EXAMINING RESILIENCY AND GRIT IN SCHOOL PSYCHOLOGISTS WITH
CONCERNS TO BURNOUT

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ABSTRACT

EXAMINING RESILIENCY AND GRIT IN SCHOOL PSYCHOLOGISTS WITH

CONCERNS TO BURNOUT

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Researchers have studied the effects of burnout on School Psychologists since the 1980s. Few studies exist that attempt to measure psychometric properties adjacent to, or that may contribute to burnout as measured by the Maslach Burnout Inventory. The purpose of this study was to investigate if two constructs, resiliency, and grit, may account for variability for each of the three subscales on the Maslach Burnout Inventory: emotional exhaustion, depersonalization, and personal accomplishment. This research could help to establish effective predictors of burnout for school psychologists before the effects of burnout begin to be felt. Participants ($N = 77$) were surveyed on age ($M = 35.21$) and years of experience ($M = 8.80$) which were used as control variables. The research questionnaire surveyed participants with The Connor-Davidson Resilience Scale and the Grit Scale and used multiple linear regression methods to predict the same participants results on the subscales of the Maslach Burnout Inventory. Results indicated both resilience ($\beta = -0.22$, $p = .042$) and grit ($\beta = -0.25$, $p = .023$) had significant, negative associations towards emotional exhaustion. Resilience also had a significant positive association ($\beta = 0.31$, $p = .005$) towards feelings of personal accomplishment. Implications for this research, limitations, and future directions were discussed.

INTRODUCTION

There has been, and continues to be, a nationwide shortage of school psychologists (Castillo et al., 2014; Eklund et al., 2017; Eklund et al., 2020), as well as a shortage of qualified faculty that train school psychologists (Clopton and Haselhuhn, 2009). Job burnout in the field of School Psychology is beginning to be a well-known problem (Schilling et al., 2018), but little research has been conducted looking at internal factors relating to resistance of symptoms of burnout. Burnout is made up of three factors, "exhaustion, cynicism (a distant attitude toward the job), and reduced professional efficacy" (Maslach et al., 2001). While some studies have investigated adjacent factors such as job dissatisfaction (VanVoorhis & Levinson, 2006) and role confusion (Weiner et al., 2021), constructs like resiliency and grit (Duckworth et. al., 2007) have not been used in this sort of study. Resilience has been shown to help mitigate symptoms of burnout in a sample of teachers (Richards et al., 2016), but this phenomenon has not been measured in the school psychology population. Grit has been studied in relation to burnout for school counselors, and results indicated negative correlations between constructs of emotional exhaustion, depersonalization, and personal accomplishment (Mullen & Crowe, 2018). There is a need to compare how both resiliency and grit relate to one another, if one construct is a stronger predictor of burnout, or if the constructs are too similar for this type of analysis.

My research explored factors that may be strong predictors of school psychologists feeling the effects of burnout. Resiliency is a factor that has been studied in similar populations, but grit has not yet been studied for this nor for similar populations.

CHAPTER ONE: REVIEW OF LITERATURE

Burnout of Psychologists

Job burnout in the field of School Psychology is becoming a well-known problem (Schilling et al., 2018), but little research has been conducted in looking at internal factors that may mitigate entirely or lessen symptoms of burnout. One of the first pieces of research specifically measuring feelings of burnout for school psychologists came out in the 1980's (Reiner & Hartshore 1982) which polled a sample of school psychologists on aspects of the job which may align with burnout and interventions for the express purpose of prevention. Results indicated that less than half polled said they experienced burnout. The data from that study did not find any effects in relation to age, sex assigned at birth, nor years of experience when compared to increased feelings of burnout (Reiner & Hartshore 1982). Contrastingly, a more recent study by Schilling et. al. (2018) used the Maslach Burnout Inventory (MBI) to investigate if a sample of southeastern United States school psychologists felt any feelings of burnout. Upwards of 90% of those surveyed indicated that they had experienced burnout symptoms in their careers as measured by the MBI for Health and Human Service (MBI – HHS) workers.

A related study investigated clinical psychologists who work in private practice and their relationship with feelings of burnout (Rupert et al., 2015). This study found long working hours are often correlated to increased feelings of burnout for clinical psychologists (Rupert et al., 2015). The researchers also noted that the high-frequency, maladaptive behavior populations that psychologists typically work with may also increase feelings of burnout, and compounding this, higher caseloads may also contribute (Rupert et al., 2015).

