reflects on their classroom instruction. A strong correlation exists between teachers’ abilities to make decisions and staying or leaving the profession (Phillips, 2015). In the 2012-2013 school year, 57.4% of teachers who left the profession said they found more autonomy and control in their current jobs. In addition, 52.2% of teachers who took another career path said they found higher professional prestige. The highest findings with 60.8% of teachers leaving the education profession said they found more of a balance between professional and personal life (U.S. Department of Education, 2014), which suggests that other occupations do not have job requirements
outside of the work environment.

Between 2010 and 2020, the demand for kindergarten through 12th grade teachers was projected to increase by 17% for kindergarten through eighth grade teachers and 7% for high school teachers (Staklis & Henke, 2013). The increase of teacher demand will be hard for low-income school districts that struggle to recruit and retain qualified teachers, especially in mathematics and science (Staklis & Henke, 2013). Teacher exodus or relocating to another school district can cost impecunious schools a substantial amount of their budget. Losing teachers can cost individual schools a range of $4,366 (New Mexico) to $17,872 (Chicago) (Frahm, 2014). Teacher attrition can cost school districts up to $2.2 billion a year (Alliance for Excellent, 2014; Phillips, 2015; Rizga, 2015). The estimated cost of teacher attrition nationwide has been as high as $7.3 billion a year (Kain, 2011; National Commission on Teaching and America’s Future [NCTAF], 2007).

After understanding the magnitude and the monetary burden of teacher attrition, it is important to focus on methods to address this persistent phenomenon. Many schools have deployed teacher induction programs to help teacher retention. Ingersoll (2012) reported that teacher induction programs have increased over the years. Between 1990 and 2008 percentage of schools participating in teacher induction programs had already increased from 50% to 91%. Induction and mentor programs use veteran teachers to assist novice teachers. Nevertheless, since induction programs heavily depended on senior teachers mentoring the new staff, the induction program has become yet another area that got negatively impacted by growing attrition rates of the senior teachers. With teacher attrition impacting the quality of teaching profession from so many perspectives, investigating teacher burnout, the leading cause of teacher attrition, may provide new venues to stabilize the growing attrition rate.

**Background**

Freudenberger (1974), a psychiatrist, studied emotional depletion, lack of motivation, and commitment to coin the phrase *burnout*. Burnout research stemmed from caregiving to service occupations. In 1976, Maslach, a social psychologist, expanded on Freudenberger’s work. Maslach interviewed workers about emotional stress, professional identity, and quality of work. Much of the beginning research used qualitative methodology with strategies of observations, interviews, and case studies (Maslach, Schaufeli, & Leiter, 2001). Maslach studied exasperation of teachers' working environments when teachers were not rewarded to the level they felt appropriate. Maslach (1976) divided emotional stress into three parts: (a) emotional exhaustion, (b) depersonalization, and (c) personal accomplishment.

In the 1980s, researchers looked at emotional depletion through a more empirical lens. Consequently, the research took on a quantitative approach through questionnaires and survey inventories to reach a higher quantity of people. As a result, in 1981, Maslach and Jackson created Maslach Burnout Inventory (MBI) (Maslach et al., 2001). At first, the MBI was used for human service occupations. However, a second version of MBI was created for educational occupations. “Burnout was viewed as a form of job stress, with links to such concepts as job satisfaction, organizational commitment, and turnover” (Maslach et al., 2001, p. 401).

In 1990s, the study of burnout spread to other occupations. Instead of focusing on healthcare, service providers, and education occupations, burnout was investigated in the fields of clerical, computer technology, military, and management (Maslach et al., 2001). By collecting more data, researchers could examine more contributions and influences of burnout. Not only was information from a wider range of occupations important regarding burnout, but also the amount of time over the years allowed the topic to be studied longitudinally.

