

# Examining The Relationships Between Positive Psychology And Teacher Burnout In Secondary Education

**Martin J. Resner**

Drake University, Des Moines, IA Address: 4390 North Newport Court Bettendorf, IA 52722, e-mail: [Marty.resner@drake.edu](mailto:Marty.resner@drake.edu)

## ABSTRACT

Since the Covid-19 worldwide pandemic, there has been a workforce shortage in many professions, including education. Before the global pandemic, education saw worrying levels of shortage, stress, burnout, and attrition. Teachers feel stressed from a growing list of roles and responsibilities. This is creating a rise in teachers' burnout, creating more problems for education such as poorer performing teachers and teachers leaving the profession. Researchers continue to look at various ways to treat, reduce, and prevent burnout.

Using Seligman's positive psychology and the PERMA framework for wellbeing, this study aims to examine possible relationships between positive psychology traits or positive emotion, engagement, relationships, meaning, and accomplishment on teacher burnout elements of emotional exhaustion, depersonalization, and accomplishment. This study used a quantitative approach and survey research methodology. Participants were 145 secondary (Grade 6-12) teachers from various public schools in two Midwest states. Pearson correlation coefficients identified that burnout components had a relationship with all positive psychology traits, except for relationships. Hierarchical regression analysis indicated that emotional exhaustion might be predicted by gender, positive emotion, relationship, meaning, and accomplishment; depersonalization may be predicted by positive emotion; accomplishment may be predicted by engagement and meaning. Recommendations for teachers (and teacher organizations), school administrators, and school boards are discussed along with recommendations for future research.

**Key Terms:** positive psychology, teachers, burnout, wellbeing.

## INTRODUCTION

The teaching profession is a highly stressful one (Taylor et al., 2021; Wilhoit, 2020). Work-related stress can lead to adverse emotions such as burnout (Atmaca et al., 2020; Demir, 2018; Zhang et al., 2019). One should anticipate stress in all walks of life. However, anxiety becomes problematic when it interferes with life functions, and burnout is an interference. Therefore, teacher burnout will be the primary focus of this article. Rumschlag (2017) noted that burnout is a "chronic phenomenon" that, if not handled correctly, leads to "poor quality student interaction, counterproductive instruction, increased absenteeism, which eventually leads to

teacher attrition" (p. 22). Therefore, it seems important to learn how to handle it properly to avoid burnout proactively.

About half of beginning teachers leave the profession in their first five years, and another third of all teachers plan to exit soon (Brasfield et al., 2019; Rumschlag, 2017). Attrition can create problems within education. With such alarming attrition rates, the teaching profession faces shortages, poor quality instruction, and poor student achievement (Ronfeldt et al., 2013). The issue of teachers being so disgruntled that they leave the profession creates problems for the many involved in the education system, from administrators to staff and students. Thus, educational leaders and developers continue to

pursue preventions and interventions to combat stress leading to burnout leading to attrition (Maslach et al., 2001). Researchers too are persistent in studying the issue to understand how to remediate and prevent burnout. To identify burnout treatment strategies, first, burnout needs to be understood.

There have been a few accepted ways to study burnout. The most widely applied burnout framework is the MBI, which measures emotional exhaustion, depersonalization, and accomplishment (Maslach, 1982; Maslach & Jackson, 1981; Pines & Maslach, 1980).

### **Emotional Exhaustion**

Maslach et al. (2001) proclaim that emotional exhaustion “is the central quality of burnout and [its] most obvious manifestation of” (p. 402). When people describe burnout in themselves or others, they most often refer to exhaustion (Chang, 2009). Emotional exhaustion entails feeling emotionally overextended and depleted of resources (Evers et al., 2004), and occurs when one feels bereft of anything to give or unable to push oneself further. Stress from high job demands closely relates to the onset of emotional exhaustion (Taris et al., 2005; Wright & Cropanzano, 1998). Thus, job demands and lack of adequate time and resources to complete tasks push workers beyond their limits, causing exhaustion. Although emotional exhaustion is the most prominent element of burnout, it does not capture the whole essence of the syndrome.

### **Depersonalization**

Depersonalization has been described as an attempt to distance individuals from their qualities, their work, those they work with, and the benefactors of their work (Maslach et al., 2001). It further entails developing poor opinions of others, expecting the worst from them, and disliking them (Benita et al., 2019). With teachers, the negative feelings formed from depersonalization are often projected on the students. Therefore, depersonalization can strain the teacher-student relationship and cause issues in building connections, garnering engagement, and misbehavior (Benita et al., 2019). Shen et al. (2015) explain that depersonalization leads a teacher to become detached and less involved in preparation and class activities, which causes

students’ views of schools to deteriorate. The previously mentioned issues are concerning, so depersonalization is a core component of the burnout framework.

### **Accomplishment**

Accomplishment is defined as feeling proficient at performing one’s duties (Maslach et al., 2001). It connects to the other two aspects of burnout: “It is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom one is indifferent” (Maslach et al., p. 403, 2001). Schnaider-Levi et al. (2020) identify that psychological and social factors, as well as organizational and environmental conditions, contribute to burnout and personal accomplishment through a lack of opportunity to accomplish tasks that align with one’s job or purpose, lack of social support, and recognition, lack of teacher autonomy, and inadequate funding. In a study about nursing burnout, Whittington et al. (2020) found that “fostering individual responsibility and organizational culture toward recognizing personal accomplishment yields positive results for the patient, employee, and organization” (p. 417). If such findings are transferable to education, there could be benefits to promoting personal accomplishment to help students, teachers, and schools.

Educator burnout can negatively affect both teachers and students (DiCarlo et al., 2020; Shen et al., 2015; Turner & Theilking, 2019). One such negative effect is that teacher burnout can lower student motivation (Shen et al., 2015). Teachers experiencing burnout may be too emotionally exhausted to generate inspiration and excitement for their students. Absenteeism is another issue that stems from exhaustion, so the combination of low-energy instruction and frequent substitutes also leads to low student motivation (Bermejo Toro & Prieto Ursúa, 2014; Sezgin et al., 2014; Yu et al., 2015). Additionally, negative teacher wellbeing can “lead to negative classroom environments and poor academic outcomes for students” (DiCarlo et al., 2020, p 485). Mentally tired teachers will not be motivated and have the energy needed to give quality effort, reflecting student performance. Ultimately schools and teachers exist to serve the

students, but districts must take care of teachers to result in quality education.

One topic of interest in social-emotional learning in education is positive psychology. In general, positive psychology is the study of positive emotions and positive character (Seligman & Csikszentmihalyi, 2000). Seligman et al. (2009) asserted that schools hold great potential for evidence-based learning of emotional wellbeing initiatives, given the amount of time students spend there and the likelihood of a more controlled environment. In addition, educational institutions can be a great place for emotional learning because students spend a lot of time in schools, providing a more controlled environment than outside. So, school experiences can be impactful in the development of social-emotional wellbeing.

Unfortunately, current literature suggests that elements of positive psychology are frequently absent from the classroom (Weiland, 2021). Therefore, educators are either failing to employ positive psychology or are not recognizing it. This lack of evidence with teachers' use of positive psychology in instruction makes it difficult for researchers to explore its effects on teacher burnout.

Lastly, although many positive psychology strategies have been studied, it has not been clearly identified which tenets of positive psychology are most related to teacher burnout. MacIntyre et al. (2019) claimed that their study was one of the first to use the positive psychology framework of PERMA to analyze teacher wellbeing. A primary goal of the PERMA framework is to have a measurable scale to help identify positive psychology elements that educators can use to create interventions to improve wellbeing (Kern et al., 2014). However, only a small body of research has applied PERMA to education (Kern et al., 2014; Lovett & Lovett, 2016). Therefore, there is a dearth of empirical data correlating teacher wellbeing to burnout.

Bringing more attention to positive psychology in the classroom and its influences on teacher wellbeing can shed new light on strategies that could proactively combat teacher burnout. However, to best focus on potential strategies, it would be worthwhile to identify

which aspects of positive psychology relate to teacher burnout.

The purpose of this study was to explore the possible relationships between positive psychology traits on teacher burnout elements. In addition, the study will explore correlational and predictive relationships, focusing on the links between engagement with positive psychology and teacher burnout levels.

### Research Questions

The following research questions were addressed in the study:

- 1) What are the demographics of participants in this study?
- 2) To what extent are there statistically significant relationships between indicators of burnout (a- emotional exhaustion, b- depersonalization, c- accomplishment) and positive psychology (a- positive emotion, b- engagement, c - relationships, d- meaning, and e- accomplishment) in teachers?
- 3) To what extent do demographics (a- gender, b- race, c- years of service, d- subject taught) and positive psychology (a- positive emotion, b- engagement, c- relationships, d- meaning, e- accomplishment) predict burnout (a- emotional exhaustion, b- depersonalization, c- accomplishment)?

This study's positive psychology conceptual framework will be Martin Seligman's (2011) PERMA Model of wellbeing. The framework of positive psychology is explained in the subsequent section.

### Positive Psychology

The founders of positive psychology described it as the study of positive emotion, character, and institutions (Seligman & Csikszentmihalyi, 2000). An important institution ripe for the study of positivism is our educational system. Pluskota (2014) summarized that a major goal of positive psychology is to provide a theoretical framework of the good life in general and practical solutions to empower a wider range of

people beyond just students to better their mental and physical wellbeing.