First year school psychology graduate students were surveyed about what they perceived would be their job functions in the field (Weiner et al., 2021), and they were also asked to estimate what each function would be timewise (measured in % of total time). The data was compared to a survey given in 2012 to school psychologists working in the field. Graduate students were found to underestimate the time they would be spending making special education referrals and overestimated the time they would be engaging in mental health initiatives. Graduate students with field-based experience indicated estimates that were more closely aligned with the veteran practitioners. This data could indicate the disconnect that new school psychologists may feel when first practicing and increase chance of burnout early. It has been shown that before the third year as a working school psychologist is a critical time for retention (Schilling et al., 2018).

Another rarely studied aspect of burnout is how the effect of pressure from administration can influence a school psychologist's ability to perform key elements of their job. In a 2016 study, practicing school psychologists were rated on what impact administrators have, especially when it comes to pressure. 219 practitioners were surveyed on a measure of School Psychologist Occupational Well Being (SPOWB), qualitative information about administrative pressure (and what kinds), and the MBI. Psychologists surveyed noted that the types of pressure they may encounter were avoiding providing services due to cost (55%), lack of appropriate tools/materials (50%), not agreeing placement was least restrictive (47.5%), performing roles outside of their responsibilities (36%), administration recommending homebound or not returning to school (22%), and 18% said that at one time administration had asked them to avoid placing a student in special education despite being eligible (Boccio et al., 2016).

The study completed by Boccio (2016) also showed that one-third of practitioners felt that an administrator had pressured them into doing something unethical. Of that one-third, the most common qualifier was 39% of admin had asked the psychologist to do something unethical be it to disregard state or federal law. Many rated that these took the form of ultimatums, so it was clearly under duress and these school psychologists had feared for their jobs. Another form of pressure was qualified as lack of resources, or insufficient timelines to complete deadlines (Boccio et al., 2016). Significant findings were identified in this study such as these "pressured" psychologists were more likely to score higher on Emotional Exhaustion and Depersonalization and lower on Personal Accomplishment (Boccio et al., 2016).

There is a study that investigated if school psychologists' competencies in crisis intervention had a modulating effect on their feelings of comfort with their job (Bolnik & Brock, 2005). Results from this study indicated that while 86% of school psychologists surveyed said crisis intervention was a part of the role, 76% of that same group noted they have been involved in less than 5 total crisis events (Bolnik & Brock, 2005). This same group overwhelmingly rated themselves as being comfortable with crisis intervention, but that is a rare situation compared to the typical test and assesses a portion of a school psychologist's role. Investigating further, those that were polled on their feelings after experiencing a crisis intervention event reported feelings of exhaustion afterwards (Bolnik & Brock, 2005). What seemed to help mitigate feelings of exhaustion in these cases were school psychologists who used several different approaches of self-care (Bolnik & Brock, 2005). Considering emotional exhaustion is one of the subscales on the MBI, it may be beneficial to understand how school psychologists may feel burnt out in relation to what types of roles they perform in the field.

Burnout of Teachers, School Staff

One study investigated the impact of student disciplinary actions as a factor contributing towards burnout of teachers (Pas et al., 2010). Teacher efficacy and burnout were not related to spec ed referrals, nor were they related to referrals to the principal's office, or in school suspension (ISS). However, both teacher efficacy and increased rates of teacher burnout were related to referrals to Student Support Teams (SST) and out of school suspensions (OSS). Teacher stress is related to teacher burnout in previous studies; however, their direct relationship is modulated by other factors, especially what job activities may contribute to that stress. One posited theory is that teachers with high rates of burnout disengage, thus leading to fewer referrals overall, which this data supports. (Pas et al., 2010).

Teachers continue to be the main target of study when measuring feelings of burnout for school-based personnel (Christian Brandt et. al., 2020; Hoglund et. al., 2015; Pas et. al., 2010). Other frameworks measuring aspects of either burnout or job satisfaction have also been used as predictors to gauge teacher's feelings or give insight into why that population feels burnout differently than other members of school staff (Christian Brandt et al., 2020). This study used a Trauma Informed Care (TIC) framework to examine what aspects of student trauma can cause teachers to then experience increased levels of burnout. Results indicated that the more a teacher felt this TIC framework was effective for managing student's needs, the more compassion teachers felt for their students, and they also reported fewer overall feelings of burnout (Christian Brandt et al., 2020). However, the same study found that more tenured teachers who already had higher levels of innate feelings of burnout were not significantly affected by TIC, and reported they were more willing to leave the field due decreased feelings of decreased personal accomplishment (Christian Brandt et al., 2020). Results indicate that there are certain

frameworks that mitigate feelings of burnout of school staff, but age or time spent in the field is still unable to completely protect against built up feelings of decreased feelings of effectiveness of their work.