In 2001, teachers were one of the largest professional groups as they made up 4% of the United States work force (Ingersoll, 2001). In 2001, there were twice as many teachers as registered nurses and five times the number of lawyers or professors (Ingersoll, 2001). However, teachers had the highest turnover rates. Ingersoll (1997) noted the teacher shortages started in the mid-eighties because of “increasing student enrollments; decreasing numbers of college graduates, especially women, choosing to become teachers; and increasing teacher retirements due to a “graying’ teaching workforce” (p. 500). Teaching turnover
national rate has remained relatively high over the years. In the late eighties, the turnover rate was 15%. In
the early nineties, the national rate was 13.2%. In mid-nineties, the national teacher turnover rate climbed
back to 14.3% (Ingersoll, 2001). According to data, teacher attrition has increased and school districts are
finding it difficult to find qualified employees to fill the positions. However, teachers nearing their tenure,
teachers better known as the graying work force, are not the cause of teacher attrition (Ingersoll, 2003).

Problems in Ohio. Ohio school district administrators are uneasy about filling all of their vacancies.
At the start of the 2015-2016 school year, although Columbus, Ohio hired its largest group of new teachers
(430); however, the district was still looking to fill job openings as school opened. Two weeks before school
started for the 2015-2016 school year, Columbus school districts still needed to fill teaching positions (Boss,
2015). According to Boss, at the start of the 2015-2016 school year, Trumbull County, which is in the eastern
part of Ohio, was experiencing a severe shortage in Spanish, science, math, special education teachers, and
speech pathologists.

The 2015-2016 school year was not the only year that school districts in Ohio had trouble with teacher
attrition. In 2014-2015, Reynoldsburg (a suburban school district located in central Ohio with
approximately 7,000 students) experienced an estimated 19% teacher attrition, which was nearly one in five
teachers and 3% higher than the national average (Boss, 2014). One of the reasons for high teacher attrition
rate was negotiation issues such as merit pay (Boss, 2014). See Figure 1 for data regarding teacher attrition
problems in central Ohio.

![Teacher turnover](image)

*Figure 1. Teacher turnover for school districts in central Ohio. Permission for use received from*
*The Columbus Dispatch*

In 2014, to help with the demands placed on school districts, Ohio State Board of Education changed
a mandate requiring schools to have five employees per 1,000 students in one of the following positions:
elementary art, music or physical education teacher, counselors, social workers, school nurses, library
media specialists, and visiting teachers (Mutasa, 2014). The Ohio State Board of Education believed this
would give districts in Ohio more flexibility to meet the needs of their students. However, this proposal
could eliminate art for students in both urban and rural areas. Such rules are reviewed every 5 years (Mutasa,
2014). Dougherty, an Ohio schoolteacher who retired in 2015, stated, “The demands that are being made
on teachers today are extremely difficult, and the amount of time that we spend on testing is ridiculous” (as
cited in Boss, 2015, para. 19).

There is also an emotional cost for teacher attrition. According to Simon and Johnson (2013), teachers’
bonds that were created were broken with peers, students, and parents as teachers’ assignments and exodus
occurred at a rapid speed. Moreover, teacher attrition is common in high poverty areas where students are
more likely to have novice teachers. According to Downey (2015), teachers are unenthusiastic about their jobs and are hesitant to recommend their profession to future prospects. In addition, teachers reported working conditions and lack of support as the problems (Hill, 2014).

The general problem is the high rates of teacher attrition in Ohio, which costs the state between $28,832,388 and $63,025,491 (Alliance for Excellent Education, 2014). The cost will continue to grow as more and more teachers leave the profession. Cody (2012) noted, “There is a 70% increase more than the past two years, in the number of teachers who are likely to leave the profession in the next five years (from 17% to 29%)” (para.1). The National Commission on Teaching and America’s Future (2007) reported, “Teacher turnover is a costly problem spiraling out of control” (p. 1). The United States spends up to $2.2 billion on teacher attrition yearly with estimation that could go up to $7 billion when including all aspects of the cost of teacher attrition. The same amount of money is diminishing other resources, which could be used to close student achievement gaps (NCTAF, 2007).

Method

The objective of the quantitative comparison research is to examine burnout rates among Ohio teachers within two groups: rural novice teachers who taught less than five years and veteran teachers who taught five years or more. Maslow’s hierarchy of needs will drive the research (see Figure 3). Before teachers can reach the highest needs of Abraham Maslow’s hierarchy of needs, the basic elements must be satisfied (McLeod, 2014).