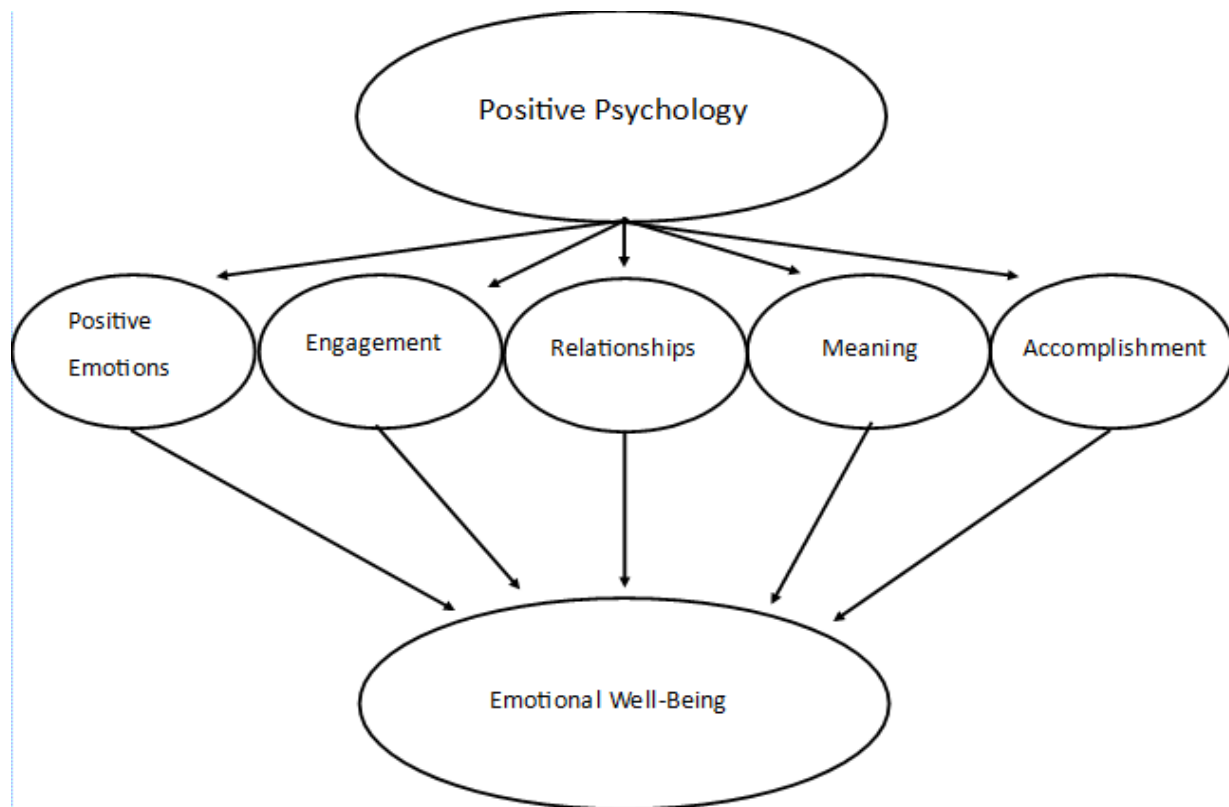
### PERMA Model

Seligman (2011) refined his framework to developed the PERMA model of wellbeing, which is comprised of five categories that define human flourishing. These include positive emotions, engagement, relationships, meaning, and accomplishment. Seligman (2011) chose these elements because 1) they met the criteria of contributing to wellbeing; 2) people pursue them independently of the other elements; 3) they can be defined and measured independently of other elements. To measure the PERMA positive psychology, which served as this study's theoretical framework, Butler and Kern (2016) created the PERMA Profiler measure. The PERMA framework has also been modified into a specific Workplace PERMA Profiler to focus on positive psychology at work instead of overall life (Kern, 2014). In this study,

the Workplace PERMA Profiler will measure teachers' positive psychology in their role as educators. A brief description of each the PERMA elements follows. Positive emotions involve pleasant feelings such as happiness, contentment, and joy (Kern, 2014). Negative emotions are not to be ignored, as they are included in the measurement tool, but the focus and ability to foster positive emotions are the PERMA framework's primary elements. Engagement has been defined as being immersed, involved, or interested in a particular task, institution, or cause (Kern, 2014). Khaw and Kern (2015) identify relationships as feelings of being a part of a community, being cared for by others, and being satisfied with one's societal system. Meaning refers to having a purpose, direction, and a sense that one's work matters in the grander scheme of things (Khaw & Kern, 2015). Kern (2014) states that "Accomplishment can be objective, marked by honors and awards received, but feelings of mastery and achievement are also important.

**Figure 1.1**

Diagram of Positive Psychology PERMA Conceptual Framework



## METHODOLOGY

Employing Seligman's (2011) positive psychology framework, this study sought to discern any impact that positive psychology traits might have on burnout indicators in teachers. Identifying aspects of positive psychology that could predict teachers' resilience to burnout may assist in the development of positive psychology strategies for intervention and prevention of burnout, including in teacher preparatory programs and in-service professional development.

### Research Design

The following research used a quantitative design based on objectivist epistemology and post-positivist theoretical perspective. It employed a survey research design. The survey instrument (Appendix B) was generated from a combination of two existing surveys, the Maslach Burnout Inventory- Educator Survey (MBI-ES) (1986) and the PERMA Workplace Profiler (Kern, 2014), as well as some researcher-designed demographic questions. Lastly, the researcher created and added two questions to collect information on the impact of the global COVID-19 pandemic.

### Data Collection

Data were collected on participant demographics, positive psychology wellbeing, and levels of burnout using the Qualtrics online survey program. The program was set such that that data

collected could not be traced back to individual participants, ensuring anonymity.

Permission to send the research survey to teachers was obtained by personal communication with building leadership in the participating schools. The survey link was sent via recruitment email (see Appendix A) to all teaching staff in the participating schools, who were asked to provide their individual informed consent (see Appendix B). The recruitment email contained information about the study and the web link to the survey.

### Sample and Participants

Participants for this study were classroom teachers in secondary educational institutions in the Midwestern United States. A convenience sample strategy (Creswell & Crewell, 2018), based on participants' willingness and availability, was used as a recruitment tool. Participation in the survey was voluntary, and no penalty or compensation was given. To qualify for participation in the study, participants were expected to meet the criteria of being a public secondary classroom teacher.

A total of 145 teachers participated in this study. Participants' demographics indicate that 57.2% of participants identified as female, 93.8% identified their race as White, 26.9% have taught for 6-10 years, and 22.1% teach mathematics. Additional participant information is included in Table 1.1.

**Table 1.1** Participant Frequency Distribution (n =145)

	Variable	n	% of sample
Gender	Male	62	42.8
	Female	83	57.2
Race	Hispanic	4	2.8
	Black, Non-Hispanic	3	2.1
	White, Non-Hispanic	136	93.8
	Race Unknown	1	.7
	Other	1	.7
Years of Teaching	1 or less	4	2.8
	2 to 5	16	11.0
	6 to 10	39	26.9

Subject	11 to 15	28	19.3
	16 to 20	26	17.9
	More than 20	32	22.1
	Math	32	22.1
	Science	17	11.7
	English	19	13.1

**Table 1.1 Continued**

Variable	n	% of sample
Social Studies	18	12.4
Foreign Language	4	2.8
Art/Music	6	4.1
Physical Education	10	6.9
Special Education	27	18.6
Career Readiness	12	8.3

**Variables**

The variables in this study are derived from Seligman's (2011) PERMA framework of positive psychology and Maslach's (1981) burnout inventory. A correlation analysis of positive psychology variables and burnout variables was conducted to see if there is any relationship between positive psychology traits and indicators of burnout. Moreover, a predictive analysis was conducted to see if demographics and positive psychology have any predictive

power on levels of burnout. The demographics and positive psychology were the independent variables, while the burnout indicators (emotional exhaustion, depersonalization, accomplishment) were the dependent variables.

**Summary of Variables**

Table 1.2 summarizes the variables used in this study, how each is measured, and the research questions in which the variable was used.

**Table 1.2** List of Variables Used in Research Questions

Variable	Type In Regression Model	Type of Measure	Research Questions
Demographics			
Age	IV	Continuous	1
Gender	IV	Nominal	1,3
Race	IV	Nominal	1,3
Years of Service	IV	Continuous	1,3
Subject Taught	IV	Nominal	1,3
Positive Psychology			
Positive Emotion	IV	Continuous	2,3
Engagement	IV	Continuous	2,3
Relationship	IV	Continuous	2,3
Meaning	IV	Continuous	2,3
Accomplishment	IV	Continuous	2,3
Burnout			
Emotional Exhaustion	DV	Continuous	2,3
Depersonalization	DV	Continuous	2,3
Accomplishment	DV	Continuous	2,3
Meaning	IV	Continuous	2,3

Accomplishment Burnout	IV	Continuous	2,3
Emotional Exhaustion	DV	Continuous	2,3
Depersonalization	DV	Continuous	2,3
Accomplishment	DV	Continuous	2,3

### Data Analysis

Data was compiled and exported through the Qualtrics online survey program into SPSS v.27 for analysis. Any data entry with missing data was removed from the data set before analysis, or additional analyses were conducted to account for missing data. Prior to analyses, data were assessed to ensure, where appropriate to analyses, that all assumptions of data normality are met.

### Limitations

A limitation of this study was that it contained only secondary educators from two neighboring Midwestern states. Future studies may look to include educators from either elementary or higher education. Additionally, the limited geographical area of the population may hinder the generalizability of the data. Another limitation was the participants were part of a convenience sample. Those accepted to participate may be doing so because they are interested in the survey topics or for other reasons that could create bias in response.

Furthermore, the study was limited by the cross-sectional design from which data are only collected at a single point in time, and burnout and positive psychology levels can vary during a teacher's school year. More so, the self-report survey research methodological approach is a limitation in that teachers could have responded in ways that they thought were socially desirable or necessary to obtain significant results. Lastly, the brevity of the PERMA measuring tool may be a limitation as there is a small number of items for each component and no reverse coded questions.

## RESULTS

### Data Screening and Assumptions of Normality

Before conducting descriptive or inferential statistics analyses, the data were screened for missing values and illegible material. Cases were

removed where the participants did not meet the criteria for participation in this study. Results of eligibility screening revealed that of the 150 responses, 146 were eligible for further analysis.

