The Road to Burnout: Dispositional and Situational Factors Affecting Teacher Self-Efficacy, Job-Related Stress, and Occupational Burnout

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Abstract

The American education system is under constant scrutiny and is the topic of much debate. The effectiveness of the system is very dependent upon the quality of the educators within it. However, a rising problem disturbing the effectiveness and retention of these educators is burnout. Teachers are leaving the field at rapidly increasing rates due to this phenomenon. The present study aspired to determine the factors causing burnout amongst educators. Two indicators have been found to be typically present within an individual prior to the event of burnout – low self-efficacy and high-stress. To determine the factors related to lower levels of teacher self-efficacy and higher levels of stress amongst educators, two sub-goals were determined. First, the research aimed to determine whether stress and teacher efficacy affected burnout. Secondly, the study aimed to determine the specific dispositional and situational factors affecting stress levels, low efficacy, and burnout amongst teachers. The dispositional factors in this case were teachers' years of experience and gender, which had no effect on stress, efficacy, or burnout. The situational factors in this case were grade level and the factors measured by the subscales of the Teacher Stress Inventory, Teacher Burnout Scale, and Teacher Sense of Efficacy Scale. High-stress levels and low efficacy were shown to be congruent with higher levels of burnout. Overall, there were no correlations between the dispositional factors and stress, efficacy, or burnout. However, it was found that several situational factors (particularly low career satisfaction, lack of administrative support, job-related stressors, attitudes towards students, lack of discipline and motivation, and low student engagement) were consistent with high-stress levels, low efficacy, and higher levels of burnout. These findings on the causes of teacher burnout can be used towards successful reformations of educational systems and teacher retention methods globally.

Keywords: teacher burnout, teacher stress, teacher efficacy

1. Introduction

Teacher burnout, "emotional exhaustion [as a result of] chronic stress", is a rapidly growing problem within the American education system.⁴ On average, 30% of teachers entering the profession leave within the first five years.¹⁸ Two indicators have been found to be typically present within an individual prior to the event of burnout – low self-efficacy and high-stress.^{1, 4, 32, 41, 47} Determining the factors related to lower levels of teacher self-efficacy and higher levels of stress amongst educators would construct a better understanding of the factors related to teacher burnout and ultimately be beneficial towards improving the American educational system.

When considering reasons for high attrition and burnout rates amongst educators, teacher self-efficacy has proven to be a factor.⁴¹ Teacher self-efficacy may be defined as "individual teachers' beliefs in their own abilities to plan, organize, and carry out activities required to attain given educational goals".⁴¹ The role it plays in the classroom is prominent and can ultimately affect the students' self-efficacy, ³ success/accomplishments,^{5, 41, 45} and motivation.³⁶ Likewise, the self-efficacy of the teacher can influence their own effectiveness in the classroom.⁴¹ Low teacher selfefficacy can cause the educator to be less resilient when facing difficulties,⁴¹ more disorganized and more critical of student's mistakes.^{2, 5, 22} However, high teacher self-efficacy can influence the educator to dedicate more time towards students having difficulties,²² avoid classroom complications,³² and have overall less job-related stress.⁷ Additionally, this has also been shown to play a role in attrition and burnout amongst educators. High levels of teacher self-efficacy are correlated with higher levels of job-retention,^{13, 23} more excitement and satisfaction regarding the overall profession,^{2, 26, 28, 31} and higher levels of commitment to the occupation.^{15, 16}

It is reported that 46 out of 100 teachers claim to experience "high daily stress" while working, making teaching the most stressful profession (tied with nursing).²⁴ Higher levels of overall stress can affect teachers' job satisfaction, ^{11, 34} their relationships with students,³⁵ their ability to effectively perform job-related duties, ^{1, 32, 33} and their dedication to teaching efficiently within the classroom.^{8, 35} Teacher stress has also been proven to be negatively correlated with teacher self-efficacy.^{7, 32, 42, 42} The continuous presence of stress can even eventually lead to burnout ^{1, 2, 17}

