Mediating Role of Psychological Capital in Korean Teachers' Grit and Burnout

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Abstract

This study aimed to investigate whether psychological capital mediates the relationship between grit and teacher burnout. Data from 574 Korean elementary and secondary school teachers were analyzed using correlation and regression analyses to determine whether psychological capital negatively mediates the link between grit and burnout. The results revealed that grit significantly reduces teacher burnout and confirmed the negative mediating role of psychological capital in this relationship. Given the limited research in this area, these findings contribute to the theoretical and empirical understanding of how grit, psychological capital, and burnout are interconnected in the teaching profession. For future research, the author suggests exploring group differences in burnout, grit, and psychological capital based on teachers' demographic factors, using multilevel or hierarchical linear models to identify distinct strategies and the impact of individual and organizational characteristics.

Keywords: grit, burnout, psychological capital, teachers, teaching profession

1. Introduction

The experience of burnout in professionals typically involves emotional exhaustion, depersonalization, and reduced professional efficacy (Maslach & Jackson, 1981). A meta-analysis on burnout in secondary school teachers found that they are more prone to feelings of exhaustion, detachment, and low motivation for achievement compared to other professions (García-Carmona, Marín, & Aguayo, 2019). Teachers experiencing burnout often lack the perseverance needed to foster their students' academic growth (Lee, 2013; Skaalvik & Skaalvik, 2017; Suh, 2017). Additionally, burnout hinders professional development by limiting discussion and reflection, which are essential for continuous school improvement within professional communities (Bardach & Klassen, 2020; Darling-Hammond, Hyler, & Gardner, 2017; Day, Sammons, Stobart, Kington, & Gu, 2007). Consequently, teacher burnout can negatively impact student achievement and motivation (Madigan & Kim, 2021; Wong, Ruble, Yu, & McGrew, 2017), lower teachers' job satisfaction and socialization within the organization (Güneş & Uysal, 2019; Skaalvik & Skaalvik, 2009; Yorulmaz, Colak, & Altinkurt, 2017), and increase their intention to leave the profession (Rajendran, Watt & Richardson, 2020).

Preventing teacher burnout is essential to maintaining effective teaching, enthusiasm, and continued professional growth (Kim, Youngs, & Frank, 2017; Kim, 2017). Previous research has examined various positive factors that reduce teacher burnout, such as self-efficacy, resilience, job engagement, self-esteem, and social support (Kim, Jörg, & Klassen, 2019; Pyhältö, Pietarinen, Haverinen, Tikkanen, & Soini, 2020).

This study explores the role of grit and psychological capital, which have been less frequently considered in the context of preventing teacher burnout. Grit, the independent variable in this study, refers to the consistent engagement, interest, and persistent effort teachers exhibit to improve their teaching and fulfill their responsibilities, even when emotionally exhausted or low in morale (Duckworth, 2016). Psychological capital, as a mediating variable, can help reduce teacher burnout by fostering resilience and optimism in both personal and professional contexts (Luthans, Youssef, & Avolio, 2007).

In this study, psychological capital is examined as a mediator that enhances teachers' grit by reinforcing job performance efficacy, optimism toward achieving long-term goals, and the ability to recover from setbacks (Youssef & Luthans, 2007). Specifically, psychological capital helps teachers maintain grit by cultivating passion, effort, and optimism in seeking alternative pathways to success, overcoming short-term challenges, and achieving long-term

goals (Stoffel & Cain, 2018; Vinothkumar & Prasad, 2016). Thus, the purpose of this study is to examine the impact of grit on teacher burnout and the mediating role of psychological capital in this relationship.

2. Theoretical Background and Research Hypothesis

Burnout generally refers to a condition in which professionals experience physical fatigue, emotional exhaustion, and reduced performance due to excessive workloads and job stress (Freudenberg, 1974; Maslach, 1982; Maslach & Leiter, 2016). It leads to disengagement, inconsistent effort, and low efficacy at work (Leiter & Maslach, 2016; Maslach & Jackson, 1981). Teachers, in particular, often experience burnout, characterized by emotional exhaustion, cynicism, demotivation, and feelings of helplessness. This results from the psychological strain and negative emotions associated with interactions involving students and colleagues (Aloe, Amo, & Shanahan, 2014; Pyhältö, Pietarinen, & Salmela-Aro, 2011; Suh, 2017).

There are several causes of teacher burnout. A systematic review and meta-analysis identified job stress, perfectionism, emotional labor, neuroticism, depression, role ambiguity, A-type personality, and student misbehavior as key risk factors (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014; García-Carmona, Marín, & Aguayo, 2019; Yin, Huang, & Chen, 2019). However, teachers can mitigate or prevent burnout by promoting protective factors such as self-efficacy, resilience, job engagement, self-esteem, social support, and the job-demand resource model (Kim, Jörg, & Klassen, 2019; Pyhältö, et al, 2020).