Additional screening was performed for cases that chose "other" for gender, race, and subject taught. The screening identified that only one participant identified as "other" in the gender category. Since there was only one case, this case was removed to maintain the anonymity of the data. The removal from analysis resulted in the total cases going from 146 to 145. An additional race category of Black/Hispanic was added for the one case that specified that race. For subject taught, a few other responses needed to be reassigned. Written responses of business, technology, agriculture, or industry were recoded as Career Readiness (coded = 9). Written responses of special education, talented and gifted, and English language learning were recoded into Special Education (coded = 8). After re-coding, there was no 'other' (coded = 10) category.

Further screening was carried out to find and manage missing values. Schafer (1999) declared that a 5% or less missing data rate is inconsequential. To address the missing values, they were replaced by their respective mean values. Tabachnick and Fidell (2013) state that mean substitution for missing values is a popular method as it is conservative, but it does reduce variance. Nine items on the survey had a missing value, and seven of those nine had a missing rate of less than 5%. Two items on the survey had a missing rate of over 5% but less than 10%. Bennett (2001) supported that statistical analysis is likely to be biased when more than 10% of the data are missing. Since all the items on the survey were missing less than 10% of the data, it should be acceptable not to remove the cases with missing values from the data set. The overall mean was used to replace items that had less than 5% missing. For items with greater than 5% missing, the mean for males and females was

used to account for possible variance between genders.

With the data containing the remaining 145 cases, further analyses were conducted to determine whether the data met the assumptions of normality. Normally distributed data is necessary to perform many inferential statistics, including independent samples t-tests, one-way ANOVAs, and multiple regressions (Tabachnick & Fidell, 2012). According to Vogt and Johnson (2011), data normality can be assumed when “the dependent variable values are assumed to be normally distributed at each level of the independent variable” (p. 257). Data normality can be assessed either statistically or graphically, and two primary components of normality are skewness and kurtosis. Skewness refers to how well data is distributed symmetrically, with the mean located centrally within the distribution

(Tabachnick & Fidell, 2012). Kurtosis refers to how well data is distributed in a bell shape, focusing on the curve's height (Vogt & Johnson, 2011). A perfectly normally distributed data distribution has a skewness and kurtosis of zero.

Skew and kurtosis were analyzed for the independent and dependent variables, either ordinal or scale. The skewness and kurtosis for all variables examined were less than |2|. George and Mallery (2016) state that skewness and kurtosis values were less than |2| are acceptable to assume data normality. Therefore, the assumption of normality was satisfied for all variables in this study. The analysis results for data normality of the ordinal and scale type independent and dependent variables are reported in Table 1.3.

**Table 1.3** Assessment of Normality for Variables in the Model (n = 145)

Variable	Skew	SE of Skew	Kurtosis	SE of Kurtosis
Age	.188	.201	-1.044	.400
Years of Service	-.086	.201	-1.031	.400
Positive Emotion	-.440	.201	-.230	.400
Engagement	-.611	.201	.584	.400
Relationship	-.682	.201	.177	.400
Meaning	-.610	.201	.462	.400
Accomplishment	-.448	.201	-.335	.400
Emotional Exhaustion*	-.169	.201	-.683	.400
Depersonalization*	.860	.201	.330	.400
Accomplishment*	-.522	.201	.267	.400

\*Dependent Variable

**Frequencies and Descriptive Statistics**

Descriptive statistics were run for each variable in the study, as well as the demographic information related to the participants. Table 1.4 reports the results of the descriptive analyses for ordinal and scale type demographic data,

including gender, race, and primary subject taught recoded as dichotomous variables and the independent and dependent variables used in this study. Descriptive statistics analyzed were the range (minimum and maximum), mean, and standard deviation.

**Table 1.4** Descriptive Statistics for Demographic Data, Independent, and Dependent Variables (n = 145)

Variable	Min	Max	Mean	SD
Age <sup>a</sup>	1	4	2.52	.99
Gender (1 = Female)	0	1	.57	.50
Race (Recoded) (1 = White)	0	1	.94	.24
Years of Service <sup>b</sup>	1	6	4.05	1.43



Primary Subject in Regression (1 = Core)	0	1	.59	.49
Positive Emotion <sup>c</sup>	2.67	9	6.43	1.48
Engagement <sup>c</sup>	1.33	9.67	7.02	1.44
Relationships <sup>c</sup>	1	10	6.76	1.70
Meaning <sup>c</sup>	3.33	10	7.56	1.36
Accomplishment <sup>c</sup>	4	9.67	7.19	1.28
Emotional Exhaustion*	3	51	28.16	11.23
Depersonalization*	0	23	7.60	5.50
Accomplishment*	19	48	37.49	5.93

<sup>a</sup> Scale: 1 = 22-29, 2 = 30-39, 3 = 40-49, 4 = 50-64, 5 = 65 and older

<sup>b</sup> Scale: 1 = 1 year or less, 2 = 2-5 years, 3 = 6-10 years, 4 = 11-15 years, 5 = 16-20 years, 6 = more than 20 years

<sup>c</sup> Scale: 0 = not at all or never, to 10 = completely or always

\*Dependent Variable

### Correlations

Pearson correlation coefficients were used to determine to what extent there were relationships between variables and assess for multicollinearity among the variables in the regression analysis. Correlations address the association between two variables by representing the strength of the linear relationship between them (Vogt & Johnson, 2011). The strength of the relationship between two variables is indicated by the correlation coefficient ( $r$ ), which ranges between -1 and 1. An  $r$  value of -1.00 or 1.00 indicates perfect predictability, and less and less predictability exists as  $r$  values get closer to zero (Tabachnick & Fidell, 2012). Multicollinear variables are two variables that are too highly correlated, .9 or higher, and are considered redundant (Tabachnick & Fidell, 2012). Two assumptions must be met to conduct a correlation (Cronk, 2014). These assumptions include:

- 1) The variables must be measured on interval or ratio scales or be dichotomous nominal variables.
- 2) The variables must be normally distributed.

Both assumptions were met by the data screening and initial data analysis as described earlier. In

addition, individual correlations were conducted on both scale demographic variables and construct variables.

To answer the research question “To what extent are there statistically significant relationships between indicators of burnout and positive psychology in teachers”; Pearson correlation coefficients were computed among each of the variables positive emotion, engagement, relationship, meaning, accomplishment, emotional exhaustion, depersonalization, and accomplishment resulting in 28 correlation coefficients represented in Table 1.5. To avoid the risk of a Type I error in determining statistical significance when computing multiple correlations, the Bonferroni approach was used to determine the new level for statistical significance. The Bonferroni approach involves dividing a generally accepted alpha level (.05) by the number of correlations (.05/28), which results in a new alpha level (.0018). In this study, correlations required a  $p$ -value below .0018 to be considered statistically significant. Using .0018 as the revised and conservative significance level, 22 of the 28 correlations were deemed significant. The significant correlations are noted with an asterisk (\*) in Table 4.5.

**Table 1.5** Correlations for Research Question 3 (n = 145)

	1	2	3	4	5	6	7
1 Positive Emotion	--						
2 Engagement	.664*	--					
3 Relationship	.495*	.253	--				
4 Meaning	.661*	.572*	.248	--			



4 Subject	.079	.078	-	--							
			.071								
5 Positive	-	-	.000	-	--						
Emotion	.049	.003		.109							
6 Engagement	.087	-	.109	.002	.664	--					
		.003			*						
7 Relationships	-	-	.039	.033	.495	.253	--				
	.052	.025			*						
8 Meaning	.077	.000	-	-	.661	.572	.248	--			
			.007	.034	*	*					
9	-	.151	.048	.032	.639	.574	.320	.641	--		
Accomplishment	.013				*	*	*	*			
10 Emotional	.353	.062	.023	.152	-	-	-	-	-	--	
Exhaustion	*				.679	.392	.251	.348	.474		
					*	*		*	*		
11	.037	.096	-	.104	-	-	-	-	-	.559	--
Depersonalization			.048		.493	.306	.176	.535	.271	*	
					*	*		*	*		
12	.011	-	-	-	.529	.563	.174	.571	.472	-	-
Accomplishment		.099	.085	.076	*	*		*	*	.270	.311
											*

Note: \*  $p < .0008$  (.05/66) Bonferroni adjustment for multiple correlations to minimize chance of Type 1 error.

### Hierarchical Multiple Regression Analysis

A hierarchical multiple regression was used to determine to what extent the independent variables were statistically significant predictors of the dependent variables. The independent variables were grouped into two blocks. The first block included the demographic variables of gender, race, years of service, and primary subject taught. The second block was based on Seligman's (2011) framework of positive psychology and included the variables of positive emotion, engagement, relationship, meaning, and accomplishment.

Three specific hierarchical multiple regression analyses were conducted to determine to what extent participants' demographics (gender, race, years of service, primary subject) and positive psychology (positive emotion, engagement, relationship, meaning, accomplishment) predicted teacher burnout (emotional exhaustion, depersonalization, diminished accomplishment). The following sections report the regression analysis results on the dependent variables.

### Emotional Exhaustion

A hierarchical regression analysis was conducted on the dependent variable teacher burnout construct of emotional exhaustion. Table 1.7 provides information on the blocks in which the variables were entered into the regression analysis, the unstandardized regression coefficients ( $b$ ), the standard error for the unstandardized regression coefficients ( $SE\ b$ ), standardized regression coefficients ( $\beta$ ), and the variance ( $R^2$ ) explained for each model (block).

**Demographics (Block 1).** Block 1 included the variables gender, race, years of service, and primary subject taught. Results for the regression analysis indicated that for block 1 gender ( $\beta = .345$ ,  $p < .001$ ) was a significant predictor of emotional exhaustion,  $F(4, 140) = 5.915$ ,  $p < .001$ , accounting for less than 15% ( $R^2 = .145$ ) of the variance in emotional exhaustion.