![Figure 2. Hierarchy of needs (Based on Maslow’s hierarchy of needs, McLeod, 2014)](image)

Researchers have cited several factors for the high rate in teacher attrition (Andrew, Richards, Templin, Bristol, & Blankenship, 2014; Oakes, Lane, Jenkins, & Booker, 2013; Maele & Houtte, 2015). One of numerous elements that cause emotional exhaustion or burnout is the increase of violence within schools (Harris & Shear, 2015; Hogan, 2014). Teachers who do not feel safe and secure in their working environment cannot have confidence or be creative in their teaching. Teachers often feel vulnerable in their working environments (Hill, 2014). Emotional exhaustion or burnout also increased as teachers spent additional hours on paperwork outside of school hours (Williams & Dikes, 2015). Teachers are found to have poorer wellbeing the longer they have taught (Pretsch, Flunger; Schmitt, 2012). Teachers with higher levels of education have an increase in burnout (Oakes et al., 2013). Pedagogy, job requirements, competency issues, management in time are reasons why teachers are leaving the field (Bennett, Brown, Smith, & Severson, 2013). It is becoming difficult for teachers to obtain achievement, creativity, and problem-solving skills when the low levels of Maslow’s hierarchy are not achieved (Chiaburu, Oh, Berry, Li, & Gardner, 2011). When applying the Maslow hierarchy of needs to teachers in rural Ohio, emotional exhaustion (burnout), personal accomplishment, and depersonalization can be a concern for teachers.
The independent variable for this study was the number of years the teachers have been employed as a teacher in the educational field. The dependent variables were the mean scores of their emotional exhaustion (burnout), personal accomplishment, and depersonalization rates in the survey instrument, *Maslach Burnout Inventory-Educators Survey, 3rd edition*. Regarding quantitative research question, Creswell (2012) stated, “The participants’ reactions to a single variable, compare groups on an outcome, or relate to variables” (p. 124).

The quantitative research questions focus on determining the emotional exhaustion (burnout), personal accomplishment, and depersonalization rate for novice teachers and veteran schoolteachers in rural Ohio. With emotional exhaustion (burnout), personal accomplishment, and depersonalization components being strong indicators for teacher attrition, finding a quantitative amount of each for schoolteachers in rural Ohio can be used for prediction of teacher exodus.

**Research Questions and Hypotheses**

**Question 1:** Is there a significant difference in the mean scores for emotional exhaustion (burnout), personal accomplishment, or depersonalization on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio?

Emotional exhaustion (EE) takes place when demands are put on an individual that overextends or overwhelms him or her. To deal with such emotions, people distance themselves from others through emotions and mental state of mind. Individual’s “emotional resources are depleted; workers feel they are no longer able to give of themselves at a psychological level” (Maslach, Jackson, & Leiter, 1996, p. 4).

H10: There is no significant difference in the mean scores for emotional exhaustion (burnout) on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

H11: There is significant difference in the mean scores for emotional exhaustion (burnout) on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

Personal accomplishment (PA) is the third dimension of burnout. At this point, a person starts to feel he or she is ineffective and lacks qualification upon personal reflection. Self-esteem diminishes and depression starts to take place. An individual has a “tendency to evaluate oneself negatively, particularly with regards to one’s work with clients. Workers may feel unhappy about themselves and dissatisfied with their accomplishments on the job” (Maslach et al., 1996, p. 4).

H20: There is no significant difference in the mean scores for personal accomplishment on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

H21: There is significant difference in the mean scores for personal accomplishment on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

Depersonalization (DP) is the second component of burnout. During this stage of burnout, a person makes a conscious effort physically to eliminate him or herself from others. Feelings of pessimism and negativity usually are seen in situations. Individuals are “negative, cynical attitudes and feelings about one’s clients” (Maslach et al., 1996, p. 4).

H30: There is no significant difference in the mean scores for depersonalization on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

H31: There is significant difference in the mean scores for depersonalization on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio.