Many causes of teacher stress are also the same causes of teacher burnout, further illuminating the relationship between the two. Teacher burnout rates have become a prominent issue specifically within the state of Georgia, with 44% of teachers leaving the profession within their first five years (compared to the overall rate of 30%).^{18, 37} When asked about reasons for their burnout, Georgia educators leaving the occupation claimed the "number and emphasis of mandated tests" as being the biggest reason for their departure.³⁷ This reason was followed in popularity by "teacher evaluation method", "level of teacher participation in decisions related to profession", "non-teaching school responsibilities/duties", "level of benefits/compensation", "level/quality of support, resources, and profession".³⁷ Interestingly, other studies have found that relationships with administrators,^{4, 25} workload and teaching duties,^{12, 25, 46} and lack of role in making decisions are also proven causes for teacher stress.³⁰ Likewise, low teacher self-efficacy has been shown to be caused by student misbehavior, teacher-parent conflict, lack of resilience when facing difficulties, lack of student autonomy, and conflicts with co-workers/administrators.⁴¹ When considering the factors causing low teacher self-efficacy and high teacher stress, two categories of factors stand out: dispositional and situational. The dispositional factors in this case are teachers' years of experience and gender. The situational factors in this case are grade level, student misbehavior, workload, and teacher-administration relationship.

In an analysis by Klassen and Chiu, teachers' self-efficacy was affected by the amount of experience the participants had teaching.³² For example, participants who were "early and mid-career" exhibited higher levels of self-efficacy than participants who were in the later years of their career.³² In fact, teachers in the later stages of their career exhibited declining self-efficacy, whereas teachers who were early to mid-career exhibited increasing self-efficacy.³²

These findings correspond with Huberman's life "cycle" of a teacher, which asserts that teachers experience certain phases throughout their career.²⁹ The first phase in a teacher's career is that of "survival" and "discovery".²⁹ During this stage, the individual is realizing the reality of work within the classroom and faces insecurity in their ability. Around five years into a teacher's career, they will enter the next phase of "stabilization".²⁹ During this stage, the individual will either dedicate his/herself to the profession or leave it. If they make the decision to stay, then the next phase of "experimentation", "activism", and "reassessment" will occur mid-career.²⁹ During this stage, the individual will evaluate the steps they have taken over the course of their career thus far. The next stage occurs during years 19-30 of the career and is a phase of "serenity".²⁹ During this stage, the individual will decrease in fervor and passion, but will increase in self-assurance. The final stage occurs during late-career, wherein a phase of "disengagement" will be experienced.²⁹ During this stage, the individual will either be content with their career or dissatisfied. Similar to Klassen and Chiu's findings that self-efficacy increases steadily over the career before decreasing in the later years,³² Huberman also asserts that teachers will grow in confidence before a possible dissent toward dissatisfaction later in the career.²⁹

Considering this cycle that educators follow as they gain experience, the education level of the teacher may also be an important factor. Bandura found that individuals who are better prepared for a job are also more self-assured, and therefore less likely to quit.⁶ The preparation of the teacher entering the profession could affect that critical five-year period where many new educators leave. If the individual enters the profession feeling better equipped and confident, then perhaps they will be more likely to continue on. Additionally, the amount of training and education the individual has obtained prior to (or throughout) their career may also affect their self-efficacy.^{21, 48}

It is a common finding in analyses of teacher self-efficacy and teacher stress that gender plays a role. Female teachers experience higher stress – 13% more work-related stress and 8% more classroom-related stress – and higher levels of burnout than their male counterparts.^{4, 32} Overall, women have larger workloads than their male counterparts, which could be the reasoning for these higher levels.⁴ Despite these findings, when considering job satisfaction, females are more satisfied than male educators.³⁹ Females are also more likely to be content with their wages, whereas males are more likely to consider their wages as being too low.³⁹ When considering the relationship between teachers and

administrators, male teachers claim to play smaller roles in decision-making and are not as close to administrators as female teachers.³⁹