**Positive Psychology (Block 2).** Block 2 included the variables of positive emotion, engagement, relationship, meaning, and accomplishment. Results for the regression analysis indicated that for block 2, gender ( $\beta = .300$ ,  $p < .001$ ), positive emotion ( $\beta = -.759$ ,  $p < .001$ ), relationship ( $\beta =$

.144,  $p = .025$ ), meaning ( $\beta = .205$ ,  $p = .011$ ), and accomplishment ( $\beta = -.192$ ,  $p = .018$ ) were statistically significant predictors of emotional

exhaustion,  $F(9, 135) = 23.360$ ,  $p < .001$ , accounting for less than 61% ( $R^2 = .609$ ) of the variance in emotional exhaustion.

**Table 1.7** Hierarchical Regression Coefficients for Emotional Exhaustion (n = 145)

Variable	B	95% CI for B		SE B	$\beta$	$R^2$	$\Delta R^2$
		LL	UL				
<b>Block 1- Demographics</b>						.145	.145**
Constant	18.767**	10.186	27.345	4.339			
Gender (1 = female)	7.803**	4.293	11.312	1.775	.345**		
Race (1 = white)	2.102	-5.138	9.342	3.662	.045		
Years of Service	.314	-.915	1.544	.622	.040		
Subject Taught (1 = core)	2.834	-1.308	-.720	6.387	.124		
<b>Block 2- Positive Psychology</b>						.609	.464**
Constant	47.676**	37.980	57.372	4.903			
Gender (1 = Female)	6.791**	4.322	9.260	1.249	.300**		
Race (1 = white)	3.839	-1.269	8.948	2.583	.083		
Years of Service	.246	-.614	1.107	.435	.031		
Subject Taught (1 = core)	1.135	-1.369	3.638	1.266	.050		
Positive Emotion	-5.770**	-7.183	-4.358	.714	-.759**		
Engagement	.188	-.990	1.366	.596	.024		
Relationship	.951*	.123	1.779	.419	.144*		
Meaning	1.693*	.386	3.000	.661	.205*		
Accomplishment	-1.687*	-3.075	-.300	.702	-.192*		

Note: CI = confidence interval; LL = lower limit; UL = upper limit

Note: \*  $p < .05$ ; \*\*  $p < .001$

**Depersonalization**

A hierarchical regression analysis was conducted on the dependent teacher burnout construct of depersonalization. Table 1.8 provides information on the blocks in which the variables were entered into the regression analysis, the unstandardized regression coefficients (b), the standard error for the unstandardized regression coefficients (SE b), standardized regression coefficients ( $\beta$ ), and the variance ( $R^2$ ) explained for each model (block).

**Demographics (Block 1).** Block 1 included the variables gender, race, years of service, and primary subject taught. Results for the regression

analysis indicated that for block 1 none of the variables were significant predictors of depersonalization,  $F(4, 140) = .785$ ,  $p = .537$ , accounting for less than 3% ( $R^2 = .022$ ) of the variance in depersonalization.

**Positive Psychology (Block 2).** Block 2 included the variables of positive emotion, engagement, relationship, meaning, and accomplishment. Results for the regression analysis indicated that for block 2 positive emotion ( $\beta = -2.055$ ,  $p < .001$ ) was the only statistically significant predictor of depersonalization,  $F(9, 135) = 5.503$ ,  $p < .001$ , accounting for less than 27% ( $R^2 = .268$ ) of the variance in depersonalization.

**Table 1.8** Hierarchical Regression Coefficients for Depersonalization (n = 145)

Variable	B	95% CI for B		SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
		LL	UL				
<b>Block 1- Demographics</b>						.022	.022
Constant	5.612	1.122	10.101	2.271			
Gender (1 = female)	.296	-1.541	2.132	.929	.027		
Race (1 = white)	2.143	-1.646	5.932	1.917	.094		
Years of Service	-.195	-.839	.449	.326	-.051		
Subject Taught (1 = core)	1.015	-.845	2.875	.941	.091		
<b>Block 2- Positive Psychology</b>						.268	.246*
Constant	16.909*	10.418	23.401	3.282			
Gender (1 = Female)	.141	-1.512	1.794	.836	.013		
Race (1 = white)	2.083	-1.337	5.503	1.729	.092		
Years of Service	-.259	-.836	.317	.291	-.067		
Subject Taught (1 = core)	.256	-1.420	1.932	.848	.023		
Positive Emotion	-2.055*	-3.001	-1.110	.478	-.552*		
Engagement	.147	-.641	.936	.399	.039		
Relationship	.289	-.265	.844	.874	.098		
Meaning	-.317	-1.192	.558	.569	-.074		
Accomplishment	.302	-.627	1.231	1.162	.056		

Note: CI = confidence interval; LL = lower limit; UL = upper limit

Note: \*  $p < .001$

### Accomplishment

A hierarchical regression analysis was conducted on the dependent teacher burnout construct of accomplishment. Table 1.9 provides information on the blocks in which the variables were entered into the regression analysis, the unstandardized regression coefficients (b), the standard error for the unstandardized regression coefficients (SE b), standardized regression coefficients ( $\beta$ ), and the variance (R<sup>2</sup>) explained for each model (block).

**Demographics (Block 1).** Block 1 included the variables gender, race, years of service, and primary subject taught. Results for the regression analysis indicated that for block 1, none of the

variables were significant predictors of accomplishment,  $F(4, 140) = .755$ ,  $p = .556$ , accounting for less than 3% (R<sup>2</sup> = .021) of the variance in accomplishment.

**Positive Psychology (Block 2).** Block 2 included the variables of positive emotion, engagement, relationship, meaning, and accomplishment. Results for the regression analysis indicated that for block 2 engagement ( $\beta = 1.297$ ,  $p < .001$ ) and meaning ( $\beta = 1.227$ ,  $p = .004$ ) were the statistically significant predictors of accomplishment,  $F(9, 135) = 12.106$ ,  $p < .001$ , accounting for 45% (R<sup>2</sup> = .447) of the variance in accomplishment.

**Table 1.9** Hierarchical Regression Coefficients for Accomplishment (n = 145)

Variable	B	95% CI for B		SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
		LL	UL				
<b>Block 1- Demographics</b>						.021	.021
Constant	41.223	36.392	46.074	2.449			

Gender (1 = female)	.174	-1.806	2.155	1.003	.015		
Race (1 = white)	-2.2078	-6.164	2.008	2.067	-.085		
Years of Service	-.333	-1.027	.361	.351	-.080		
Subject Taught (1 = core)	-.911	-2.917	1.094	1.014	-.076		
<b>Block 2- Positive Psychology</b>						.447	.426**
Constant	19.623**	13.538	25.709	3.077			
Gender (1 = Female)	-.406	-1.955	1.144	.784	-.034		
Race (1 = white)	-2.321	-5.527	.886	1.621	-.095		
Years of Service	-.473	-1.013	.068	.273	-.114		
Subject Taught (1 = core)	-.650	-2.222	.921	.795	.054		
Positive Emotion	.425	-.462	1.311	.448	.106		
Engagement	1.297**	.557	2.036	.374	.316**		
Relationship	-.182	-.702	.338	.263	-.052		
Meaning	1.227*	.407	2.047	.415	.282*		
Accomplishment	.376	-.495	1.247	.440	.081		

Note: CI = confidence interval; LL = lower limit; UL = upper limit

Note: \*  $p < .01$ ; \*\*  $p < .001$

### Summary Answers to Research Questions

In this section, each of the four research questions is answered using the statistical analyses' results.

#### Research Question 1

What are the demographics of participants in this study?

The sample consisted of 145 participants. The majority of the participants were between the ages of 30-39 (41.4%), followed by 40-49 (21.1%), 50-65 (21.1%), and 22-29 (14.5%). There were more female (57.2%) participants than males (42.8%). Most of the participants selected their race as White (93.8%), proceeded by Hispanic (2.8), Black/Non-Hispanic (2.1), Black /Hispanic (0.7%), and Unknown (0.7%). Participants who have taught for 6-10 years (26.9%) were in the majority, followed closely by those that have taught for more than 20 years (22.1%). Other participants have taught for 11-15 years (18.3%), 16-20 years (17.9%), 2-5 years (11.0%), and one year or less (2.8%). Lastly, the sample consisted of participants that taught math (22.1%), Special Education (18.6%), English (13.1%), Social Studies (12.4%), Science (11.7%), Career Readiness (8.3%), Physical Education (6.9%), Art/Music (4.1%), and Foreign Language (2.8%).

#### Research Question 2

To what extent are there statistically significant relationships between indicators of burnout (a- emotional exhaustion, b- depersonalization, c- diminished accomplishment) and positive psychology (a- positive emotion, b- engagement, c - relationships, d- meaning, and e- accomplishment) in teachers?

**Emotional Exhaustion.** A Pearson product correlation identified four moderate, negative, statistically significant relationships between positive psychology traits and emotional exhaustion. The strongest, negative, statistically significant correlation was between positive emotion and emotional exhaustion, followed by accomplishment, engagement, and meaning. The emotional exhaustion burnout component decreased as the positive psychology trait scores of positive emotion, engagement, meaning, and accomplishment increased.

**Depersonalization.** A Pearson product correlation identified three moderate and one weak, negative statistically significant relationships between positive psychology traits and the burnout component of depersonalization. The strongest, negative, statistically significant

correlation was between positive emotion and depersonalization, followed by meaning, engagement, and accomplishment. The depersonalization burnout component decreased as the positive psychology trait scores of positive emotion, engagement, meaning, and accomplishment increased.

**Accomplishment.** A Pearson product correlation identified four moderate, negative, statistically significant relationships between positive psychology traits and the burnout component of diminished accomplishment. The strongest, negative, statistically significant correlation was between meaning and diminished accomplishment, followed by engagement, positive emotion, and accomplishment. As the positive psychology trait scores of positive emotion, engagement, meaning, and accomplishment increased, the diminished accomplishment burnout component score decreased.

Notably, the relationship trait was the only positive psychology trait found not statistically significant with any of the burnout components.

### Research Question 3

To what extent do demographics (a- gender, b- race, c- years of service, d-subject taught) and positive psychology (a- positive emotion, b- engagement, c- relationships, d- meaning, e- accomplishment) predict burnout (a- emotional exhaustion, b- depersonalization, c- diminished accomplishment)?

