FACTORS CONTRIBUTING TO STRESS OF BUSINESS/MARKETING EDUCATORS

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Abstract

***Problem**: Business/marketing education teachers face demanding challenges with stress being a primary example. Teachers often suffer from tension, frustration, anxiety, anger, and even depression; and stress has been identified as a contributing factor for teacher attrition. **Purpose**: This study was designed to identify the level of stress among secondary business/marketing educators relating to administration, school climate, and resources that are associated with stress and to determine if business/marketing educators perceive they are receiving support from administration in dealing with factors associated with stress. **Methodology**: Data collected with a researcher-designed survey entitled Stress Questionnaire were analyzed using the following statistical procedures: Descriptive, Multiple Regression, Multivariate Analysis of Variance (MANOVA), and Pearson Product-Moment Correlation. **Findings**: Respondents reported that mild stress was due to school climate, mild to moderate stress was due to school administration, and mild to moderate stress was due to resources. There was a significant difference ($p < .05$) in the relationship between stress due to school climate and the level of support received from administrators in dealing with school climate. Likewise, a significant difference existed in the relationship between stress and resources and the level of support received from administrators in dealing with resources. No significant differences were found between self-reported personality type and the overall stress level reported for teaching, collegiality, school climate, administration, and resources. However, significant differences were found in the relationship between overall stress level and the individual stress factors for administration, school climate, administration, and resources. Business/marketing educators indicated the need for stress management workshops through in-service or professional development programs, implementation of coping strategies, and more administrative support in dealing with factors that cause stress.*

Introduction and Background

The description for a teaching position sounds ideal—short workdays, summers and holidays off, and being paid to help young people achieve. According to Reese (2004), however, many who accept teaching positions leave the profession within five years. Teachers who stay often become disillusioned and increasingly frustrated by the difficulties facing educators (Tammar, 1998).

Teacher stress is defined by Kyriacou (1987) as "the experience by a teacher of unpleasant emotions, such as tension, frustration, anxiety, anger, and depression

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resulting from aspects of work as a teacher" (p. 146). Stress is one of the factors related to teacher attrition and is believed to be a cause of high teacher turnover and absenteeism (Hammond & Onikama, 1997). Alhija (2015) reported that more experienced teachers, compared to less experienced teachers, indicated they have more stress related to students' behavior and educational policy. Alhija (2015) speculated that this can be related to low tolerance because of burnout. A survey by Optum Research, a Minnesota-based company that studies work-related health risks, found that 88% of teachers experience moderate to high levels of stress (Crute, 2004).

Teaching is a vulnerable occupation (Dworkin, 1987) that is susceptible to stressors at both the organizational and personal level. "Across the nation and around the world, increasing numbers of teachers report serious work-related stress. When teachers become stressed too many leave their schools" (Reese, 2004, p. 26). Many educators who stay are bored, irritated, or perform in a perfunctory manner just to get through the workday. Many are also counting the days until retirement or investigating other career choices. Still others feel helpless and trapped in their once-loved profession (Jarvis, 2002; Reese, 2004; Tammar, 1998).

Related Literature

Brightwell (1985) and Pares (1995) determined that a teacher's ability to perform a job was significantly diminished by stressful conditions. A direct relationship between principals and teachers was identified. When the principal and teacher supported each other, the teacher's stress level decreased. When a principal reduced job-related stressors, the teacher's ability to accomplish job responsibilities improved. Klanderman (1985) also concluded that management tensions or poor relationships with principals increased teacher stress levels. A strong supportive relationship between teacher and principal lowers job-related stress.

According to Calabrese (1987), a part of a principal's responsibilities should include creating a positive working environment. Principals should be proactive in assessing their own stressors and levels of stress. They should also develop an awareness of the stressors experienced by their staff. Principals, administrators, and even school board members should work with department chairs to provide a means to alleviate stress before a teacher reaches the breaking point. According to Kiff (1986), if administrators and school boards do not develop ways to alleviate stress, the superior teacher may become an endangered species.