Other studies used the MBI to determine if high needs schools modulated how burnout affected teachers (Hoglund et al., 2015). High needs schools as defined in this study were schools that qualified as Title 1 schools, with higher than typical populations of low income and ethnically diverse students (Hoglund et al., 2015). Results indicated teachers who reported an elevated level of connectiveness with their classroom also had prominent levels of personal accomplishment as measured by the MBI. Conversely, higher rates of student's externalizing behaviors increased feelings of depersonalization, while also decreasing a teacher's feelings of personal accomplishment (Hoglund et al., 2015).

School counselors have also been studied when it comes to concepts such as burnout, perceived stress, and job satisfaction (Mullen et al., 2017). While the comparison is not completely analogous, school counselors and school psychologists typically work with similar populations. This study (Mullen et al., 2017) did not use the MBI to measure burnout, but instead used a similar measure called the Burnout Measure-Short Form (BM-SF) but results corroborated findings from Maslach et al., (2001). While the study did not use the MBI, results mirrored the Maslach et al., (2001) study in those greater levels of stress correlate with greater feelings of burnout, and decreased job satisfaction (Maslach et al., 2001; Mullen et al., 2017; Mullen at el., 2020). These school counselor studies seem to indicate feelings of burnout are similar in most ways to what has been in the few studies that have examined school psychologists using similar constructs especially when it comes to large caseloads (Mullen et al.,

2020; Rupert et al., 2015) and fewer available resources (Boccio et al., 2016; Rupert et al., 2015; Castillo et al., 2014).

Like teachers and school counselors, practitioners who specialize in Applied Behavior Analysis (ABA) also work in schools, private practice, and frequently with children who qualify for special education, or have high frequency or intensity behaviors (Gibson et al., 2009). One such study found that ABA therapists working in thirteen schools in Ireland reported that high work demands and lower levels of support from management were correlated with lower scores on the decreased personal accomplishment facet on the MBI (Gibson et al., 2009).

Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI) is a 22-item survey that measures three distinct aspects of burnout; Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) (Maslach et al., 2001). Emotional exhaustion is defined by feelings of fatigue, or decreased overall mood associated with the day-to-day responsibilities of one's job. Depersonalization relates to the emotional distance one can feel towards job responsibilities or lack of engagement. Reduced feelings of Personal Accomplishment come from perceptions of inefficacy related to the job. These three aspects combine to give a total score. The MBI has a specific survey that is used for Human Health Services employees, which may be the most accurate to use for school psychologists working in the field (Schilling et al., 2018).

Research has shown that using the MBI gives an accurate gauge of how an individual perceives their own feelings of burnout; and that using scores from the three distinct sub-constructs can paint a picture of how exactly one's work influences differing aspects of burnout (Hastings et al., 2004; Mullen et al., 2017; Schilling et al., 2021) For example, Maslach et al. (2001) reported that there are differences in how each aspect of burnout as measured by the MBI

is felt more or less strongly in relation to a sample's average age or profession. . Examples of how the three sub-constructs within the Maslach Burnout Inventory are related to work experiences are that workload is correlated to EE, feelings of control are associated with PA, and feelings of connectedness to your community are correlated to DP (Maslach et al., 2001). Also, according to this study, sex assigned at birth was not a strong predictor of overall MBI scores, but marriage status was, concluding that those identifying as single were more likely to report higher overall feelings of burnout. Furthermore, age was also negatively correlated with burnout, as younger people frequently reported feeling more burnout compared to older people (Maslach et al., 2001). These results directly bolster the idea that experience can be a mitigating factor to aspects of burnout, and that those who continue to stay in their respective fields should typically feel less burnt out as time goes by.

While studies have investigated adjacent factors such as job dissatisfaction (VanVoorhis & Levinson, 2006) and role confusion (Weiner et al., 2021) in school psychologist populations, constructs such as resiliency (Connor & Davidson, 2003) and grit (Duckworth et al., 2007) have not been examined as potential protective factors that may decrease feelings of burnout.

Resilience

Resilience is typically defined as resistance to adversity, or the ability to rebound from distressing events and is a well-known construct that has been studied in the context of positive psychology (Georgoulas-Sherry, 2022; Schwarz, 2018). Resiliency has been shown to help mitigate symptoms of burnout in a sample of teachers (Richards et al., 2016), but this phenomenon has not been measured in samples of school psychologists. Furthermore, there is a need to compare how both resiliency and grit relate to one another, if one construct is a stronger predictor of burnout, or if the constructs are too similar for this type of analysis.

Grit

Angela Duckworth first published an article extolling the virtues of what she calls "grit;" a psychometric that seeks to quantify two distinct aspects of what Duckworth calls "perseverance" and "passion for long-term goals" (Duckworth et. al., 2007). The original study's inception studied these aspects in a population of West Point Military Academy students and tracked them longitudinally. Results found that those who scored higher on the Grit scale were less likely to drop out of West Point. Other populations have been studied ranging from Ivy League university graduates to National Spelling Bee participants and in all studies IQ did not have a strong correlation to grit scores, but grit scores did have some correlation to aspects of conscientiousness on the Big 5 Personality Test (Duckworth et al., 2007).