**Question 2:** How do years of teaching experience affect emotional exhaustion, depersonalization, and personal accomplishment experienced by teachers?
As described earlier, emotional exhaustion takes place when “feelings of being emotionally over extended and exhausted by one’s work” (Maslach, Jackson, Leiter, Schaufeli, & Schwab, 1986, para. 2). Teacher emotional exhaustion (burnout) has a potentially serious consequence for students, school districts, and for the teachers themselves (Maslach et al., 1996). The services that teachers supply deteriorate in quality when a veteran teacher leaves the classroom. Since 2012, 1,000 Ohio teachers had actions taken against their teaching licenses (Wagner, 2014).

H4: There is no relationship between the level of perceived emotional exhaustion (burnout) and years of service among the teachers in rural Ohio.

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Personal accomplishment takes place when “feelings of competence and successful achievement in one’s work” (Maslach et al., 1986, para. 2). Teacher job satisfaction has continued to decline over the last two and half decades to the lowest levels (MetLife, 2013). Teachers are struggling to feel they are making a difference with the stress accountability of student growth measures, teacher performance, lacking appropriate teaching material, and job security taken away with new, complex, and rigorous teacher evaluation in place (MetLife 2012, 2013; Schneider, 2014).

H5: There is no relationship between perceived personal accomplishment and years of service among the teachers in rural Ohio.

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Depersonalization takes place when “an unfeeling and impersonal response toward recipients of one’s service, care treatment, or instruction” (Maslach et al., 1986, para. 2). Teachers start to feel that students cannot be helped and are deserving of their difficulties. The feelings of unreachable students overcome teachers’ emotions during depersonalization. With new lockdown procedures in place and certain types of heating/cooling systems in school, teachers are asked to keep their classroom doors shut and locked. It is becoming easier for teachers to feel disconnected and isolated from others when there are physical blocks to communication with collaborations with other staff members. Presidential candidate, John Kasich from Ohio stated that he would abolish all teachers’ lounges if elected President of the United States (Emma & Shah, 2015), which could further isolate teachers from others. Large class sizes also result in teachers becoming disconnected from their students. The Gates Foundation reported the education system could improve by lifting caps on class sizes (Long, 2011). An increase in students in a classroom means there is less time to have individual conferences students, which affects relationship building.

H6: There is no relationship between the experience of depersonalization and years of service among the teachers in rural Ohio.

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To find answer to these questions and test the hypotheses, we collected data from 162 rural Ohio school teachers and measured teachers’ sense of personal accomplishment, emotional exhaustion, and depersonalization as three identified components of burnout.

Results

In all, 162 teachers from Ohio participated in the survey. Of this number, 23 (14%) were male and 139 (86%) were female. The gender participation in the study is proportional to the representation of genders in the actual teacher work force. There is a clear female majority in the profession (Larisa, 2012). Regarding ethnicity, all (100%) reported as White. It was expected that an abundance of the participants would be White because Ohio is made up of 83% of Whites and the researcher focused on rural areas of the state (U.S. Census, 2014). Generalization of results are cautioned to the entire state because 17% of other ethnicity make up the state population and the entire state is not rural.

At the time of data collection, participants reported their ages in the following manner: 36 (22%) reported they were between 20 to 29; 40 (24.7%) reported they were between 30 to 39; 34 (21.9%) reported
they were between 40 to 49; 39 (24.1%) reported they were between 50 to 59; and 13 (8%) reported they were more than 60 years of age. Assumption of the sample population is a representation of rural Ohio according to Public School Review. When reporting years of experience teaching, with a range of no years completed to 45 years, the mean years was 15. Comprehending the average years for the participants can help recognize underlying factors that could attribute to the results of study. Given that the sample population had 15 years of experience on the average demonstrates that the environment was not predominantly novice, and therefore the trends found were likely to be a representation of an experienced educator.

When asked what grade level participants spent the majority of time teaching, they reported 31 (19.1%) they taught kindergarten-grade 3; 37 (22.8%) indicated 4-6 grade; 16 (9.8%) indicated 7-8 grade; 29 (17.9%) reported 9-12 grade; special education (special education was included as a category recognizing that the nature of job may lead to high stress levels.), 25 (15.4%); and other, 24 (14.8%). Other responsibilities or courses taught by participants included music or choir (6), curriculum supervisor (1), physical education (3), school counselor (2), art (2), special education (1), speech pathologist (2), school librarian (1), and computers-technology (1). Comprehending that all grade levels are equivalently represented allows for the results to characterize the challenges and struggles from each grade level. One of the rationales for including these categories was to be able to identify if any specific area of employment was contributing more significantly to the stress levels experienced by the teachers.