**Gender.** Results from the hierarchical regression analyses revealed the demographic variable of gender was a statistically significant predictor of emotional exhaustion. This indicated that female participants were more likely to have higher levels of emotional exhaustion. Gender was not a statistically significant predictor for depersonalization or diminished accomplishment.

**Race.** Results from the hierarchical regression analyses revealed the demographic variable of race was not a statistically significant predictor for any burnout component.

**Years of Service.** The hierarchical regression analyses revealed that the demographic variable of years of service was not a statistically significant predictor for any burnout component.

**Subject Taught.** The hierarchical regression analyses revealed that the demographic variable of subject taught was not a statistically significant predictor for any burnout component.

**Positive Emotion.** The hierarchical regression analyses revealed the positive psychology variable of positive emotion was a statistically significant negative predictor for emotional exhaustion and depersonalization. This indicated that participants with higher positive emotion scores were more likely to have lower emotional exhaustion and depersonalization levels. However, positive emotion was not a statistically significant predictor of accomplishment.

**Engagement.** The hierarchical regression analyses revealed the positive psychology variable of engagement was a statistically significant positive predictor for accomplishment. This indicated that participants with higher engagement scores were more likely to have higher levels of accomplishment. However, engagement was not a statistically significant predictor of emotional exhaustion or depersonalization.

**Relationship.** Results from the hierarchical regression analyses revealed the positive psychology variable of relationship was a statistically significant positive predictor for emotional exhaustion. This indicated that participants with higher relationship scores were more likely to have higher levels of emotional exhaustion. On the other hand, relationship was not a statistically significant predictor for depersonalization or accomplishment.

**Meaning.** The hierarchical regression analyses revealed that the positive psychology variable of meaning was a statistically significant positive predictor for emotional exhaustion and accomplishment. This indicated that participants with higher meaning scores were more likely to

have higher emotional exhaustion and accomplishment levels. However, meaning was not a statistically significant predictor for depersonalization.

**Accomplishment.** The hierarchical regression analyses revealed that the positive psychology variable of accomplishment was a statistically significant negative predictor for emotional

exhaustion. This indicated that participants with higher accomplishment scores were more likely to have lower levels of emotional exhaustion. However, accomplishment was not a statistically significant predictor of depersonalization or accomplishment. Table 1.10 provides a summary of the statistically significant predictors from the full model for emotional exhaustion, depersonalization, and accomplishment.

**Table 1.10** Summary of Statistically Significant Predictors for the three burnout components.

Variable	Emotional Exhaustion	Depersonalization	Accomplishment
Gender (1 = female)	Positive Predictor		
Race (1 = white)			
Years Taught			
Subject Taught (1 = core)			
Positive Emotion	Negative Predictor	Negative Predictor	
Engagement			Positive Predictor
Relationship	Positive Predictor		
Meaning	Positive Predictor		Positive Predictor
Accomplishment	Negative Predictor		

### Discussion of Results

Educators continue to address the concerns of burnout and attrition due to many factors, including workload, self-efficacy, lack of resources, stress, and other elements added by the Covid-19 pandemic (Beltman & Poulton, 2019; L. Sokal et al., 2021). Falecki and Mann (2021) claim that “teacher wellbeing is not just an individual’s responsibility, but it is a shared organizational, community and worldwide concern” (p. 176) because burnout can lead to teachers being exhausted and have negative impacts on both teacher and student performance. The prominence and persistence of the teacher burnout problem have led to seeking remedies and preventions.

One framework for gathering more evidence for creating remedies and preventions for teacher burnout is positive psychology (Falecki & Mann, 2021; White & Waters, 2015). Positive psychology interventions that increase wellbeing and reduce depressive symptoms include developing gratitude, identifying character strengths, exploring explanatory style, setting goals, savoring positive emotions, forming positive relationships, and celebrating achievements (Seligman, 2002). Falecki and Mann (2021) proclaim that “PERMA offers a simple model to identify key interventions for

developing wellbeing” (p. 181). To help alleviate teacher burnout, research around positive psychology components and the development of interventions must continue.

This study aimed to examine which specific components of PERMA might have connections to teacher burnout to further guide research towards effective strategies for combating burnout. The statistical analysis conducted in this research shows that four of the five PERMA traits had a statistically significant correlation with burnout components. Furthermore, the results show that all five PERMA traits are statistically significant predictors of at least one burnout component. These independent variables and relationships will be discussed in detail in the sections below.

### Positive Emotion

This study indicates that positive emotion moderately correlates with all three burnout components (emotional exhaustion, depersonalization, and accomplishment). Positive emotion had the strongest correlation of all PERMA traits with emotional exhaustion and depersonalization. The correlation between positive emotion and emotional exhaustion was the strongest of all correlations examined. These findings support Williams et al. (2012) and



Galanakis et al. (2011), whose research reported that the experience of positive emotions is negatively related to work strains, such as emotional exhaustion. This study suggests that teachers with higher levels of positive emotion will experience less emotional exhaustion from work. Therefore, it may be important to inform educators about positive emotions' benefits and equip educators with strategies that may boost positive emotions. Positive emotion showed the strongest correlation of any PERMA trait, which may become a powerful device in addressing teacher burnout.

Furthermore, the results of this study indicate that positive emotion was a statistically significant negative predictor for emotional exhaustion and depersonalization. This result supports Galanakis et al. (2011), who found that positive emotions predict workplace stress. Also, other research has reported that the positive emotion of gratitude negatively predicts emotional exhaustion and depersonalization (Diener et al., 2019; Lanham et al., 2012). This study suggests that the level of positive emotion can predict how emotionally exhausted and depersonalized teachers may become. Hence, understanding one's PERMA score on positive emotion may lead to insight into how resilient one may be towards the burnout components of exhaustion and depersonalization. In turn, positively affecting one's emotions could help build burnout resilience.

### **Engagement**

This study indicates that engagement moderately correlates with all three burnout components (emotional exhaustion, depersonalization, and accomplishment). The strongest correlations were with accomplishment, followed by emotional exhaustion and depersonalization. These results support Faskhodi and Siyyari's (2018) research that also found a significant relationship between burnout and teacher work engagement. This relationship suggests that teachers with higher engagement have lower levels of burnout. Other research from Salmela-Aro et al. (2019) further supports findings of a relationship between engagement and work, in which burnout is lower in those more engaged. However, Salmela-Aro et al. (2019) explored

further and found that there can be a significant work engagement from those also experiencing burnout. Therefore, it will be important to remember that relationships are not absolute because engagement will not always lead to lower stress. For example, high levels of engagement, or even over-engagement, could negatively affect burnout (Nerstad et al., 2019). However, since a relationship between engagement and burnout is supported, engagement should be considered another potential outlet for reducing burnout.

Additionally, the results of this study indicate that engagement was a statistically significant predictor of accomplishment. Faskhodi and Siyyari's (2018) study also resulted in work engagement being a significant predictor of burnout. More specifically, it was found that the engagement characteristic of vigor was a significant predictor of teacher burnout, while absorption and dedication were not (Faskhodi & Siyyari, 2018). The current study suggests that a teacher's level of engagement could predict the level of accomplishment the teacher feels. Since a low level of accomplishment, or diminished accomplishment, is a component of burnout, it may prove fruitful to develop ways to keep teachers engaged in their work to help keep feelings of accomplishment higher.

### **Relationship**

Results of this study indicate that relationship has no statistically significant correlation with the burnout components. This is an interesting result because it is contradictory to previous research. For example, Fiorilli et al.'s (2019) study found that the more the relationship in the workplace the teachers perceived, the less they experienced burnout. Similarly, Mérida-López et al.'s (2020) analysis suggested that relationships with colleagues and supervisors are associated with teacher intention to leave, which is closely related to burnout. However, none of the research that was reviewed regarding relationships and burnout discussed there not being an association between the two. Therefore, this research's finding that no significant correlation exists warrants further thought and study. Perhaps, since the Covid-19 pandemic is limiting human

interactions, the relationship aspect of the workplace is becoming less meaningful.

However, the results of this study indicate that relationship was a statistically significant positive predictor for emotional exhaustion. This result supports other research, such as Carlotto and Câmara (2019), whose findings suggest that interpersonal relationships indicate teacher burnout. In addition, the current study suggests that a teacher's workplace relationship level may predict their emotional exhaustion such that if relationships increase, then emotional exhaustion would also increase. This result may be that because of the interpersonal relationships developed at work, teachers may feel more emotional exhaustion because they are worried about their circumstances and those they have developed relationships. Furthermore, it could be hypothesized that the upkeep and development of relationships at work take work and can be an additional strain on other work responsibilities.

### **Meaning**

This study indicates that meaning has a moderate correlation with all three burnout components (emotional exhaustion, depersonalization, and accomplishment). Meaning had the strongest correlation of all the PERMA traits with accomplishment. In support of these findings, Salmela-Aro et al. (2019) found that teachers who see their work as meaningful scored low in their burnout components. Roohani and Dayeri (2019) studied meaning as a different form of motivation and found several correlations between meaning and the burnout components. Of note, intrinsic motivation negatively correlated with emotional exhaustion (Roohani & Dayeri, 2019). The current study indicates a relationship between teachers finding meaning in their work and levels of burnout. Consequently, developing and maintaining meaning for teachers may be an important factor in reducing burnout.

Moreover, the results of this study indicate that engagement was a statistically significant positive predictor of emotional exhaustion and accomplishment. Roohani and Dayeri (2019) analyzed the predictive nature of meaning on burnout through motivation components and found no significant predictive relationship for emotional exhaustion, but the

intrinsic motivation was a significant predictor of accomplishment. The current study differs from these previous findings on emotional exhaustion but supports the results on accomplishment. Differences may be due to Roohani and Dayeri (2019) breaking meaning into smaller components, whereas the current analysis used meaning as a broader variable. Allan et al. (2019) also found, more generally, that meaningful work was a negative predictor of burnout.