With the overcrowding and curriculum demands placed on teacher preparation programs, it is often not feasible to create an additional course that focuses on the health issues most relevant to future teachers. Brown and Nagel (2004) suggested, however, that teacher educators include the integration of stress management techniques within the curriculum. One approach is to have teacher educators model stress management skills in the classroom. Teacher educators should identify the stress management objectives within specific methods and content course work.

As early as the 1980s, teacher stress was recognized in the courts. In addition to problems in the classroom caused by stressed teachers, schools and school boards began dealing with financial issues caused by teacher stress. Stress and strain on the job were ruled by the courts as legitimate claims in workers' compensation claims. Workers' compensation claims for teacher stress and strain increased in frequency, and the actual costs of such claims grew (Remley, 1985).

What is the business/marketing educator's role in the area of stress? Business/marketing educators are working daily to prepare students for the workplace. In preparing students to be successful on the job, the business/marketing teacher is responsible for assisting students to develop skills and attitudes that contribute to success. With office jobs listed among stressful occupations, including instruction on stress management seems logical (Hagler, 1990). Business/marketing educators must first learn to recognize and control stress themselves and then prepare their students to deal with stress.

At the school level, the increase in stress is reflected in a growing average of teacher absences and a rise in the number of early retirements (Gaziel, 1993). If job stress can have such devastating effects on teachers, then it is important to be able to recognize the sources of such pressure so that effective management strategies can be developed (Kiff, 1986).

Purpose of the Study

The focus of this study was to determine the level of self-reported stress among business/marketing educators related to their jobs as teachers. The study sought to determine if there is a difference in the level of stress among these educators as it relates to school climate, resources, and personal characteristics. The study also focused on how business/marketing teachers perceive they are receiving support from their principals in dealing with stress. The survey was further designed to determine if strategies have been developed by teachers and/or administrators for dealing with stress.

Research Questions

The following research questions addressed factors that contribute to stress among business/marketing educators:

1. What is the perceived level of stress as it relates to administration, school climate, and resources?
2. What is the perceived level of administrative support as it relates to school climate and resources?
3. What is the relationship between the level of stress relating to:
    a. School climate and the perceived level of administrative support for school climate?
    b. Resources and the perceived level of administrative support for resources?

3. Is there a difference in the level of stress associated with administration, school climate, resources, and personal characteristics when analyzed by demographic factors (gender, age, teaching experience, degree, school system, and administrative responsibilities)?
4. Is there a difference between self-reported personality type and the overall stress level reported for teaching, collegiality, school climate, administration, and resources?
5. What is the relationship between the overall stress level and the individual stress factors for: a) administration, b) school climate, and c) resources?

Methods and Procedures

A survey was developed to collect data corresponding with the research questions. To ensure content and face validity of the data, a panel of experts evaluated the instrument. Panel members included university faculty chosen for their knowledge and experience in descriptive survey research design, survey instruments, and data collection, as well their content area expertise. The panel assisted in developing an instrument that accurately reflected the area and realm of interest (teacher stress) and the perception that the instrument would measure what it was intended to measure.

Cronbach's Alpha was used to estimate the internal consistency of the instrument. For a scale to be considered reliable, it should have an alpha of 0.70 (Pedhazur & Schmelkin, 1991). Cronbach's Alpha for the scales used to determine levels of stress due to administration was 0.89; levels of stress due to school climate, 0.84; levels of support received from administration in dealing with school climate, 0.91; levels of stress due to resources, 0.88; levels of support received from administration in dealing with resources, 0.92; and levels of overall stress, 0.77. Results of the Cronbach's Alpha for each scale indicated acceptable levels for research purposes.

Validity and Reliability

The most prominent internal validity concern in designing the survey was presence and degree of measurement error and the attitude of participants toward surveys. Minimizing the degree of measurement errors was addressed during the survey development. Several survey sections were developed with each section pertaining to one specific factor. Covering one factor at a time enabled participants to understand each question more clearly and answer more truthfully and accurately.