When asked what subject teachers spent a majority of time teaching, 26 (16.0%) participants reported self-contained classroom, 24 (14.8%) indicated math, 36 (22.2%) language arts, 10 (6.2%) science, 3 (1.9%) social studies, 26 (16.1%) special education, and 37 (22.8%) other subjects taught. The highest scores came from the area of music and health/physical education. Regarding geographic area within Ohio, 51 (31.5%) reported being located in the Northwest, 23 (14.2%) from the Southwest, 23 (14.2%) from the Central, 43 (26.5%) from the Northeast, and 22 (13.6%) from the Southeast. Concerning highest education, 24 (14.8%) reported highest education attained was a bachelor’s degree, 14 (8.6%) listed a bachelor’s degree plus 15 credit hours, 51(31.5%) listed a master’s degree, 38 (23.5%) listed a master’s plus 15, 35 (21.6%) listed a master’s plus 30, and one (0%) listed a doctoral degree. When asked to describe the type of school, participants reported 40 (24.7%) K-5, 4 (2.5%) K-6, 10 (6.2%) K-8, 19 (11.7%) 6-8, 34 (21%) 9-12, and 55 (34%) reported K-12. Based on the sample of size of the research, assumption is made that it is represented of teachers in rural Ohio.

Initially, the mean scores of the main research variables (DP, EE, and PA) were calculated using descriptive analysis. The results are shown in Table 1. It was noted that according to the MBI-E, the mean values indicated low values for DP (<8) and PA (>37), and high average value for EE (>27). The maximum values were recorded in the high end of the scale. A large standard deviation was noted for DP and EE, which indicated more than desired variability in the responses collected.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>162</td>
<td>0</td>
<td>25</td>
<td>6.6</td>
<td>5.58</td>
</tr>
<tr>
<td>EE</td>
<td>162</td>
<td>2</td>
<td>49</td>
<td>25.64</td>
<td>11.34</td>
</tr>
<tr>
<td>PA</td>
<td>162</td>
<td>20</td>
<td>48</td>
<td>38.83</td>
<td>5.49</td>
</tr>
<tr>
<td>Valid</td>
<td>162</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Frequency curves were obtained to see if these data were equally distributed across the sample. The histograms demonstrated visible skewness for PA and DP, the histogram for EE displayed two visible peaks which demonstrated that data was not singularly distributed. The PA histogram demonstrated a positive skew. The curve for DP was negatively skewed. Nevertheless the skewness was found to be non-significant.
based on Kurtosis values falling within the acceptable limits of ±1.96. The data was found fit for parametric analysis. We conducted the *t* test. Results of the *t* test are reported in Table 2. According to the values shown in Table 2, the equal homogeneity of variance was reported across all variables when tested for novice or experienced group. For the mean scores of PA, EE, DP to be significantly different between the novice and experienced teachers a significance value of *t* should have been lower than 0.05 (*p* < 0.05). Because all significance values were computed higher than 0.05, there was no significant difference found in the experienced PA, EE, and DP between the novice and experienced teachers. These results failed to reject the first three null hypotheses of the study.

Table 2
Levene’s Test and *t* Test Results for Group Novice/Experienced

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th><em>t</em>-test for Significance of Mean Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>F</em></td>
<td>Sig.</td>
</tr>
<tr>
<td>PA</td>
<td>2.94</td>
<td>0.088</td>
</tr>
<tr>
<td>EE</td>
<td>0.416</td>
<td>0.52</td>
</tr>
<tr>
<td>DP</td>
<td>0.306</td>
<td>0.53</td>
</tr>
</tbody>
</table>

At this point, because the first three null hypotheses could not be rejected and because data were already collected for participants’ gender, differences between the mean scores for PA, EE, and DP by gender were also investigated using the same process as described earlier. The results of the *t* test for group gender are reported in Table 3.