Another interesting finding is that the analysis implies that teachers with more meaning in their work may have higher emotional exhaustion levels. This may be due to the added internal pressure a teacher may place on themselves for wanting to be successful in their profession because they find their work meaningful.

### **Accomplishment**

Results of this study indicate that accomplishment has a statistically significant correlation with all three burnout components, which was moderate for emotional exhaustion and accomplishment and weak for depersonalization. The findings from the present study complement previous work from Daumiller et al. (2021), which found a negative relationship between achievement goals and burnout and a positive relationship between achievement avoidance and burnout. These results suggest that teachers with a higher perception of accomplishment will show lower levels of burnout. Therefore, strategies for increasing perceived accomplishment should be sought out or developed to limit the feelings of burnout in teachers.

Finally, the results of this study indicate that accomplishment was a statistically significant negative predictor of emotional exhaustion. Sijbom et al. (2019) research provided similar results, noting that employee mastery may predict burnout in a way that more achievement reduces burnout. The current study suggests that the level of accomplishment a teacher feels could predict how emotionally exhausted they may become. Hence, teachers need to develop a sense of accomplishment to reduce emotional exhaustion, which could be done through clear tasks and attainable goals (Daumiller et al., 2021; Sijbom et al., 2019). If

teachers are not given a chance to succeed and meet expectations placed upon them, they may be more likely to experience burnout.

### **Recommendations for Practice**

The results of this study indicate connections between positive psychology traits and burnout components in secondary educators. Pressley (2021) has reported that the COVID-19 pandemic has added to the burnout issue that educators are facing. This current study is unique because it is one of few to address burnout through the lens of positive psychology. Furthermore, this research looks to understand the connection between positive psychology traits and their relationship to burnout components. Identifying associations between positive psychology and burnout can lead to the further development of positive psychology research and strategies that can be used to reduce or avoid burnout. Understanding what positive psychology traits may impact burnout the most can lead to more focused creation of education and practices that can be taught to current and preservice teachers to help them decrease their likelihood of burnout. The findings from this study could help further educate teachers in positive psychology strategies and assist in initiatives designed to reduce burnout and retain teachers. This study can provide recommendations for school leaders, teachers, and programs developing future teachers.

School leadership and teacher preparatory programs can educate staff and future teachers on positive psychology, mainly what it is and isn't, and its potential benefits. Also, once further research is conducted on best practices for implementation, leaders and prep programs can inform teachers on how to incorporate positive psychology in the classroom. Building leaders, prep programs, and teachers alike can also practice and model positive psychology. Positive psychology strategies should bolster positive emotion, engagement, and accomplishment, as those traits had the strongest relationships with burnout, as found in this study.

### **Recommendations for Future Research**

This study added to the literature on teacher burnout and positive psychology. This study is

unique in that minimal studies have used the PERMA positive psychology traits to explore how to manage teacher burnout. Furthermore, this study is one of few that have looked for correlation and predictive relationships between the PERMA features and burnout components to help identify which positive characteristics significantly impacted burnout. Similar studies could be conducted to continue using the PERMA framework to address teacher burnout and gather data from more diverse populations. In addition, since positive emotion, engagement, and accomplishment have been identified as key traits, further research needs to identify strategies that teachers can use in and out of the classroom to improve those positive psychology traits. And finally, once those strategies are identified, further research can explore how to best implement those strategies in buildings and classrooms.

### **Conclusion**

This study shows connections between positive psychology traits and burnout components in secondary teachers. Seligman's (2011) PERMA model of wellbeing was used to identify variables and their relationship to participants. By isolating individual traits of positive psychology relationships that emerged, a better understanding of how each influences teacher burnout materialized. The researcher developed a survey instrument using existing survey instruments for PERMA in the workplace and burnout in education. Data were gathered via an online survey, and statistical analyses were conducted. A hierarchical regression analysis identified positive emotion, engagement, relationship, meaning, and accomplishment as statistically significant predictors of one or more burnout components. There are multiple ways in which the results of this study can influence current industry practices and inform future research.

### **REFERENCES**

1. Allan, B. A., Owens, R. L., & Douglass, R. P. (2019). Character Strengths in Counselors: Relations With Meaningful Work and Burnout. *Journal of Career Assessment*, 27(1), 151–166.

- <https://doi.org/10.1177/1069072717748666>
2. Atmaca, Ç., Rızaoğlu, F., Türkdogan, T., & Yaylı, D. (2020). An emotion focused approach in predicting teacher burnout and job satisfaction. *Teaching and Teacher Education*, 90. <https://doi.org/10.1016/j.tate.2020.103025>
  3. Beltman, S., & Poulton, E. (2019). "Take a step back": Teacher strategies for managing heightened emotions. *Australian Educational Researcher* (Springer Science & Business Media B.V.), 46(4), 661–679. <https://doi.org/https://doi-org.cowles-proxy.drake.edu/10.1007/s13384-019-00339-x>
  4. Benita, M., Butler, R., & Shibaz, L. (2019). Outcomes and antecedents of teacher depersonalization: The role of intrinsic orientation for teaching. *Journal of Educational Psychology*, 111(6), 1103–1118. <https://doi.org/10.1037/edu0000328>
  5. Bermejo Toro, L., & Prieto Ursúa, M. (2014). Absenteeism, burnout and symptomatology of teacher stress: sex differences. *International Journal of Educational Psychology*, 3(2), 175–201. <https://doi.org/10.4471/ijep.2014.10>
  6. Brasfield, M. W., Lancaster, C., & Xu, Y. J. (2019). Wellness as a Mitigating Factor for Teacher Burnout. *Journal of Education*, 199(3), 166–178. <https://doi.org/10.1177/0022057419864525>
  7. Butler, J., & Kern, M. L. (2016). The PERMA-Profil: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3), 1–48. <https://doi.org/10.5502/ijw.v6i3.526>
  8. Carlotto, M. S., & Câmara, S. G. (2019). Prevalence and predictors of burnout syndrome among public elementary school teachers. *Análise Psicológica*, 37(2), 135–146. <https://doi.org/10.14417/ap.1471>
  9. Chang, M. L. (2009, September). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, Vol. 21, pp. 193–218. <https://doi.org/10.1007/s10648-009-9106-y>
  10. Cronk, B. (2014). *How to use SPSS* (8th ed.). Glendale, CA: Pyczak Publishing.
  11. Daumiller, M., Rinas, R., Hein, J., Janke, S., Dickhäuser, O., & Dresel, M. (2021). Shifting from face-to-face to online teaching during COVID-19: The role of university faculty achievement goals for attitudes towards this sudden change, and their relevance for burnout/engagement and student evaluations of teaching quality. *Computers in Human Behavior*, 118. <https://doi.org/10.1016/j.chb.2020.106677>
  12. Demir, S. (2018). The relationship between psychological capital and stress, anxiety, burnout, job satisfaction, and job involvement. *Eğitim Araştırmaları - Eurasian Journal of Educational Research*, 2018(75), 137–154. <https://doi.org/10.14689/ejer.2018.75.8>
  13. DiCarlo, C. F., Meaux, A. B., & LaBiche, E. H. (2020). Exploring Mindfulness for Perceived Teacher Stress and Classroom Climate. *Early Childhood Education Journal*, 48(4), 485–496. <https://doi.org/10.1007/s10643-019-01015-6>
  14. Diener, E., Thapa, S., & Tay, L. (2019). Annual Review of Organizational Psychology and Organizational Behavior Positive Emotions at Work. *Annu. Rev. Organ. Psychol. Organ. Behav.* 2020, 7, 451–477. <https://doi.org/10.1146/annurev-orgpsych-012119>
  15. Evers, W. J. G., Tomic, W., & Brouwers, A. (2004). Burnout among teachers: Students' and teachers' perceptions compared. *School Psychology International*, 25(2), 131–148. <https://doi.org/10.1177/0143034304043670>
  16. Falecki, D., & Mann, E. (2021). Cultivating Teacher Resilience International Approaches, Applications and Impact. In C. F. Mansfield (Ed.), *Cultivating Teacher Resilience* (pp. 175–191). Fremantle, Australia: Springer.
  17. Faskhodi, A. A., & Siyyari, M. (2018). Dimensions of work engagement and teacher burnout: A study of relations among Iranian EFL Teachers. *Australian Journal of Teacher Education*, 43(1), 78–93. <https://doi.org/10.14221/ajte.2018v43n1.5>
  18. Fiorilli, C., Benevene, P., De Stasio, S., Buonomo, I., Romano, L., Pepe, A., & Addimando, L. (2019). Teachers' Burnout: The Role of Trait Emotional Intelligence and Social Support. *Frontiers in Psychology*, 10.