Duckworth has studied other interactions, such as a correlation of higher grit scores to age (Duckworth et al., 2007) or higher levels of education (Duckworth et al., 2007). What has not been studied however, is how grit compares to other similar constructs like resiliency, and especially in specific populations such as school psychologists. Furthermore, connections between how grit has a negative relationship with aspects of burnout have already been made (Mullen & Crowe, 2018), but again not in a population of school psychologists.

Problem Statement

Addressing school psychologist burnout is a multi-faceted and challenging issue. While data suggests that most school psychologists practicing today experience some level of burnout, it is unknown whether there is a way to predict a professional's prior susceptibility to those feelings of burnout. With the field currently losing 5% of their school psychologists year after year and no increase in the rate at which new school psychologists are being trained, there is a deficit that can never be fully bridged (Castillo et al., 2014). This is exacerbated with what is

known about the causes of burnout for school-based staff, with research pointing to factors like increasing caseloads and student ratios as main factors, but many factors in addition to these help contribute to increased rates of emotional exhaustion (Boccio et al., 2016, Gibson et al., 2009; O'Brennan et al., 2017; Rupert et al., 2015; Reiner & Hartshorne, 1982)

Overall, school psychologists have high rates of job satisfaction, but there is a plateauing effect that comes with this, as those higher rates tend to come at the mid-point or tail-end of a career (Worrell, Skaggs, & Brown, 2006)The MBI is a valid means of measuring current levels of burnout of school psychologists, but outcomes as well as how burnout correlates with leaving the field is also unknown. Resiliency has been shown to be an effective bulwark in promoting job retention, as well as increasing emotional well-being in similar school-oriented populations (Richards et al., 2016). Grit is another construct that has been shown to predict an individual's ability to be resistant to the effects of adversity (Duckworth et al., 2007). Grit is also a strong indicator of the ability to continue to work on tasks until long-term goals have been met (Mullen & Crowe, 2018). Knowing that there is a certain level of attrition among school psychologists, isolating positive psychological constructs like resiliency or grit that by their definition bolster perseverance and response to setbacks would be beneficial to prevent that attrition. In this way, resiliency and grit could be used to predict scores on the subscales from the MBI, to determine who may, or may not, need additional support.

This study collected data on a sample of school psychologists using three measures: the Maslach Burnout Inventory, the Connor Davidson Resilience Scale, and the Grit scale. It was hypothesized that both resiliency and grit would account for a significant amount of variability within scores on the subscales of the MBI. The following research questions were posed:

1. How much variance does age and years of experience in the field account for each

    subscale on the MBI?

2. Does resiliency account for significant amounts of variability on the MBI subscales

    for school psychologists?

3. Does grit account for significant amounts of variability on the MBI subscales for

    school psychologists?

4. Which variable, resiliency, or grit, has a stronger predictive value in concerns to an

    individual's scores on the MBI subscales?

5. Do resiliency and grit have a significant amount of overlap in their predictive values,

    and if so, can they be considered the same variable in this type of analysis?

CHAPTER TWO: METHODS

Participants

Participants for this study were recruited from the "r/schoolpsychology" subreddit on Reddit.com, which is a specific community for school psychologists with an active membership of 6,867. A priori power analysis was run to determine the minimum required number of participants to find an effect. Assuming a medium effect size (Cohen's $f^2 = 0.15$), 90% power, and four predictors (controlling for age, years of experience, tested predictors grit and resilience), the minimum number of participants needed were $N = 88$ to find an effect with those parameters. A total number of $N = 77$ of participants made up the sample used in this research.

Information regarding participant demographics was gathered (See Appendix A) which included age ($M = 35.21$, $SD = 8.44$) and years of experience working in the field as a school psychologist ($M = 8.80$, $SD = 7.69$). Participants' ages ranged from 24 years of age to 63 years of age. Their years of experience in the field ranged from 1 year to 32 years.

Instruments

Maslach Burnout Inventory

The construct of burnout was measured using The Maslach Burnout Inventory - HHS (Maslach et al., 1983) which is a 22-item survey of job-related feelings. Participants were asked to rate themselves on these questions relating to feelings commonly felt during work relating to burnout and are scored using a Likert scale that ranges from 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 day*), and 6 (*Every Day*). Each question relates to a specific subscale, and those scores are then added, and a mean is calculated for each subscale. Higher scores on subscales indicate stronger feelings

of those constructs felt in the workplace. The purpose of the inventory was to measure three aspects of burnout (personal accomplishment, depersonalization, and emotional exhaustion). This iteration of the MBI is for specific use for Human and Health Services Workers. A population of staff who work with adults with intellectual disabilities were given the MBI, and factor analysis was used to determine if the individual questions were consistently valid ways to measure burnout for that staff population. Results concluded a prominent level of internal validity for all test questions the MBI as relating to the three broad constructs of emotional exhaustion ($\alpha = 0.87$), personal accomplishment ($\alpha = 0.68$), and depersonalization ($\alpha = 0.76$) (Hastings et al., 2004).