The situational factors affecting teacher self-efficacy and stress are grade level, student misbehavior, workload, teacher-administration relationship, and wages. The overall consensus across research is that teachers of earlier grades exhibit greater self-efficacy than teachers of later grades.^{27, 47} Middle school and high school teachers also experience lower confidence when trying to engage students through classwork.⁴⁷ However, elementary school teachers experience higher levels of stress than middle and high school teachers.⁴

Student behavior can be another element to the teaching profession that affects stress levels and teacher self-efficacy. In fact, student misbehavior and the resulting confrontation with parents is positively correlated with teacher stress.⁴¹ Borg and Riding put "pupil misbehavior" as one of four categories that are the reasons for high levels of teacher stress.¹¹ Along with misbehavior, negative attitudes from students have also proven to be the cause of stress for educators.^{35, 43} Other researchers have argued that simple "misbehavior" is not a reason for teacher stress, but rather the constant misbehavior of certain students that causes the teachers stress.^{19, 35} Ultimately, when the classroom environment is poor, the teacher faces stress and unsatisfactory feelings towards their students.¹⁴

According to Abel and Sewell, unconstructive relationships with colleagues and administrators are often a cause for teacher burnout.¹ The reported stress caused by negative relations with administrators is higher amongst teachers in urban-area schools compared to rural-area schools, but both still report that this relationship is a cause for their stress.¹ The ultimate reasoning for this is the heavy demands from administrators, as well as the lack of communication between teachers and administrators.^{4, 25}

Low salary is often another cause of stress for educators, along with heavy workload.⁴³ Females are, on average, more content with their wages than male teachers.³⁹ In fact, males are likely to not pursue a career in education due to the salary.³⁹ Low salary appears to be more correlated with stress than teacher self-efficacy. The workload associated with being an educator is most often arduous. Therefore, it is not shocking that heavy workload is also a common factor attributing towards educators' exhaustion and high levels of stress.^{12, 25}

1.1. Present Investigation

The purpose of this present study was to examine the effects of certain dispositional and situational factors on burnout, stress, and low efficacy amongst teachers. The dispositional (internal) factors considered are gender and years of experience. The situational (external) factors considered are grade level and the factors measured by the subscales of the TSI, TSES, and TBS.

There are two main focuses of this study. The first objective is to determine whether stress and teacher self-efficacy are correlated with burnout. It is hypothesized that stress will be negatively correlated with teacher burnout. It is also projected that burnout will be congruent with lower levels of teacher self-efficacy.

The second focus will be determining the factors affecting stress levels and low teacher self-efficacy amongst educators. Considering the dispositional factors in question, it is hypothesized that higher teacher self-efficacy and lower stress will be consistent with more years of experience by the educator. When comparing gender, it is believed that male teachers will report lower levels of stress and higher levels of teacher self-efficacy than their female counterparts. When analyzing the situational factors in question, it is hypothesized that subscales relating to student misbehavior, heavy workload, and negative teacher-administration relationships will be congruent with high levels of stress and low levels of teacher self-efficacy. It is also hypothesized that higher grade levels will be consistent with higher stress levels, and lower levels of efficacy.

2. Method

2.1. IRB Approval

This research study was vetted by an Institutional Review Board and received approval prior to being conducted.

2.2. Participants

Participants were recruited from various school systems across America, both rural and urban. Fortunately, these educators were almost uniformly distributed across sixth-, seventh-, and eighth-grade levels. These participants were recruited through social media to take part in an anonymous, voluntary survey. Upon selecting the link, an online

consent form was given prior to the survey. On this form, a check box indicating the participant gave their consent had to be fulfilled before accessing the survey. Participants had the right to leave the survey at any time.