- <https://doi.org/10.3389/fpsyg.2019.02743>
19. Galanakis, M., Galanopoulou, F., & Stalikas, A. (2011). Do positive emotions help us cope with occupational stress? *Europe's Journal of Psychology*, 7(2), 221–240. Retrieved from [www.ejop.org](http://www.ejop.org)
  20. Kern, M. L. (2014). The Workplace PERMA Profiler. Retrieved from [https://docs.google.com/forms/d/1eamBshwjTjyQDsWG72qum8Czi\\_J2lIZ3Q7r5FE5ojEA/viewform?usp=sen](https://docs.google.com/forms/d/1eamBshwjTjyQDsWG72qum8Czi_J2lIZ3Q7r5FE5ojEA/viewform?usp=sen)
  21. Kern, M. L., Waters, L., Adler, A., & White, M. (2014). Assessing employee wellbeing in schools using a multifaceted approach: associations with physical health, life satisfaction, and professional thriving. *Psychology*, 05(06), 500–513. <https://doi.org/10.4236/psych.2014.56060>
  22. Khaw, D., & Kern, M. L. (2015). A cross-cultural comparison of the PERMA model of well-being. *Undergraduate Journal of Psychology at Berkeley*, 1, 1–22. Retrieved from <http://ujpb.org/a-cross-cultural-comparison-of-the-perma-model-of-well-being/>
  23. Lanham, M. E., Rimsky, L. S., & Weill, S. R. (2012). How Gratitude Relates to Burnout and Job Satisfaction in Mental Health Professionals Mark S. Rye. *Journal of Mental Health Counseling*, 34, 341–354.
  24. Lovett, N., & Lovett, T. (2016). Wellbeing in Education: Staff Matter. *International Journal of Social Science and Humanity*, 6(2), 107–112. <https://doi.org/10.7763/ijssh.2016.v6.628>
  25. MacIntyre, P. D., Ross, J., Talbot, K., Mercer, S., Gregersen, T., & Banga, C. A. (2019). Stressors, personality and wellbeing among language teachers. *System*, 82, 26–38. <https://doi.org/10.1016/j.system.2019.02.013>
  26. Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach burnout inventory. Scarecrow Education.
  27. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397–422.
  28. Mérida-López, S., Sánchez-Gómez, M., & Extremera, N. (2020). Leaving the Teaching Profession: Examining the Role of Social Support, Engagement and Emotional Intelligence in Teachers' Intentions to Quit. *Psychosocial Intervention*, 29(3), 141–151. <https://doi.org/10.5093/PI2020A10>
  29. Nerstad, C. G. L., Wong, S. I., & Richardsen, A. M. (2019). Can engagement go awry and lead to burnout? The moderating role of the perceived motivational climate. *International Journal of Environmental Research and Public Health*, 16(11). <https://doi.org/10.3390/ijerph16111979>
  30. Pluskota, A. (2014). The application of positive psychology in the practice of education. *SpringerPlus*, 3(1), 1–7. <https://doi.org/10.1186/2193-1801-3-147>
  31. Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, 50(5), 325–327. <https://doi.org/10.1016/j.jclinepi.2006.07.015>
  32. Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How Teacher Turnover Harms Student Achievement. *American Educational Research Journal*, 50(1), 4–36. <https://doi.org/10.3102/0002831212463813>
  33. Roohani, A., & Dayeri, K. (2019). On the Relationship between Iranian EFL Teachers' Burnout and Motivation: A Mixed Methods Study Iranian Journal of Language Teaching Research. *Iranian Journal of Language Teaching Research*, 7(1), 77–99. <https://doi.org/10.30466/ijltr.2019.120634>
  34. Rumschlag, K. E. (2017). Teacher burnout: a quantitative analysis of emotional exhaustion, personal accomplishment, and depersonalization. *International Management Review*, 13(1).
  35. Salmela-Aro, K., Hietajärvi, L., & Lonka, K. (2019). Work Burnout and Engagement Profiles Among Teachers. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02254>
  36. Schnaider-Levi, L., Ganz, A. B., Zafrani, K., Goldman, Z., Mitnik, I., Rolnik, B., & Lev-Ari, S. (2020). The effect of inquiry-based stress reduction on teacher burnout: A controlled trial. *Brain Sciences*, 10(7), 1–9. <https://doi.org/10.3390/brainsci10070468>
  37. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). *Positive-Psychology: An*

- Introduction. *American Psychologist*, 55(1), 5–14. <https://doi.org/doi:10.1037//0003-066X.55.1.5>
38. Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293–311. <https://doi.org/10.1080/03054980902934563>
  39. Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
  40. Sezgin, F., Koşar, S., Kılınc, A. Ç., & Öğdem, Z. (2014). Teacher Absenteeism in Turkish Primary Schools: A Qualitative Perspective from School Principals\*. *International Online Journal of Educational Sciences*, 6(3), 612–625. <https://doi.org/10.15345/iojes.2014.03.010>
  41. Shen, B., McCaughtry, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology*, 85(4), 519–532. <https://doi.org/10.1111/bjep.12089>
  42. Sijbom, R. B. L., Lang, J. W. B., & Anseel, F. (2019). Leaders' achievement goals predict employee burnout above and beyond employees' own achievement goals. *Journal of Personality*, 87(3), 702–714. <https://doi.org/10.1111/jopy.12427>
  43. Sokal, L., Trudel, L. E., & Babb, J. (2021). I've had it! Factors associated with burnout and low organizational commitment in Canadian teachers during the second wave of the COVID-19 pandemic. *International Journal of Educational Research Open*, 2–2, 100023. <https://doi.org/10.1016/j.ijedro.2020.100023>
  44. Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.) Needham Heights, MA: Allyn and Bacon.
  45. Taris, T. W., Le Blanc, P. M., Schaufeli, W. B., & Schreurs, P. J. G. (2005). Are there causal relationships between the dimensions of the Maslach Burnout Inventory? A review and two longitudinal tests. *Work and Stress*, 19(3), 238–255. <https://doi.org/10.1080/02678370500270453>
  46. Taylor, S. G., Roberts, A. M., & Zarrett, N. (2021). A brief mindfulness-based intervention (bMBI) to reduce teacher stress and burnout. *Teaching and Teacher Education*, 100. <https://doi.org/10.1016/j.tate.2021.103284>
  47. Turner, K., & Theilking, M. (2019). Teacher well-being: Its effects on teaching practice and student learning. In *Issues in Educational Research* (Vol. 29).
  48. Vogt, W. P., & Johnson, R. B. (2011). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences*. Thousand Oaks, CA: Sage Publications.
  49. Weiland, A. (2021). Teacher well-being: Voices in the field. *Teaching & Teacher Education*, 99.
  50. White, M. A., & Waters, L. E. (2015). A case study of 'The Good School:' Examples of the use of Peterson's strengths-based approach with students. *Journal of Positive Psychology*, 10(1), 69–76. <https://doi.org/10.1080/17439760.2014.920408>
  51. Whittington, K. D., Shaw, T., Mckinnies, R. C., & Collins, S. K. (2020). Promoting personal accomplishment to decrease nurse burnout. *Nurse Leader*, 416–420. <https://doi.org/DOI:10.1016/j.mnl.2020.10.008>
  52. Wright, A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology Psychological Association, Inc*, 83(3), 486–493.
  53. Yu, X., Wang, P., Zhai, X., Dai, H., & Yang, Q. (2015). The Effect of Work Stress on Job Burnout Among Teachers: The Mediating Role of Self-efficacy. *Social Indicators Research*, 122(3), 701–708. <https://doi.org/10.1007/s11205-014-0716-5>

## APPEDENDICES

### APPENDIX A

Recruitment Email

Dear Educator,

My name is Martin Resner, and I am a current Drake University doctoral candidate. The purpose of this e-mail is to invite you to participate in my doctoral research dissertation study. I am asking public-school secondary

teachers to participate in an anonymous online survey, which should take approximately 15 minutes to complete.

My research involves studying positive psychology factors that could be predictors of various levels of teacher burnout. There will likely be no direct benefit to you should you choose to participate in this survey. However, the information from this study may serve to inform professional development for inservice teachers and education programs for preservice teachers. Your participation in this survey is completely voluntary, and there is no penalty for not participating. You may choose to skip any questions in the survey that you would prefer not to answer. You may also choose to stop taking the survey at any time for any reason.

Please find the survey at the link below. You will first be taken to an informed consent page, where you will receive further detailed information about the study, including estimated risks, benefits, and contact information. Following this page, the survey will begin. The link to participate will be open for three weeks and close on Sunday December 5, 2021 at 10:00 PM.

[Survey Link](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM) or  
[http://drake.qualtrics.com/jfe/form/SV\\_cD5414aX0qwKcJM](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM)

If you have any questions, please do not hesitate to contact me at any time. I am available for contact at [marty.resner@drake.edu](mailto:marty.resner@drake.edu)

Thank you very much for your time and consideration.

Respectfully,

Martin Resner

Doctoral Candidate, Drake University

## APPENDIX B

### Informed Consent and Survey Instrument **Informed Consent Agreement:**

This is a research study. Please take your time to decide if you would like to participate. Please feel free to ask questions at any time.

**Title of the Study:** Examining the relationships between positive psychology and teacher burnout in secondary education.

**Investigator:** Martin Resner, Doctoral Candidate, Drake University

### **Introduction**

The purpose of this study is to develop an understanding of the relationship between positive psychology traits and teacher burnout and if there is any predictive ability from that relationship concerning the level of teacher burnout. You are being invited to participate in this study because you meet the demographic criteria for the study. You should not participate in this study if you are not currently a secondary school teacher in the United States.

### **Procedures**

If you agree to participate, you will be asked to complete the following survey. The survey asks basic demographic questions relevant to this study. In addition, participants are asked to rate their level of agreement with statements related to positive psychology and teacher burnout.

This survey will take approximately 15 minutes to complete.

### **Risks**

The risks for participating in this survey are perceived to be minimal. However, possible risks include the time required to complete the survey and potential stress or negative emotional reaction while answering questions. If you are in any way negatively impacted during this study, please contact me at [marty.resner@drake.edu](mailto:marty.resner@drake.edu), my dissertation advisor Dr. Randal Peters at [randal.peters@drake.edu](mailto:randal.peters@drake.edu), or Drake IRB at [irb@drake.edu](mailto:irb@drake.edu) or 515-271-3472.

### **Benefits**

Should you choose to participate in the study, there will likely be no direct benefit to you. However, it is hoped that the information collected from this study may serve to inform professional development and teacher preparatory programs.



## Participant Rights

Your participation in this study is completely voluntary, and you may refuse to participate or leave the study at any time. If you decide not to participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled. You can skip any questions that you do not wish to answer.

## Confidentiality

Data collected from this study will be anonymous, and all information will be stored in a password-protected computer with no personal identifiers linking you to your responses. Results of the study will be analyzed, written, and published in aggregate form, with no personal identifiers being used in any way. The survey results will be included in the dissertation document, which will be publicly available upon completion through the Drake University Cowles Library and may later be submitted for journal publication or conference presentation. The data will be kept for three years or until the data is no longer useful.