Connor Davidson Resilience Scale

Resiliency was measured using The Connor Davidson Resilience Scale (CD-RISC) which is a 25-item scale that measures trait resilience. Participants were asked to rate themselves using a Likert scale ranging from 1 (*Not true at all*), to 5 (*True nearly all the time*). Each answer was added to produce a final raw score per participant. The CD-RISC uses a five-factor model, and the main construct is described as persistence/tenacity and a keen sense of self-efficacy (Connor & Davidson, 2003). Other factors include emotional and cognitive control under pressure, adaptability/ability to bounce back, control, and meaning (Connor & Davidson, 2003). Internal consistency for the CD-RISC was determined to be $\alpha = 0.89$ using the sample for the original study (Connor & Davidson, 2003).

Grit Scale

The Grit scale (Appendix B) is a 12-point survey that has two categories in which questions primarily load from; Consistency of effort (items 1, 5, 6, 2, 4, 3) and Perseverance of effort (items 9, 10, 12, 11, 7, 8). Participants were asked to rate themselves on a Likert scale

ranging from 1 = *not at all like me* to 5 = *very much like me.* Raw scores are added for the twelve

questions and divided by the number of total questions to get a final Grit score. The Grit Scale

reports internal validity through Cronbach's alpha for the whole scale (α = .85), consistency of

effort (α = .84), and perseverance of effort (α = .78) (Duckworth et al., 2007).

Procedures

The survey that includes the demographic information, MBI, CD-RISC, and Grit scale

were entered into the online tool, Qualtrics, to prepare to gather the necessary participant data.

Requests for participation were sent out to the members of the r/schoolpsychology subreddit on

Reddit.com. The survey was available starting on 3/18/2024 and closed on 4/25/2024.

Recruitment posts included background information about the current study, goals, and

incentives to participate. There was also a paragraph including information that overviewed

informed consent, as well as the option to opt out of the survey at any time. Participants were

incentivized with a chance to enter a raffle for two $50 Amazon gift cards provided by the

primary investigator. After a participant had completed the whole survey, they had the option of

entering an email address in which to enter for a chance to receive one of the two gift cards.

Email addresses entered in this way were not tied to a specific set of survey data and existed for

the sole purpose of being able to receive the Amazon gift card if they were chosen. All surveys

with this opt-in criteria were chosen through a random number generator and emailed coinciding

with the end of the data gathering phase of this project. All data remained de-identified and

anonymous. Recruitment and consent are described in Appendix C.

Analyses

To examine research questions 1-5, three linear regression tests were conducted to determine if

any of the independent variables account for significant amounts of variance in the dependent

variables, and what correlations can be drawn between them. The independent variables included grit score, resiliency score and the dependent variables were emotional exhaustion, personal accomplishment, and depersonalization subscales on the MBI. Age and years of experience were included in the first step of each regression as control variables. The second step included age, years of experience in the field, resilience, and grit.

CHAPTER THREE: RESULTS

Emotional Exhaustion

We regressed emotional exhaustion ($M = 4.53$, $SD = 1.37$) onto resilience ($M = 92.96$, $SD = 10.32$) and grit ($M = 3.61$, $SD = 0.47$), while controlling for age and years of experience in the field (see Table 1).

Age and years of experience in the field were entered in the first step of the model, and resilience and grit were entered into the second step. The first step of the model accounted for 15% of the variance, $R^2 = .15$, $\Delta F(2, 74) = 6.66$, $p = .002$. In this first step, age was negatively and significantly associated with emotional exhaustion, $B = -1.47$, $\beta = -1.01$, $t(74) = -3.60$, $p < .001$. Also in this first step, years worked in the field was positively and significantly associated with emotional exhaustion, $B = 1.65$, $\beta = 1.00$, $t(74) = -3.55$, $p < .001$. Adding resilience and grit to the second step of the model accounted for an additional 15% of the variance, $\Delta R^2 = 0.15$, $\Delta F(2, 72) = 7.69$, $p < .001$. In this second step, resilience was negatively associated with emotional exhaustion and significant $B = -0.26$, $\beta = -0.22$, $t(72) = -2.07$, $p = .04$. Grit was negatively associated with emotional exhaustion and significant, $B = -6.27$, $\beta = -0.29$, $t(72) = -2.33$, $p = .023$. In sum, after controlling for age and years worked in the field, results indicated that both resilience and grit were negatively correlated and significantly associated with emotional exhaustion. The regression equation for predicting emotional exhaustion with the two control variables and two predictors was:

$\hat{Y} = 124.31 - 1.00(\text{age}) + 1.00(\text{years\_worked\_in\_the\_field}) - 0.22(\text{resilience}) - 0.25(\text{grit}) + \text{error}$

Table 1.