Table 3
Levene’s Test and *t* Test Results for Group Gender

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th><em>t</em>-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>F</em></td>
<td>Sig.</td>
</tr>
<tr>
<td>PA</td>
<td>0.01</td>
<td>0.92</td>
</tr>
<tr>
<td>DP</td>
<td>3.18</td>
<td>0.08</td>
</tr>
<tr>
<td>EE</td>
<td>7.81</td>
<td>0.01</td>
</tr>
</tbody>
</table>

According to the data in Table 3, EE failed to pass the Levene’s test, which means that the experience of
emotional exhaustion is not equally varied between female and male participants of the study. The $t$ test revealed that there was a significant difference found between the means scores of DP ($p<0.05$) between female and male participants. Table 4 reports the group statistics broken down by gender that pertain to the significant difference in experienced DP between female and male participants. This data point successfully revealed a category of difference that was not earlier captured in the hypotheses. This finding may suggest that there is a difference in how burnout is handled among gender.

Table 4

*Groups Statistics by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>$N$</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>139</td>
<td>38.79</td>
<td>5.498</td>
<td>0.466</td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>39.04</td>
<td>5.588</td>
<td>1.165</td>
</tr>
<tr>
<td><strong>DP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>139</td>
<td>6.1727</td>
<td>5.19326</td>
<td>0.44049</td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>9.2174</td>
<td>7.09646</td>
<td>1.47971</td>
</tr>
<tr>
<td><strong>EE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>139</td>
<td>25.7122</td>
<td>10.81012</td>
<td>0.9169</td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>25.2174</td>
<td>14.44097</td>
<td>3.01115</td>
</tr>
</tbody>
</table>

To further understand this new found category (gender) crosstabs were used. Table 5 shows the crosstabs for the variables.

Table 5

*Crosstabs for the Variables*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Experience</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td><strong>PA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Low</td>
<td>69%</td>
<td>70%</td>
</tr>
<tr>
<td>Moderate</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>139</td>
<td>23</td>
</tr>
<tr>
<td><strong>EE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>51%</td>
<td>57%</td>
</tr>
<tr>
<td>Low</td>
<td>23%</td>
<td>39%</td>
</tr>
<tr>
<td>Moderate</td>
<td>26%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>139</td>
<td>23</td>
</tr>
<tr>
<td><strong>DP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>Low</td>
<td>73%</td>
<td>45%</td>
</tr>
<tr>
<td>Moderate</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>139</td>
<td>23</td>
</tr>
</tbody>
</table>

The primary reason for generating crosstabs was to find if data for EE demonstrated any patterns. Crosstabs revealed that male teachers seemed to have quite few responses in the moderate range, signifying an experience of either high or quite low emotional exhaustion. In addition, a marked difference between the PA values of experienced and novice teachers (although statistically non-significant) was noted. Differences of experienced DP between male and female teachers were also noted. Finally, before moving
onto testing the second research question, it was necessary to test the significance of an observation that mean values of all three sub scales were toward the higher end of the BMI-E scale. A one sample $t$ test was conducted to find if the mean values of EE, PA, and DP were significantly high according to the classifications defined in the BMI-E scale. The results for one sample $t$ tests are tabulated in the Table 6.

Table 6

<table>
<thead>
<tr>
<th></th>
<th>$t$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>90% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA (Test Value =36)</td>
<td>6.55</td>
<td>161</td>
<td>0.00</td>
<td>2.827</td>
<td>2.11 - 3.54</td>
</tr>
<tr>
<td>EE (Test Value = 27)</td>
<td>-1.52</td>
<td>161</td>
<td>0.13</td>
<td>-1.35802</td>
<td>-2.8325 - 0.1165</td>
</tr>
<tr>
<td>DP (Test Value=13)</td>
<td>-14.59</td>
<td>161</td>
<td>0.00</td>
<td>-6.39506</td>
<td>-7.1203 - -5.6698</td>
</tr>
</tbody>
</table>

The test results of one sample $t$ test demonstrate that experience of quite low sense of personal accomplishment (PA), and a sense of medium to slightly moderate depersonalization (DP) was statistically significant across the participants. This data point marked a new significant finding that was not earlier captured in the hypotheses but was revealed during the course of conducting analysis on the collected data. Toward testing the second set of hypotheses associated with the research question that inquired about a relationship between burnout and years of experience (YoExp) Pearson’s $r$ was calculated. Because the study failed to reject the first set of hypotheses, the identified group novice/experienced could not be used. Because gender was found to be a significant factor, it was included the correlational matrix. Results of Pearson’s correlation are reported in Table 7.