2.3. Measures

For Study 1, a survey was constructed and evaluated using the Teachers Sense of Self-Efficacy Scale (TSES).⁴⁵ The purpose of this survey was to analyze teacher self-efficacy. Each question consisted of three subscales: *Efficacy for Instructional Strategies* (IS; teaching abilities within the classroom), *Efficacy for Classroom Management* (CM; behavioral management within the classroom), and *Efficacy for Student Engagement* (SE; ability to motivate and engage students within the classroom). This survey consisted of 12 items with optional answers ranging in degree of perceived personal influence: 1 (Nothing), 3 (Very Little), 5 (Some Influence), 7 (Quite a Bit), and 9 (A Great Deal).

Study 2 consisted of a survey integrating The Teacher Burnout Scale (TBS).⁴⁰ Each question integrated the use of four sub-scales: *Career Satisfaction, Perceived Administrative Support, Coping with Job-Related Stress,* and *Attitudes Towards Students.* Possible answers were arranged on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

For Study 3, a survey was assembled using the Teacher Stress Inventory (STI).²⁰ The purpose of this survey wass to analyze teacher stress levels and the sources of stress. All thirty questions integrated 10 subscales, each consisting of three questions. The subscales are *Time Management, Work-related Stressors, Professional Distress, Discipline & Motivation, Professional Investment, Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations,* and *Behavioral Manifestations.* Possible answers ranged in strength on a Likert scale from 1 (No Strength) to 5 (Major Strength).

2.4.Procedure

All three studies were presented to the participants together as one survey. Participants were asked to complete each survey honestly and completely. A short demographics survey concluded the packet. Following completion, the surveys were analyzed according to their manuals.

3. Results

3.1.TBS, TSES, & TSI Findings

To examine the relationship between stress, efficacy, and burnout, and analysis of the TSES, the TSI, and the TBS was conducted. There was a strong significant correlation between teachers' sense of efficacy and burnout r(85) = -.425, p = .001. This was a negative correlation, indicating that teachers with a higher sense of efficacy are more likely to experience burnout. There was also a significant correlation between stress and burnout r(78) = .745, p = .001. The correlation was positive, signifying that teachers with higher levels of stress are more likely to experience burnout. Furthermore, teachers' sense of efficacy and stress were also significantly correlated r(78) = -.221, p = .048. This was a negative correlation, indicating that teachers with higher levels of stress will have a higher sense of efficacy.

Table 1. Correlations between the TSES, the TSI, and the TBS.

Correlations TSES_totalsc TBS_totalscor e TBS_totalscor e TSES_totalscore Pearson Correlation 1 221° .425° Sig. (2-tailed) .048 .000 .048 .000 N 87 80 87 TSI totalscore Pearson Correlation 221° 1 .745°					
				-	-
	TSES_totalscore	Pearson Correlation	1	221	425**
		Sig. (2-tailed)		.048	.000
		N	87	80	87
	TSI_totalscore	Pearson Correlation	221*	1	.745**
		Sig. (2-tailed)	.048		.000
		N	80	80	80
	TBS_totalscore	Pearson Correlation	425	.745	1
		Sig. (2-tailed)	.000	.000	
		N	87	80	87

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

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

3.2. TBS Findings

Previous findings have shown that teacher burnout is strongly correlated with efficacy and stress.⁴¹ To test this hypothesis and obtain a detailed review of the correlation between burnout and efficacy amongst teachers, an analysis was conducted of the TSES and the four TBS subscales (Career Satisfaction, Administrative Support, Job-Related Stressors, Attitudes of Students). There was a significant correlation between burnout and Career Satisfaction, r(85) = -.409, p = .001. This was a negative correlation, indicating that teachers who are not as satisfied in their career will experience less efficacy. Burnout and Administrative Support had a significant correlation r(85) = -.242, p = .024. This was also a negative correlation, signifying that teachers who do not receive adequate administrative support will experience less efficacy. Likewise, there was also a significant correlation between burnout to Job-Related Stressors, r(85) = -.372, p = .001. This correlation was also negative and suggests that teachers who face more stressor related to the job will experience less efficacy. Additionally, the correlation between burnout and Attitudes of Students was significant r(85) = -.330, p = .002. This negative correlation indicates that bad attitudes from students is associated with less efficacy amongst teachers.