Regression Analysis Predicting Emotional Exhaustion from Age, Years Worked in the Field,

Resilience, and Grit

Predictor	*B*	*SE*	β	*t*	*p*
Step 1					
Age	-1.47	0.41	-1.00	-3.60	<.001
Years worked in the field	1.60	0.45	1.00	3.55	<.001
Step 2					
Age	-1.45	0.38	-1.00	-3.86	<.001
Years worked in the field	1.65	0.41	1.03	3.99	<.001
Resilience	-0.26	0.18	-0.22	-2.07	.042
Grit	-6.27	2.69	-0.25	-2.33	.023

Note: An additional 15% of variance was accounted for by Step 2

Depersonalization

We also regressed depersonalization ($M = 2.46$, $SD = 1.21$) onto resilience and grit, while still controlling for age and years worked in the field (see Table 2).

Age and years worked in the field were entered in the first step of the model, and resilience and grit were entered into the second step. The first step of the model accounted for 5% of the variance, $R^2 = 0.05$, $\Delta F(2, 74) = 1.76$, $p = .179$. In this first step, age was not associated with depersonalization, $B = -0.39$, $\beta = -0.59$, $t(74) = -1.85$, $p = .069$. Also in this first step, years worked in the field was not associated with depersonalization, $B = 0.43$, $\beta = 0.55$, $t(74) = 1.84$, $p = .071$. Adding resilience and grit to the second step of the model accounted for

an additional 5% of the variance, $\Delta R^2 = 0.05$, $\Delta F(2, 72) = 1.81$, $p = .171$. In this second step,

resilience was not associated with depersonalization $B = -0.01$, $\beta = -0.02$, $t(72) = -0.17$, $p = .864$.

Grit was also not associated with depersonalization, $B = -2.57$, $\beta = -0.21$, $t(72) = -1.70$, $p = .094$.

After controlling for age and years worked in the field, results indicated that both resilience and

grit were negatively correlated but not significantly associated with depersonalization. The

regression equation for predicting depersonalization with the two control variables and two

predictors was:

$\hat{Y} = 32.69 - 0.55(\text{age}) + 0.57(\text{years\_worked\_in\_the\_field}) - 0.02(\text{resilience}) - 0.21(\text{grit}) + \text{error}$

Table 2.

Regression Analysis Predicting Depersonalization from Age, Years Worked in the Field,

Resilience, and Grit

Predictor	B	SE	β	t	p
Step 1					
Age	-0.39	0.21	-0.55	-1.85	0.69
Years worked in the field	0.43	0.23	0.55	1.84	0.71
Step 2					
Age	-0.40	0.21	-0.55	-1.88	0.65
Years worked in the field	0.45	0.23	0.57	1.94	.056
Resilience	-0.01	0.07	-0.02	-0.17	.864
Grit	-2.57	1.51	-0.21	-1.70	.094

Note: An additional 5% of variance was accounted for by Step 2

Personal Accomplishment

Finally, we also regressed personal accomplishment ($M = 5.15$, $SD = 0.78$) onto resilience and grit, while still controlling for age and years worked in the field (see Table 3).

Age and years worked in the field were entered in the first step of the model, and resilience and grit were entered into the second step. The first step of the model accounted for 2% of the variance, $R^2 = 0.02$, $\Delta F(2, 74) = 1.02$, $p = .363$. In this first step, age was not associated with personal accomplishment, $B = 0.13$, $\beta = 0.18$, $t(74) = 0.59$, $p = .556$. Also in this first step, years worked in the field was not associated with personal accomplishment, $B = -0.26$, $\beta = -0.31$, $t(74) = -1.05$, $p = .299$. Adding resilience and grit to the second step of the model accounted for an additional 25% of the variance, $\Delta R^2 = 0.25$, $\Delta F(2, 72) = 12.62$, $p < .001$. In this second step, resilience was positively and significantly associated with personal accomplishment $B = 0.19$, $\beta = 0.31$, $t(72) = 2.88$, $p = .005$. Grit was positively correlated but not significantly associated with personal accomplishment, $B = 3.84$, $\beta = 0.30$, $t(72) = 2.75$, $p = .008$. After controlling for age and years worked in the field, results indicated that resilience was both positively and significantly correlated with personal accomplishment. Grit was also positively correlated with personal accomplishment, but not significantly so. The regression equation for predicting personal accomplishment with the two control variables and two predictors was:

$\hat{Y} = 8.21 + 0.16(\text{age}) - 0.38(\text{years\_worked\_in\_the\_field}) + 0.31(\text{resilience}) + 0.30(\text{grit}) + \text{error}$

Table 3.