Population

Research participants included business/marketing educators from a southern state. The Department of Career-Technical Education provided names of business/

marketing educators included in a directory of all business/marketing educators in the state. The population consisted of 1,000 business/marketing educators listed in the directory. Systematic sampling was used to select every third business/marketing educator in the directory. The resulting sample totaled 333 participants.

Data Analysis

The Statistical Package for Social Sciences (SPSS) was used to analyze the data. Descriptive statistics included frequencies and percentages used to summarize, analyze, and organize the data. Descriptive statistics were also used to provide an indication of relationships between variables.

Research Questions 1 and 2 were analyzed using descriptive statistics, means, and standard deviations. Standard deviation, the most common measure of statistical dispersion, measures how widely spread the values are in a data set (Gravetter & Wallnau, 2002). The Pearson Product-Moment Correlation was used to analyze research Question 3. This statistic measures the degree and the direction of the linear relationship between two variables and is the most common correlation tool (Gravetter & Wallnau, 2002). A basic property of Pearson's r is the range from -1 to +1. A correlation of -1.0 means a perfect negative linear relationship; a correlation of 0 means no linear relationship; and a correlation of +1 indicates a perfect linear relationship (Lane, 2003). The coefficient of determination (R^2) was calculated to determine the proportion of variance present in the variables. The adjusted R^2 was calculated to represent a more accurate estimate of the true R^2 that would be found in the population.

Multivariate Analysis of Variance (MANOVA) was used to analyze Question 4. MANOVA is a type of multivariate analysis used to analyze data that consists of more than one dependent variable at a time (Creech, 2003). MANOVA allows the testing of the hypotheses regarding the effect of one or more independent variables on two or more dependent variables. A MANOVA analysis generates a p-value that is used to determine whether the null hypothesis can be rejected. MANOVA is used in two major circumstances. The first circumstance is when there are several correlated dependent variables and the researcher desires a single, overall statistical test on this set of variables instead of performing multiple individual tests (Carey, 1998). The second circumstance, and sometimes the most important, explores how independent variables influence some patterning of response on the dependent variables.

Additionally, the effect size was calculated to determine the strength of the relationship between two variables. The effect size quantifies the size of the difference between two groups and gives a true measure of the significance of the difference. "In general, Z^2 is interpreted as the proportion of variance of the dependent variable that is related to the factor. Traditionally, Z^2 values of 0.01, 0.06, and 0.14 represent small, medium, and large effect sizes respectively" (Green, Salkind, & Akey, 1997, p. 193).

MANOVA was also used to analyze Question 5, which dealt with the relationship between self-reported personality types and the overall stress level reported for teaching, collegiality, school climate, administration, and resources. For this study, personality type was self-identified by the participants after reading a description for each type. A reader might question the validity of classifying self-identifying personality types and how accurately individuals can predict their types. Including personality types in this study resulted from findings in the literature review whereby individuals with Type A personalities were more susceptible to stress.

Multiple Regression Analysis was used to analyze Question 6. The main purpose of this analysis was to learn more about the relationships between several independent or predictor variables and a dependent or criterion variable. A score was taken of the dependent variable to determine which items account for the greatest portion of variability. Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level and can establish the relative predictive importance of the independent variables.

Results and Analysis

Respondents totaled 107 business/marketing educators comprised of 13 (12.1%) males and 94 (87.9%) females. Age groups in order by percentage were 40-49 years (33.6%), 50-59 years (33.5%), 30-39 years (15.8%), 24-29 years (13.0%), and 60-67 years (3.7%). The years of teaching experience reported were 1-5 years (23.3%), 6-10 years (16.9%), 11-20 years (29.9%), 21-30 years (19.5%), and over 30 years (10.3%). The average teaching experience was 14 years. Educational levels included 26 (24.3%) with a bachelor's degree, 74 (69.2%) had a master's degree, and 7 (6.5%) had a specialist degree. No respondents reported having obtained a doctorate degree. Forty-six (43%) respondents teach in city school systems while 61 (57.0%) respondents teach in county school systems.