		TSES_totalsc ore	TBS_Career	TBS_Admin	TBS_Stress	TBS_Studen s
TSES_totalscore	Pearson Correlation	1	409	242	372	330
	Sig. (2-tailed)		.000	.024	.000	.00
	N	87	87	87	87	8
TBS_Career	Pearson Correlation	409	1	.423**	.741	.547
	Sig. (2-tailed)	.000		.000	.000	.00
	N	87	87	87	87	8
TBS_Admin	Pearson Correlation	242	.423	1	.498	.413
	Sig. (2-tailed)	.024	.000		.000	.00
	N	87	87	87	87	8
TBS_Stress	Pearson Correlation	372	.741	.498**	1	.498
	Sig. (2-tailed)	.000	.000	.000		.00
	N	87	87	87	87	8
TBS_Students	Pearson Correlation	330	.547	.413	.498	
	Sig. (2-tailed)	.002	.000	.000	.000	
	N	87	87	87	87	8

Table 2. Correlations between the TSES total score and the TBS subscales.

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

An additional analysis was conducted on the TSI and the four subscales of the TBS (Career Satisfaction, Administrative Support, Job-Related Stressors, Attitudes of Students) to examine the relationship between stress and burnout in more detail. There was a significant correlation between stress and Career Satisfaction r(78) = .568, p = .001. Additionally, there was a significant correlation between Administrative Support and burnout r(78) = .641, p = .001. Job-Related Stressors and burnout were also significantly correlated r(78)=.680, p=.001. The correlation between Attitudes of Students and burnout was significantly correlated as well r(78) = .397, p = .001. To summarize these findings, high levels of stress is associated with dissatisfaction in the career, less administrative support, stressors related to the job, and negative attitudes from students.

3.3.TSES Findings

Based on previous findings, it was hypothesized that efficacy would be positively negatively correlated with burnout and stress. To test this hypothesis and the correlation between efficacy and burnout amongst teachers, an analysis was conducted of the TBS and the three TSES subscales (Student Engagement, Class Management, Instructional Strategies). Teachers' burnout was significantly correlated with Student Engagement, r(85) = -.473, p = .001. This negative correlation suggests that teachers' who face low student engagement are more likely to experience burnout. Burnout was also significantly correlated with Class Management, r(85) = -.386, p = .001. This was also a negative correlation, suggesting that teachers who have issues managing the classroom will be more likely to experience burnout. However, burnout was not significantly correlated with Instructional Strategies, r(85) = -.386, p = .182.

Table 3. Correlations between the TBS total score and the TSES subscales.

		Correlation	าร		
		TBS_totalscor e	TSES_StudE ngage	TSES_Instruc tStrat	TSES_Class Man
TBS_totalscore	Pearson Correlation	1	473**	145	386
	Sig. (2-tailed)		.000	.182	.000
	N	87	87	87	87
TSES_StudEngage	Pearson Correlation	473**	1	.388**	.585
	Sig. (2-tailed)	.000		.000	.000
	N	87	87	87	87
TSES_InstructStrat	Pearson Correlation	145	.388	1	.429
	Sig. (2-tailed)	.182	.000		.000
	N	87	87	87	87
TSES_ClassMan	Pearson Correlation	386	.585	.429	1
	Sig. (2-tailed)	.000	.000	.000	
	N	87	87	87	87

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

To obtain a further understanding of stress and efficacy, an analysis was conducted using the TSI and the three TSES subscales (Student Engagement, Class Management, Instructional Strategies). There was a significant correlation between stress and Student Engagement r(78) = -.297, p = .008. The correlation was negative, implying that teachers who have issues engaging students will are more likely to experience more stress. Instructional Strategies was not significantly correlated with stress r(78) = -.052, p = .645, and neither was Classroom Management r(78) = -.153, p = .175.

Table 4. Correlations between the TSI total score and the TSES subscales.