Table 7

Correlations (Pearson’s correlation matrix)

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>EE</th>
<th>DP</th>
<th>YoExp</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>Pearson Correlation</td>
<td>-0.277**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP</td>
<td>Pearson Correlation</td>
<td>-0.435**</td>
<td>0.518**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>YoExp</td>
<td>Pearson Correlation</td>
<td>0.05</td>
<td>-0.021</td>
<td>-0.056</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.528</td>
<td>0.787</td>
<td>0.479</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Pearson Correlation</td>
<td>0.016</td>
<td>-0.015</td>
<td>0.191*</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.839</td>
<td>0.847</td>
<td>0.015</td>
<td>0.651</td>
</tr>
</tbody>
</table>

N = 162 for all variables

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

These results failed to reject the second set of null hypotheses suggesting a relationship between year of experience and identified variables. Nevertheless, it was found that there was a significant relationship between gender and DP and gender at a 95% confidence level ($p < 0.05$). The Pearson $r$ Correlation was $r$
Other correlations identified were between the subscales of the instrument (PA, EE, and DP), and between YoExp and Novice/Experienced groups. These correlations were obviously present because of the validity of the instrument and a direct relationship between years of experience and the status of the participant considered as novice or experienced.

Discussion

According to data collected from the 162 participants, no significant differences were found between the means for emotional exhaustion (burnout), personal accomplishment, or depersonalization on *Maslach Burnout Inventory-Educators Survey, 3rd edition* between novice teachers (who taught less than five years) and veteran teachers (who taught five years or longer) in rural Ohio. In addition, no significant differences were found between teaching experience and emotional exhaustion, depersonalization, and personal accomplishment. However, a significant finding was found among gender and depersonalization.

The mean personal accomplishment score of the teachers in the sample was significantly lower than the defined threshold of low personal accomplishment as defined by *Maslach Burnout Inventory-Educators Survey, 3rd edition*. Personal accomplishment has a reversed scale in contrast to the other two subscales. Based on the results, an interpretation can be made that participants lacked in feeling competence and were successful in their achievements.

With new and changing content standards, teaching textbooks, manipulatives, technology, and standardized assessments come misperceptions and exasperation. It is hard for teachers to feel accomplished while always behind schedule of completion of requirements. It is often difficult for teacher to feel a sense of accomplishment when there is so much left undone in their workday. Based on the research, it was noticed that a high majority (69%) of participants fell in the low range for personal accomplishment. Taking a closer look, a high percentage of both novice (79%) and veteran (67%) teachers fell in this category. With the high demands placed on educators currently, it is realistic that both groups feel overwhelmed regardless of the length of their careers.

One factor that could cause a significantly lower personal accomplishment is the new Ohio Teacher Evaluation System (OTES). At the time of data collection, up to 50% of teachers’ evaluation was based on students’ standardized test results, which has changed several times in a short period of time. The Ohio Achievement Assessment (OAA) was used for teacher evaluations for several years. It was replaced with Partnership for Assessment of Readiness for College and Careers (PARCC) and cancelled after the woeful first year in Ohio. It is replaced by the American Institutes for Research (AIR). With the lack of continuity of standardized assessments, teachers may not feel they have mastered the expectations from the Ohio Department of Education.

A survey conducted by the National Education Association (NEA), 72% of teachers claimed to feel moderate to extreme pressure to increase assessment scores (Walker, 2014). Teachers may carry the burden of students’ achievement with them without knowing what to do differently. The other 50% of teachers’ evaluation is a complex matrix with 10 domains that teachers either demonstrate or provide materialized evidence. It is hard for educators to feel a sense of dedication and passion toward a profession that educators feel they cannot be successful.