Descriptive statistics were used to identify perceived personality types. Respondents who described themselves as having Type A personalities perceived themselves as hard driving, competitive, structured, self-starters, and individuals with a high sense of time urgency. Respondents who described themselves as having Type B personalities perceived themselves as easy going, relaxed, spontaneous, and someone who lets problems work themselves out. Eighty (74.8%) respondents perceived themselves as Type A personalities and 27 (25.2%) self-reported as having Type B personalities.

Research Question 1: What is the perceived level of stress as it relates to administration, school climate, and resources?

A Likert-type scale was used: (0) No Stress, (1) Mild Stress, (2) Moderate Stress, and (3) Extreme Stress. The subscale for stress included eight items related to administration. The mean score was 1.23 ($SD = 0.745$). Based on the measurement scale, this mean score indicated a level of mild stress. The subscale for stress

included nine items related to school climate. The mean score was 1.57 (SD = 0.591), which indicated a stress level between mild and moderate. The subscale for stress related to resources included five items with a mean score of 1.53 (SD = 0.900), which indicated a level between mild and moderate stress.

Research Question 2: What is the perceived level of administrative support as it relates to school climate and resources?

The following Likert-type scale was used: (0) No Support, (1) Mild Support, (2) Moderate Support, and (3) Total Support. The subscale for administrative support received in dealing with school climate included nine items. The mean score was 1.82 (*SD* = 0.719), which indicated a level slightly below moderate support. Nine items were included on the subscale for administrative support received in dealing with resources. The mean score was 1.59 (*SD* = 0.922), which indicated a level between mild and moderate support.

Research Question 3: What is the relationship between the level of stress relating to (a) school climate and the perceived level of administrative support for school climate and (b) resources and the perceived level of administrative support for resources?

The Pearson Product-Moment Correlation was used to analyze the linear relationship between the stress of school climate and the perceived level of administrative support for school climate. Results indicated an overall statistically significant linear relationship between stress relating to school climate and the perceived level of administrative support for school climate [$r(105) = 0.35$, $p < 0.05$]. In terms of the strength of the relationship, the Coefficient of Determination adjusted $R^2 = 0.111$ indicates that 11% of the variance in school climate stress can be explained by the level of support received from administration in dealing with school climate. Ironically, the higher the level of school climate stress, the higher the level of perceived support received by administration. Table 1 shows the means and standard deviations between school climate and administrative support for school climate.

Table 1
Means and Standard Deviations for Measure* of Stress Related to School Climate and Support for School Climate.

	Stress Related to School Climate		Support for School Climate	
Item**	***M***	***SD***	***M***	***SD***
1	1.56	0.88	1.90	0.83
2	1.49	0.82	1.82	0.90
3	1.05	0.99	2.13	0.96
4	1.93	0.88	1.69	0.88
5	1.82	1.04	2.01	0.96
6	1.93	0.82	1.82	0.97
7	2.03	0.85	1.78	0.96
8	0.87	0.89	1.74	1.09
9	1.53	0.87	1.57	0.94

*Lykert-type scale: 0 = No Stress, 1 = Mild Stress, 2 = Moderate Stress, 3 = Extreme Stress

**See Appendix A for description of *Items*.

Table 2 reports the means and standard deviations between resources and administrative support for resources. The Pearson Product-Moment Correlation was used to analyze the linear relationship between the stress of resources and the perceived level of administrative support for resources. The Pearson *R* indicated an overall statistically significant linear relationship between stress related to resources and the perceived level of administrative support for resources [$r(105) = 0.36$, $p < 0.05$]. In terms of the strength of the relationship, the Coefficient of Determination adjusted $R^2 = 0.122$ indicates that 12% of the variance in resources stress can be explained by the level of support received from administration in dealing with resources. Oddly, the higher the level of stress related to resources, the higher the level of support for resources.

Table 2
Means and Standard Deviations on the Measure* of Resources and Support for Resources.