		Cor	relations			
			TSES_totalscor	TSES_StudEng	TSES_InstructSt	TSES_ClassMa
		TSI_totalscore	e	age	rat	n
TSI_totalscore	Pearson Correlation	1	221	297	-0.052	-0.153
	Sig. (2-tailed)		0.048	0.008	0.645	0.175
	N	80	80	80	80	80
TSES_totalscore	Pearson Correlation	221	1	.847	.737	.822
	Sig. (2-tailed)	0.048		0.000	0.000	0.000
	N	80	87	87	87	87
TSES_StudEngage	Pearson Correlation	297	.847	1	.388	.585
	Sig. (2-tailed)	0.008	0.000		0.000	0.000
	N	80	87	87	87	87
TSES_InstructStrat	Pearson Correlation	-0.052	.737	.388	1	.429
	Sig. (2-tailed)	0.645	0.000	0.000		0.000
	N	80	87	87	87	87
TSES_ClassMan	Pearson Correlation	-0.153	.822"	.585	.429	1
	Sig. (2-tailed)	0.175	0.000	0.000	0.000	
	N	80	87	87	87	87

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

3.4.TSI Findings

Previous studies have shown that the continuous presence of stress can even eventually lead to burnout.^{1,9,17} To test this correlation between burnout and stress, an additional analysis was conducted of the TBS and the ten TSI subscales (Time Management, Work-Related Stressors, Professional Distress, Discipline and Motivation, Professional Investment, Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomical Manifestations, Behavioral Manifestations). There was a significant correlation between burnout and Time Management r(78) = .310, p = .005, indicating that teachers facing issues with time management might also experience manifestations of burnout.

Burnout and Work Stressors were significantly correlated r(78) = .601, p = .001, signifying that teachers facing stressors related to their work are more likely to experience burnout. The correlations were significant between burnout and Professional Distress r(78) = .501, p = .001; Discipline and Motivation r(78) = .572, p = .001; Professional Investment r(78) = .573, p = .001; and Emotional Manifestations r(78) = .459, p = .001. These findings suggest a strong relationship between burnout and stressors from every day, work-related causes.

The correlation between burnout and Fatigue Manifestations was significant r(78) = .343, p = .002, signifying that indications of fatigue are connected to the experience of burnout amongst teachers. A significant correlation was also

found between burnout and Cardiovascular Manifestations r(78) = .415, p = .001. This indicates that there is a possible association between teachers facing cardiovascular manifestations and burnout. Finally, burnout and Behavioral Manifestations were also significantly correlated r(78) = .469, p = .001.

To further understand the relationship between stress and efficacy, and analysis testing correlation between the TSES and ten TSI subscales (Time Management, Work-Related Stressors, Professional Distress, Discipline and Motivation, Professional Investment, Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomical Manifestations, Behavioral Manifestations) was performed. The only significant correlation was between efficacy and Discipline and Motivation r(78) = .469, p = .001.

3.5.Grade Level

Previous findings have shown that teachers of earlier grades exhibit greater self-efficacy than teachers of later grades.^{27, 47} However, teachers of earlier grades tend to exhibit higher levels of stress than teachers of higher grades.⁴ To test whether grade level truly has an effect on stress, burnout, or efficacy, several analyses were conducted. The first analysis was performed on the TSI and its ten subscales using an Independent t-test. For sixth-, seventh-, and eighth-grade teachers, the results were not significant across all groups. The second analysis was run on the TBS and its four subscales using Independent t-tests. For sixth-, seventh-, and eighth-grade teachers, the results were insignificant across all groups.

The final analysis was performed on the TSES and its three subscales (Student Engagement, Class Management, Instructional Strategies). For sixth-, seventh-, and eighth-grade teachers, the results were insignificant across all groups.

3.6. Subject Taught

To test whether the subject teachers were involved in teaching affected stress, efficacy, or burnout, several analyses were conducted. The initial analysis was focused on Math teachers. The first test was on the TSI and its ten subscales using an Independent t-test. For math teachers, the results were insignificant for every item tested. For science teachers, the results were not significant across all groups.