Personal accomplishment may also be reduced while working with administrators who eliminated or reduced the educators’ instructional autonomy. Educators who are not treated as professionals and lack control of their instruction can feel irritated with their work as they try to conform to others’ philosophies. Instructional methodology can also be limited based on educators’ resources. Educators who limit resources can feel a shortage of accomplishment. Because my sample was selected from rural school districts, school districts do not have the same revenue as other schools in more industrialized areas.

The mean emotional exhaustion score of the teachers in the sample population fell only one mean point away from high based on the defined fringe of emotional exhaustion as generated by *Maslach Burnout Inventory-Educators Survey, 3rd edition*. Although participants may not have reached the distinctive high levels of emotional exhaustion, they came close to feeling emotionally overextended and exhausted through their working conditions. Participants were close to feeling emotionally drained as they lacked the energy
to give more of themselves to students than they already had. The feeling of depletion became the daily norm. There was a relationship between unpleasant contact with administers and educators to emotional exhaustion (Maslach et al., 1996).

Participants’ mean level of depersonalization was significantly lower than the level provided by Maslach Burnout Inventory-Educators Survey, 3rd edition. With low depersonalization, data provided evidence that the participants in the study had positive feelings toward their environment and treatment of their students. Educators who have low depersonalization are effective and have a positive outlook and impression in their work environment. It is likely that the participants in the study do not isolate themselves from others and majority of them have good relationships with students, parents, and their peers. Although teachers may find themselves exhausted from the instructional demands, they find comfort in supporting one another professionally and personally.

The results also indicated that experienced teachers (11%) seemed to distinguish themselves with having higher personal accomplishment than did novice teachers (3%) for the category of teachers in the high range of personal accomplishment. The result is not surprising because experienced teachers have had the extra years to create, develop, and modify their craft. Novice teachers lack personal accomplishment in their early years of teaching as they are trying to meet all of the professional requirements placed on them.

Male teachers seemed to have either high (57%) or low (39%) emotional exhaustion. From the data analysis, it seemed that males can distance themselves from their work as a defense mechanism to prevent emotional exhaustion. It is possible that there are male teachers who show up for the paycheck every two weeks and have deficiency with passion for their profession. While some males detach themselves from their work, it helps to eliminate hopelessness, impatience, and irritability. In contrast, other male teachers can overwhelm themselves with all the perennial factors that contribute to feeling devastated. Standardized assessments, teacher evaluations, lack of resources, and excessive amount of other requirements are enough for some male educators to feel emotional fatigue. Based on the data analysis, how genders deal with stressful situations can play a role with the amount of exhaustion they acquire. Moreover, 77% of females had moderate to high levels of emotional exhaustion while 61% of males fell into the same category.

Male teachers had a significantly higher depersonalization than did female teachers. Of the two genders, females seemed to be more of the nurturer and supporter as they related to students, making a personal connection with them. With those males who suffered emotional exhaustion, it was easy for them to become depersonalized and cynical with their students.

**Recommendations**

There seem to be many reasons at a personal level that can trigger burnout among teachers. As shown by these data, the trigger may vary by gender, by subject taught, and by demographics etc. Future researchers may leverage the framework if this research to explore deeper each of these variables. Perhaps conducting a mixed methods research would be the optimal design to get a deeper insight into this subject area. Perhaps there is also a need to develop a more holistic approach to support and evaluate existing teachers other than using standardized testing results. Such individualized approaches may work help protecting the existing teachers away from burnout and facilitate them to get more enthusiastic about their jobs.

With a predictions of teacher attrition continuing to increase, it is important to determine the cause this chronic phenomenon of approximately 3.4 million teachers, 15.7%, leaving the profession annually. Before teachers can reach the self-actualization level of Maslow’s hierarchy, teachers’ basic needs of having food, water, warmth, security, and a feeling of belonging within an academic community needs to be established. Once these elements are fulfilled, teachers can have mastery, achievement, and gratification. Teacher exodus can cost school districts up to tens of thousands and effects students’ academic achievement. Education is one of the most important cornerstone of the country’s success. The country needs to establish an educational supportive community that allows teachers to teach, grow, and succeed. Once society supports teachers, students can reach their full academic potential.
References