	Stress Related to Resources		Support for Resources	
Item**	***M***	***SD***	***M***	***SD***
1	1.11	1.03	1.79	1.30
2	1.42	1.09	1.51	1.01
3	1.61	1.12	1.55	1.10
4	1.61	1.11	1.51	1.10
5	1.94	1.09	1.59	1.05

*Lykert-type scale: 0 = No Stress, 1 = Mild Stress, 2 = Moderate Stress, 3 = Extreme Stress

**See Appendix B for description of *Items*.

Research Question 4: Is there a difference in the level of stress associated with administration, school climate, resources, and personal characteristics when analyzed by demographic factors (gender, age, teaching experience, degree, school system, and administrative responsibilities)?

General MANOVA was used to analyze the multiple dependent variables. This type of multivariate analysis is used to analyze data that consists of more than one dependent variable at a time. The results of the MANOVA analysis appear in Table 3.

A significant difference was found due to age on the measure of school climate $F(1,105) = 10.540$, $p = 0.002$. The multivariate $Z^2 = 0.12$ indicates 12% of the multivariate variance of climate stress can be explained by the age of the respondent. The analysis revealed that respondents over the age of 48 experienced more stress related to school climate than did their younger cohorts. In addition, a significant difference existed on the measure of resources due to type of school system in which respondents were employed: $F(1,105) = 6.621$, $p = 0.011$. The multivariate $Z^2 = 0.07$ indicates 7% of the multivariate variance of resources stress can be

Table 3
Differences in the Level of Stress Associated with Administration, School Climate, Resources, and Personal Characteristics when Analyzed by Demographics.

Demographics	Administrative		School Climate		Resources		Personal Characteristics	
	F	p	F	p	F	p	F	p
Gender	0.059	0.808	1.879	0.173	0.068	0.795	0.952	0.331
Age	1.177	0.280	10.540	0.002	0.024	0.876	3.116	0.080
Teaching Experience	0.039	0.844	2.030	0.157	1.942	0.166	0.771	0.382
Highest Degree	2.081	0.130	0.644	0.527	1.946	0.148	0.568	0.568
School System	2.167	0.144	0.593	0.443	6.621	0.011	0.876	0.351

Note: Statistically significant differences—$F(1,105)$, $p < 0.05$.

explained by the type of school system in which one is employed. Respondents employed in county school systems experienced a higher level of stress due to resources than respondents who were employed in city school systems.

A statistically significant difference ($p < 0.05$) was also found due to administrative duties on the measure of administration $F(1,105) = 6.940$, $p = 0.010$. The multivariate $Z^2 = 0.09$ indicates 9% of the multivariate variance of administrative stress can be explained by the administrative duties performed by the respondents. The analysis revealed that respondents who reported performing administrative duties experienced more stress than those who did not perform administrative duties.

Research Question 5: Is there a difference between self-reported personality type and the overall stress level reported for teaching, collegiality, school climate, administration, and resources?

No statistically significant differences ($p < 0.05$) were found between self-reported personality type and the overall stress level reported for teaching, $F(1,105) = 0.099$, $p = 0.754$; collegiality, $F(1,105) = 0.272$, $p = 0.603$; school climate, $F(1,105) = 0.896$, $p = 0.346$; administration, $F(1,105) = 0.296$, $p = 0.588$; and resources, $F(1,105) = 1.557$, $p = 0.215$.

Research Question 6: What is the relationship between the overall stress level and the individual stress factors for (a) administration, (b) school climate, and (c) resources?

Multiple Regression Analysis was used to analyze the relationship between the overall stress level and the individual stress factors for administration, school climate, and resources. The purpose of this analysis was to learn more about the relationships between several independent or predictor variables and a dependent or criterion variable. A statistical significance was found in the relationship

between the overall stress level and the individual stress factors for administration, school climate, and resources. Based on the relationship and looking at each variable individually, the strongest relationship was observed between the overall stress level and the individual stress factor due to school climate, $r(103) = 0.819$, $p < 0.001$. The second strongest relationship existed between overall stress level and the individual stress factor due to administration, $r(103) = 0.797$, $p < 0.001$. Stress due to resources had the lowest relationship to overall stress, $r(103) = 0.648$, $p < 0.001$. The multiple correlation coefficient (R) using all three variables is 0.953, and the adjusted R^2 is 0.905 indicating 91% of the variance in overall stress can be predicted from the three variables.