For social science teachers, the results were significant for certain groups: total TSI, t(78) = 2.958, p = .004; Professional Investment, t(78) = 2.779, p = .007; Cardiovascular Manifestations, t(78) = 3.301, p = .001; Gastronomical Manifestations, t(78) = 3.962, p = .001; Behavioral Manifestations, t(78) = 3.638, p = .001. The results were insignificant for other groups: Time Management, t(78) = 1.400, p = .165; Work Stressors, t(78) = 1.622, p =109; Professional Distress, t(78) = .545, p = .587; Discipline and Motivation, t(78) = 1.475, p = .144; Emotional Manifestations, t(78) = 1.297, p = .199; Fatigue Manifestations, t(78) = 1.105, p = 273.

For language arts teachers, the results were significant for certain groups: Professional Investment, t(78) = 2.166, p = .033; Cardiovascular Manifestations, t(78) = 2.521, p = .014. The results were insignificant for other groups: total TSI, t(78) = 1.524, p = .132; Time Management, t(78) = 1.276, p = .206; Work Stressors, t(78) = 1.714, p = .090; Professional Distress, t(78) = .343, p = -.732; Discipline and Motivation, t(78) = .052, p = .959; Emotional Manifestations, t(78) = .267, p = .790; Fatigue Manifestations, t(78) = .503, p = .617; Gastronomical Manifestations, t(78) = .583, p = .561; Behavioral Manifestations, t(78) = .372.

The second analysis was run on the TBS and its four subscales using Independent t-tests. For Math, Science, Social Science, and Language Arts teachers, the results were insignificant across all groups. The final analysis was performed on the TSES and its three subscales (Student Engagement, Class Management, Instructional Strategies). For Math, Science, and Language Arts teachers, the results were insignificant across all groups. For Social Science teachers, the results were insignificant for all groups except Classroom Management t(78) = -2.051, p = .044.

3.7. Class Size

To determine whether class size plays a role on teachers' stress, efficacy, and burnout, several analyses were performed. There was not a significant correlation between class size stress amongst teachers r(78) = .157, p = .163. Additionally, class size and burnout were not significantly correlated either r(78) = .068, p = .547. Class size and efficacy amongst teachers were also not significantly correlated r(78) = .076, p = .504.

3.8. Years of Experience

When testing the effect years of experience had on the TSI, the TSES, and the TBS, analyses were conducted. For years of experience and burnout, an analysis showed that there was no significant correlation between the two r(78) = .062, p = .585. Years of experience and stress were not significantly correlated either r(78) = .132, p = .243. The correlation between efficacy and years of experience was also not significantly correlated r(78) = -.039, p = .731.

3.9. Gender

To determine whether gender affects stress, efficacy, or burnout, san Independent t-test was performed. For gender and burnout, the results showed no significant correlation between males (M = 2.07, SD = .543) or females (M = 2.768, SD = .748) and burnout t(78) = -1.847, p = .069. There was also no significant correlation between males (M = 3.112, SD = .426) or females (M = 3.381, SD = .510) and stress t(78) = -1.032, p = .305. Additionally, there was no significant correlation between males (M = 7.333, SD = .531) or females (M = 6.703, SD = .754) and stress t(78) = 1.646, p = .305).

4. Discussion

The overall objective of this study was to determine the possible factors affecting teacher burnout. To do so, two subgoals were determined. First, the research aimed to determine whether stress and teacher efficacy affected burnout. Secondly, the study aimed to determine the specific dispositional and situational factors affecting stress levels, low efficacy, and burnout amongst teachers. The dispositional factors in this case were teachers' years of experience and gender. The situational factors in this case were grade level and the factors measured by the subscales of the TSI, TBS, and TSES (such as student misbehavior, workload, and teacher-administration relationship).^{20, 40, 45}

Originally, it was hypothesized that stress and efficacy would be negatively correlated with teacher burnout.^{1, 2, 7, 17, 17, 32, 42} These theories were proven to be correct. A strong, negative correlation was found between teachers' sense of efficacy and burnout, showing that teacher's with low efficacy are likely to experience high levels of burnout. Stress and burnout produced a strong, positive correlation, implying that teachers who experience high levels of stress are likely to also experience high levels of burnout. Therefore, because they are so closely related, it is possible to assert that the path to burnout for an educator may begin with the presence of either low efficacy or high-stress.