Regression Analysis Predicting Personal Accomplishment from Age, Years Worked in the Field,

Resilience, and Grit

Predictor	B	SE	β	t	p
Step 1					
Age	0.13	0.22	0.18	0.59	.556
Years worked in the field	-0.26	0.25	0.31	-1.05	.299
Step 2					
Age	0.12	0.20	0.16	0.60	.549
Years worked in the field	-0.29	0.21	-0.36	-1.36	.178
Resilience	0.19	0.07	0.31	2.88	.005
Grit	3.84	1.40	0.30	2.75	.008

Note: An additional 25% of variance was accounted for by Step 2

CHAPTER FOUR: DISCUSSION

There were several significant correlations when it came to how resiliency and grit could account for variance on the MBI subscales. First, both resiliency and grit were significantly correlated to scores on the EE subscale. This indicates that when an individual has elevated levels of grit or resiliency, they are far more likely to be protected from feelings of burnout associated with EE. However, most of the variance could also be explained by both age and years worked in the field. This is most important for school psychologists who do not yet have several years of experience or who are younger, since if they are especially gritty or resilient those feelings of EE may be mitigated. Also, it appears that for EE, grit is a better predictor when compared to resilience, albeit slightly. This result answers all research questions, as all predictors in the model accounted for significant variance of EE scores.

Depersonalization was unable to be significantly predicted by every variable used in the model, especially when it came to resilience scores. No significant correlations were found when considering each variable's impact on DP scores. This could be due to a myriad of factors, including a similar finding from Gibson et al., (2009) that noted samples that tended to have more direct contact with students/clients had less feelings of DP compared to the other MBI subscales. Role confusion might also be a factor associated with feelings of depersonalization. Given graduate students were unprepared with regards to their expected job function versus actual job function when compared to those already working (Weiner et al., 2021), this might increase the emotional distance they feel towards those functions in turn.

Feelings of personal accomplishment was the last MBI subscale analyzed with this regression model. Results indicated that resilience was both positively correlated and significant

when accounting for the variance of feelings of personal accomplishment. Grit was also positively correlated to PA but was not significant. This subscale also did not have a significant correlation to the two control variables. In fact, step 2 of the regression accounted for far more variance compared to step 1, showing that both grit and resiliency together was a much better predictor of PA in comparison to their predictive elements for the other subscales.

In total, no predictor variable was by far stronger than any other when it came to subscales on the MBI. Grit did predict MBI subscales more consistently than resilience when factoring in adjusted beta scores for all three subscales, especially when it came to depersonalization. Resilience was more significantly associated with the MBI subscales, as it was significantly correlated with both EE and PA (compared to grit's significant association with just EE). The takeaway is that both grit and resiliency are best used in conjunction with each other to predict if a school psychologist is more susceptible to increased feelings of burnout when considering EE, DP, and PA.

<div align="center">

Conclusions and Future Directions

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Implications for this research are that it may be beneficial to screen school psychologists using grit or resiliency measures before they enter full-time fieldwork. Grit and resilience have significant predictive power regarding emotional exhaustion and personal accomplishment, respectively. For new school psychologists, you may be able to understand which of those facets of burnout they may be most susceptible to if you know how gritty or resilient they intrinsically are. In this case, there is no known accurate predictor of depersonalization, so if a school psychologist has plenty of grit and resilience, an intervention targeting issues around depersonalization would be most effective. The veritable counter to increased feelings of depersonalization, or less feelings that the work school psychologists do matters on a human

level, would be to increase the amount of time school psychologists interact with students directly. Not only would it be beneficial to increase the time school psychologists spend directly with students, but as Hoglund et al., (2015) posited, students with high-frequency behaviors should also be avoided if possible. Increasing the amount of time that a school psychologist spends with the general education student body may be an obvious intervention since there should be less maladaptive behaviors felt overall compared to students in special education or in self-contained/behavioral settings. There may also be credence to strategies to shuffle school psychologists around to different school assignments if their current one has them dealing with a disproportionate sample of high frequency behavior students.