Participants were asked four open-ended questions. The first question asked the respondents if they have implemented coping strategies to alleviate stress in their teaching. If the respondents answered yes, they were asked to list the strategies. Not all respondents answered the open-ended questions.

Thirteen respondents reported that they leave school work at school, ten reported they make sure they are prepared and organized each day, eight reported exercising on a regular basis, and six reported relaxing frequently. Four respondents each reported taking medication, meditating, praying, and talking with colleagues to alleviate stress. Learning to say no, seeking assistance from parents, taking personal days off from school, and decreasing time grading papers were cited by three respondents as ways to alleviate stress. Making plans to retire, keeping a positive attitude, avoiding contact with administration, listening to music, keeping in contact with education association representatives, delegating work to other teachers or student aides, and drinking alcohol were also mentioned as ways to alleviate stress.

A second question asked respondents if the administration at their school implemented coping strategies to assist in dealing with stress. If the respondents answered yes, they were asked to list these strategies. Over 75 respondents reported that their administration had not implemented coping strategies. Thirteen respondents reported that their administration conducted workshops as a coping strategy, and three reported that their administration had put mentors in place as a coping strategy. The remaining respondents reported that their administration gave duty-free weeks and award opportunities, such as food and refreshments as coping strategies. Another 20 participants did not respond to this question.

The third question asked respondents if they had attended a stress management workshop. If respondents answered yes to this question, they were asked to explain the nature of the workshop. Eighty respondents reported that they had never attended a stress management workshop. Twenty respondents reported that they had attended a stress management workshop where topics included learning how to say no and relaxation techniques.

The final question asked respondents if there were factors causing them stress that were not listed on the survey. If the respondents answered yes, they were asked to list those factors. Common factors reported included family problems, having

to go through business and industry certification, career-technical education paperwork, sponsorship of career and technical education student organizations, lack of parent support, students' personal family problems, and fear of students bringing weapons to school.

Conclusions

The following conclusions were based on the findings of the study:

- Stress conditions exist for business/marketing educators in the areas of administration, school climate, and resources, all of which impact their job performance.
- There is a lack of administrative support received by business/marketing educators in dealing with factors that cause stress. Ironically, the higher the level of support received from administration, the higher the level of stress experienced by teachers.
- School systems lack workshops and other stress management techniques that assist educators in implementing coping strategies to reduce or to help alleviate stress.

Recommendations

Based on the conclusions, the following recommendations are made:

- Business teacher education programs should promote an awareness of health knowledge regarding teacher stress in the areas of administration, school climate, and resources through communication and training.
- Business teacher education programs and local school systems should integrate stress management, stress reduction activities, and coping strategies in the curriculum and in professional development programs.
- School systems should promote an awareness of health knowledge in their schools regarding teacher stress in the areas of administration, school climate, and resources through communication and training.
- School administrators should implement administrative support systems to ensure that all teachers have an avenue to collaborate and solve issues that cause stress.
- School systems should implement stress management strategies that target older and more experienced teachers.

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Appendix A

Item 1 = Overall school climate (Atmosphere of the learning environment)
Item 2 = Minor student discipline (excessive talking, getting out of seat, display of cell phone, or horseplay
Item 3 = Verbal or physical abuse by students toward teacher in the classroom
Item 4 = Motivation of students in the classroom
Item 5 = Accountability regarding "No Child Left Behind" Legislation
Item 6 = Modification of the curriculum for special needs students
Item 7 = Dealing with low student achievement
Item 8 = Threat of lawsuits in my school system
Item 9 = Overall teacher morale

Appendix B

Item 1 = Resources (textbooks, workbooks, reference books, etc.)
Item 2 = Funds for program improvement
Item 3 = Up-to-date equipment
Item 4 = Up-to-date software
Item 5 = Technology support personnel to solve computer technology problems