A more in-depth analysis using the measurements' subscales produced some interesting findings on the possible underlying causes of low efficacy, high-stress, and burnout. Since efficacy and stress were shown to be underlying factors leading burnout, it was especially important to dig deeper into these subscales.^{1, 2, 4, 17, 32, 41, 42, 47} It was found that high levels of stress are likely to be present within an individual when low career satisfaction, lack of administrative support, job-related stressors, and negative attitudes from students are also present. Teachers facing problems with low student engagement are also likely to experience higher levels of stress.

When considering low efficacy amongst teachers, these low levels were found to be present within an individual when low career satisfaction, lack of administrative support, job-related stressors, and negative attitudes from students are also present. Problems with discipline and motivation are also likely to be present alongside low efficacy. ^{11, 19, 35, 41}

The analysis of the correlation between burnout and the stress and efficacy subscales also produced significant findings. Teachers who experience low student engagement and a lack of class management are also likely to experience burnout.¹⁴ Likewise, problems with time management, discipline and motivation, professional investment, work-related stressors, and professional distress are indicators of the presence of burnout.^{1, 4, 25} According to the results, certain manifestations of stress (emotional, fatigue, cardiovascular, gastronomical, and behavioral) are also proven to be indicators of burnout.²⁰

From this analysis of the subscales, certain findings stood out amongst the results as possible causes of stress, efficacy, and burnout. Subscales related to, both, stress and efficacy were low career satisfaction, lack of administrative support, job-related stressors, and negative attitudes from students.⁴⁰ The subscale related to, both, burnout and efficacy was discipline and motivation problems. The subscale associated with, both, burnout and stress was low student engagement. Because of the strong presence these relationship exhibited in this research, it is reasonable to suggest that future teacher retention methods could include techniques to increase career satisfaction, foster more

administrative support, relieve job-related stressors, encourage positive attitudes from students, mend discipline and motivation problems, and increase student engagement.

It was hypothesized that more years of teaching experience would result in higher efficacy and lower stress.^{18, 29, 32, 37} However, there was no significant change in efficacy, stress levels, or burnout between teachers who were relatively new to the occupation and teachers who had been teaching for many years. This is quite noteworthy, as burnout does not appear to develop after working in the field for a prolonged amount of time.^{29, 32} According to this data, new teachers are just as likely to experience burnout, stress, and low efficacy as long-time teachers. This suggests that issues with teacher retention are not due to educators getting bored or tired of the job after years of teaching, but rather issues within the occupation that long-time and new teachers are all experiencing.^{29, 32} Regarding gender, the original hypothesis was that males would report lower levels of stress and higher levels of teacher efficacy than females.³⁹ However, there were no significant results between males and females for stress, efficacy, or burnout. This suggests that males and females are equally affected within the field.

To further understand the relationship between stress, efficacy, and burnout, future research would be beneficial. An analysis of the effect of teachers' levels of education would be useful, seeing as educators vary in types of degrees/certifications. Whether one method of obtaining certification (through bachelor's programs, post-baccalaureate certificate programs, or masters programs) affects teacher preparedness more positively than others would be constructive towards training future educators. Reforming teacher training methods could help to limit stress and boost efficacy amongst educators, potentially avoiding burnout altogether. Additionally, there could be further research conducted on gender and burnout. The results from this research comparing gender differences with stress, efficacy, and burnout were inconclusive, so there is certainly room for more supplementary data. Because teacher salary is a prominent issue, it would also be interesting to see research focusing on whether salary has an affect on stress, efficacy, and burnout.

5. References

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