## Contacts and Questions

You are encouraged to ask questions at any time during this study. For further information about the study, contact Martin Resner (researcher) at [marty.resner@drake.edu](mailto:marty.resner@drake.edu) or 630-479-8875 or Dr. Randal Peters (advisor) at [randal.peters@drake.edu](mailto:randal.peters@drake.edu).

If you have any questions about the rights of research subjects or research-related inquiry, please contact the IRB Administrator at [irb@drake.edu](mailto:irb@drake.edu) or 515-271-3472. The Drake Institutional Review Board approved this consent form on (insert date).

You may print a copy of this form for your records.

By clicking "I consent to participate" you voluntarily agree to participate in this study. Please understand that even after consenting and participating, you may still withdraw at any time for any reason. If you do not want to participate, please click "I do not wish to participate" or close your browser.

## Demographic Questions:

1. What is your age?
  - a. 22-29
  - b. 30-39
  - c. 40-49
  - d. 50-64
  - e. 65+
  
2. To which gender do you identify?
  - a. Male
  - b. Female
  - c. Other
  
3. What is your race?
  - a. Non-resident
  - b. Hispanic
  - c. American Indian/Alaskan Native, Non-Hispanic
  - d. Asian, Non-Hispanic
  - e. Black, Non-Hispanic
  - f. Native Hawaiian/Pacific Islander, Non-Hispanic
  - g. White, Non-Hispanic
  - h. Race or Ethnicity Unknown
  - i. Two or More Races, Non-Hispanic
  - j. Other
  
4. How many years have you been employed in the education field as a teacher?
  - a. 1 or less
  - b. 2-5
  - c. 6-10
  - d. 11-15
  - e. 16-20
  - f. More than 20
  
5. Which subject do you teach?
  - a. Math
  - b. Science
  - c. English
  - d. Social Studies
  - e. Foreign Language
  - f. Arts/Music
  - g. Physical Education
  - h. Special Education
  - i. Career Readiness
  - j. Other



### Maslach Burnout Inventory – Educators Survey

(Maslach et al., 1984)

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number “0” (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (From 1 to 6) that best describes how frequently you feel that way.

- 0 = Never
- 1 = A few times a year or less
- 2 = Once a month or less
- 3 = A few times a month
- 4 = Once a week
- 5 = A few times a week
- 6 = Every day

1. \_\_\_\_\_ I feel emotionally drained from my work.
2. \_\_\_\_\_ I feel used up at the end of the workday
3. \_\_\_\_\_ I feel fatigued when I get up in the morning and have to face another day on the job.
4. \_\_\_\_\_ I can easily understand how my students feel about things.
5. \_\_\_\_\_ I feel I can treat some students as if they were impersonal objects.
6. \_\_\_\_\_ Working with people all day is really a strain for me.
7. \_\_\_\_\_ I deal very effectively with the problems of my students.
8. \_\_\_\_\_ I feel burned out from my work.
9. \_\_\_\_\_ I feel I’m positively influencing other people’s lives through my work.
10. \_\_\_\_\_ I’ve become more callous toward people since I took this job.
11. \_\_\_\_\_ I worry that this job is hardening me emotionally.
12. \_\_\_\_\_ I feel very energetic.
13. \_\_\_\_\_ I feel frustrated by my job.
14. \_\_\_\_\_ I feel I’m working too hard on my job.
15. \_\_\_\_\_ I don’t really care what happens to some students.

16. \_\_\_\_\_ Working with people directly puts too much stress on me.
17. \_\_\_\_\_ I can easily create a relaxed atmosphere with my students.
18. \_\_\_\_\_ I feel exhilarated after working closely with my students.
19. \_\_\_\_\_ I have accomplished many worthwhile things on this job.
20. \_\_\_\_\_ I feel like I’m at the end of my rope.
21. \_\_\_\_\_ In my work, I deal with emotional problems very calmly.
22. \_\_\_\_\_ I feel students blame me for some of their problems.

Copyright ©1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab. All rights reserved in all media. Published by Mind Garden, Inc., [www.mindgarden.com](http://www.mindgarden.com)

### PERMA Workplace Profiler

(Kern, 2014)

Instructions: On the following pages are 23 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling or experience, write the number “0” (zero) in the space before the statement. If you have had this feeling or experience, indicate how often you feel it by writing the number (From 1 to 10) that best describes how frequently you think that way.

1. To what extent is your work purposeful and meaningful? (0 = Not at all; 10 = Completely)
2. How often do you feel you are making progress towards accomplishing your work-related goals? (0 = never; 10 = always)
3. At work, how often do you become absorbed in what you are doing? (0 = never; 10 = always)
4. In general, how would you say your health is? (0 = terrible; 10 = excellent)
5. At work, how often do you feel joyful? (0 = never; 10 = always)
6. To what extent do you receive help and support from coworkers when you need it? (0 = Not at all; 10 = Completely)

7. At work, how often do you feel anxious? (0 = never; 10 = always)
8. How often do you achieve the important work goals you have set for yourself? (0 = never; 10 = always)
9. In general, to what extent do you feel that what you do at work is valuable and worthwhile? (0 = Not at all; 10 = Completely)
10. At work, how often do you feel positive? (0 = never; 10 = always)
11. To what extent do you feel excited and interested in your work? (0 = Not at all; 10 = Completely)
12. How lonely do you feel at work? (0 = Not at all; 10 = Completely)
13. How satisfied are you with your current physical health? (0 = Not at all; 10 = Completely)
14. At work, how often do you feel angry? (0 = never; 10 = always)
15. To what extent do you feel appreciated by your coworkers? (0 = Not at all; 10 = Completely)
16. How often are you able to handle your work-related responsibilities? (0 = never; 10 = always)
17. To what extent do you generally feel that you have a sense of direction in your work? (0 = Not at all; 10 = Completely)
18. Compared to others of your same age and sex, how is your health? (0 = terrible; 10 = excellent)
19. How satisfied are you with your professional relationships? (0 = Not at all; 10 = Completely)
20. At work, how often do you feel sad? (0 = never; 10 = always)
21. At work, how often do you lose track of time while doing something you enjoy? (0 = never; 10 = always)
22. At work, to what extent do you feel contented? (0 = Not at all; 10 = Completely)
23. Taking all things together, how happy would you say you are with your work? (0 = Not at all; 10 = Completely)

Copyright © 2013 University of Pennsylvania.  
For commercial usage, please contact the Center

for Technology Transfer of the University of Pennsylvania

### **Pandemic Influence Questions:**

Instructions: Please rate the following question on the five-point scale with 1 = “no influence,” 2 = “some influence,” 3 = “neutral,” 4 = “moderate influence,” and 5 = “extreme influence.”

1. To what extent have your experiences as an educator during the COVID-19 pandemic influenced your responses to the questions in this survey?

Instructions: Please provide a typed response to the following prompts:

- 1: Please use the space below to tell us how your experiences as an educator during the COVID-19 pandemic influenced your mental wellbeing.
- 2: Again, thinking about the COVID-19 pandemic, help us understand how it may have changed your perspective on your job.

### **APPENDIX C**

#### **Reminder Email 1**

Dear Educator,

Recently you received an email inviting you to participate in an anonymous online study for my doctoral dissertation. Because the survey is anonymous, this reminder email is being sent to all potential participants. If you have already completed the survey, please disregard this message and thank you very much for your participation. If you have not completed the survey, please consider participating. The survey will take approximately 15 minutes to complete, and your participation is greatly appreciated.

My research involves studying positive psychology factors that could be predictors of the various levels of teacher burnout. There will likely be no direct benefit to you should you choose to participate in this survey. However, the information from this study may serve to inform professional development for inservice teachers and education programs for preservice teachers. Your participation in this survey is completely voluntary, and there is no penalty for not participating. You may choose to skip any

questions in the survey that you would prefer not to answer. You may also choose to stop taking the survey at any time for any reason.

Please find the survey at the link below. You will first be taken to an informed consent page, where you will receive further detailed information about the study, including estimated risks, benefits, and contact information. Following this page, the survey will begin. The link to participate will be open for three weeks and close on Sunday December 5, 2021 at 10:00 PM.

[Survey Link](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM) or  
[http://drake.qualtrics.com/jfe/form/SV\\_cD5414aX0qwKcJM](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM)

If you have any questions, please do not hesitate to contact me at any time. I am available for contact at [marty.resner@drake.edu](mailto:marty.resner@drake.edu)

Thank you very much for your time and consideration.

Respectfully,

Martin Resner

Doctoral Candidate, Drake University

APPENDIX D

Reminder Email 2

Dear Educator,

Recently you received an email inviting you to participate in an anonymous online study for my doctoral dissertation. Because the survey is anonymous, this reminder email is being sent to all potential participants. If you have already completed the survey, please disregard this message and thank you very much for your participation. If you have not completed the survey, please consider participating. The survey will take approximately 15 minutes to complete, and your participation is greatly appreciated.

My research involves studying positive psychology factors that could be predictors of the various levels of teacher burnout. There will likely be no direct benefit to you should you choose to participate in this survey. However, the information from this study may serve to inform professional development for inservice teachers and education programs for preservice teachers.

Your participation in this survey is completely voluntary, and there is no penalty for not participating. You may choose to skip any questions in the survey that you would prefer not to answer. You may also choose to stop taking the survey at any time for any reason.

Please find the survey at the link below. You will first be taken to an informed consent page, where you will receive further detailed information about the study, including estimated risks, benefits, and contact information. Following this page, the survey will begin. The link to participate will be open for three weeks and close on Sunday December 5, 2021 at 10:00 PM.

[Survey Link](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM) or  
[http://drake.qualtrics.com/jfe/form/SV\\_cD5414aX0qwKcJM](http://drake.qualtrics.com/jfe/form/SV_cD5414aX0qwKcJM)

If you have any questions, please do not hesitate to contact me at any time. I am available for contact at [marty.resner@drake.edu](mailto:marty.resner@drake.edu)

Thank you very much for your time and consideration.

Respectfully,

Martin Resner

Doctoral Candidate, Drake University