There were several limitations to this study. The participant sample ($n = 77$) was limited and was under the proposed threshold of $n = 88$ that a priori power analyses indicated would find a medium effect size (Cohen's $f^2 = 0.15$) at 90% power. Another limitation was that self-report measures such as the grit scale have the propensity to commit errors related to social desirability bias (Duckworth et al., 2007). Compounding user error, due to sourcing a sample using an open social media platform, there is no way to ensure everyone who indicated they were a school psychologist actually was a school psychologist. In the case of depersonalization, since there was not a significant amount of the construct that the model accounted for, that means there is an unknown variable that can better explain that variance. However, considering significant effects were found for personal accomplishment and emotional exhaustion even when controlling for age and years of experience in the field, results from this study indicate that both grit and resilience can be used to predict facets related to increased feelings of burnout for this population.

Future directions for this line of research should include investigations of how constructs like grit and resiliency can be specifically applied to more at-risk school psychologist populations such as early career, or late career psychologists. Moreover, it may also be beneficial to investigate efficacious interventions that specifically target increasing an individual's grit or resilience. Longitudinal studies may be the best way we can track the effects of burnout through school psychologist's careers, because identifying a true flashpoint that determines when too much burnout truly leads to an exit from the profession could increase our understanding of why school psychologists choose to leave the field. This research will continue to increase our understanding of the interactions between school psychologists and burnout, and hopefully lead to a way to increase retention of school psychologists.

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APPENDIX A: DEMOGRAPHICS

1. I give my consent for participation in this study

    ○ Yes

    ○ No

2. Current Job Title

    ○ School Psychologist

    ○ Other: (please describe) _____

3. Age

    ○ _____

4. Years worked in the field

    ○ _____

APPENDIX B: GRIT SCALE

Please rate each item on a five-point scale where 1=*not at all like me* to 5=*very much like me*

1. I often set a goal but later choose to pursue a different one.

2. New ideas and projects sometimes distract me from previous ones.

3. I become interested in new pursuits every few months.

4. My interests change from year to year.

5. I have been obsessed with a certain idea or project for a short time but later lost interest.

6. I have difficulty maintaining my focus on projects that take more than a few months to complete.

7. I have achieved a goal that took years of work.

8. I have overcome setbacks to conquer an important challenge.

9. I finish whatever I begin.

10. Setbacks don't discourage me.

11. I am a hard worker.

12. I am diligent.

APPENDIX C: RECRUITMENT AND CONSENT

My name is Matt Engebrethson, and I am a School Psychology graduate student at Western Carolina University. I am conducting a research study for my thesis entitled Examining Resiliency and Grit in School Psychologists with Concerns to Burnout. You are invited to participate in a research study about how the resiliency and grit of an individual affects their feelings of burnout in the field of school psychology. I am also investigating the differences between resiliency and grit, and if one factor is a stronger or weaker predictive element in concerns to scores on a burnout measure. This research could be helpful in determining who is possibly more at risk for feeling symptoms of burnout. It would also be beneficial to determine if resiliency or grit is a stronger factor in concerns to preventing burnout for school psychologists, in order to use appropriately targeted interventions which, lead to better outcomes.

To participate in this study, you must be currently employed and licensed to practice school psychology. Your participation in this research involves a survey comprised of three elements: the Maslach Burnout Inventory (MBI), the Connors Davidson Resiliency Scale (CD-RISC), and the GRIT Scale. Data on age and years of experience in the field will also be collected. The survey will take approximately 10 minutes. Your participation is voluntary, and you may choose to opt out at any time by closing the browser window. The data collected in this study is anonymous. This means that not even the research team can match you to your data. The research team will work to protect your data to the extent permitted by technology. It is possible, although unlikely, that an unauthorized individual could gain access to your responses because you are responding online. This risk is similar to your everyday use of the internet. Some questions in this survey may cause some discomfort in concerns to stress, stressful situations, or

job-related feelings of burnout. You may refuse to answer any questions, take a break, or discontinue the survey at any time.

Compensation will be provided in the form of a raffle for one of two $50 Amazon.com gift cards. After a participant has completed the whole survey, they will follow a link to another Qualtrics survey to enter an email address they wish to use to receive possible compensation. Email addresses entered in this way will not be tied to a specific set of survey data and exist for the sole purpose of being able to receive the Amazon gift card if they are chosen. If you have any questions regarding this research project, please contact Matt Engebrethson at mengebrethson1@catamount.wcu.edu or my thesis chair, Dr. Candace Boan-Lenzo, at cboan@email.wcu.edu

If you have questions or concerns about your treatment as a participant in this study, you may contact the Western Carolina University Institutional Review Board through the Office of Research Administration by calling 828-227-7212 or emailing irb@wcu.edu. All reports or correspondence will be kept confidential to the greatest extent possible.

If experiencing any discomfort because of questions asked in this survey, participants are encouraged to contact the Substance Abuse and Mental Health Services Administration hotline at 1-800-662-HELP (4357). SAMHSA's hotline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.