The current study explores whether grit can serve as an independent variable that helps prevent or mitigate teacher burnout. Grit refers to persistence and passion for long-term goals, enabling individuals to overcome obstacles and persist through difficulties (Duckworth, 2016; Duckworth, Peterson, Matthews, & Kelly, 2007). Grit consists of two components: persistent effort and steady interest (Duckworth & Quinn, 2009). Steady interest involves maintaining consistent goals and interests, while persistent effort entails having the patience and determination to continue striving towards goals despite failures, frustrations, and setbacks.

Grit has been identified as an effective variable in various contexts, such as the military, workplace, and personal relationships (Eskreis-Winkler, Duckworth, Shulman, & Beal, 2014). In education, grit has been linked to academic achievement and student retention in both K-12 and higher education settings (Credé, Tynan, & Harms, 2017; Hodge, Wright, & Bennett, 2018; Muenks, Wigfield, Yang, & O'Neal, 2017). However, there are few studies examining teachers' grit, apart from its positive effects on teacher effectiveness, self-efficacy, and retention (Dobbins, 2016; Robertson-Kraft & Duckworth, 2014). Few studies have examined the relationship between teachers' grit and burnout. However, despite the limited research in this area, studies on other professions, such as doctors and school counselors, have demonstrated a negative relationship between grit and burnout. For instance, Halliday et al. (2017) found that grit negatively influenced burnout in UK doctors. Similarly, Mullen and Crowe (2018) reported that grit had a negative impact on burnout among school counselors.

In addition to grit, psychological capital has also been shown to reduce teacher burnout. Ferradás et al. (2019) found that teachers with higher psychological capital experience lower levels of burnout. Zhang, Zhang, and Hua (2019) further confirmed that psychological capital plays a key role in lowering teacher burnout. In this study, psychological capital is assumed to reduce burnout by fostering hope, optimism, passion, and confidence in teachers, enabling them to overcome difficulties and obstacles (Luthans, Luthans, & Jensen, 2012).

From a positive psychology perspective, psychological capital refers to a positive psychological state that enhances personal well-being and social prosperity, achieved through positive experiences, traits, and group restoration (Peterson & Seligman, 2004). It includes components such as self-efficacy, hope, optimism, and resilience (Luthans, Youssef, & Avolio, 2007). Self-efficacy refers to an individual’s belief in their ability to achieve specific goals. Teacher self-efficacy has been negatively associated with burnout (Skaalvik & Skaalvik, 2010), with studies showing that lower levels of self-efficacy increase the risk of burnout (Kim & Burić, 2020). Hope involves perseverance toward goals and the ability to adapt and find alternative paths when faced with obstacles. Optimism refers to an individual's positive outlook on future success, while resilience involves the ability to recover from setbacks and persist in the face of adversity (Luthans & Youssef, 2007).

Psychological capital builds the foundation for grit by instilling hope, optimism, and self-efficacy, enabling individuals to pursue and achieve long-term goals, even in the face of challenges. Despite the limited research on teachers, Kim (2019) found that psychological capital mediated the relationship between grit and academic burnout in high school students. Additionally, Luthans, Luthans, and Chaffin (2019) confirmed that psychological capital played a mediating role in the relationship between grit and academic performance among university students.

Given the scarcity of research, it is necessary to further investigate the relationship between grit and teacher burnout and the mediating role of psychological capital in this context. In summary, teachers experience burnout due to heavy workloads and stress, which negatively affects their performance and professional development. This study assumes that grit, as an independent variable, can alleviate teacher burnout by reducing feelings of fatigue and maintaining steady effort. Moreover, psychological capital is proposed as a mediating factor that supports and sustains teachers' grit, enhancing resilience, optimism, and the pursuit of alternative strategies to achieve goals. To examine these relationships, the following hypotheses were formulated:

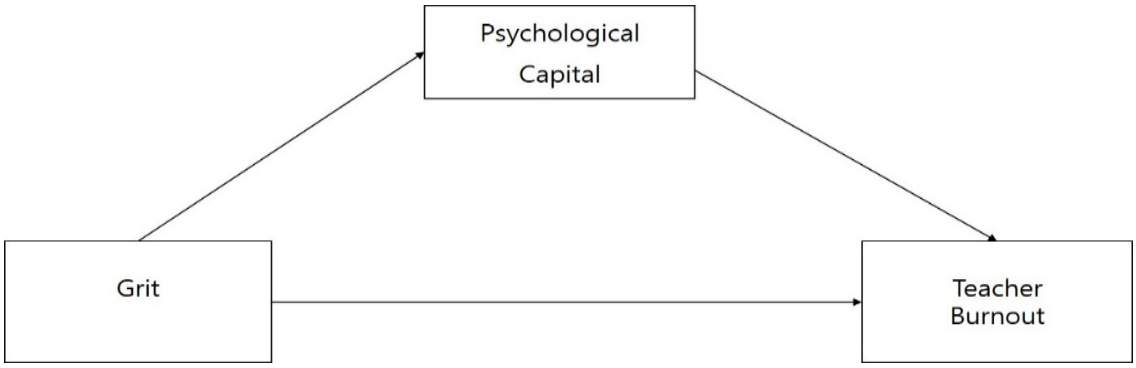

Figure 1. Research Model

Hypothesis 1: Grit will negatively impact teacher burnout.

Hypothesis 2: Psychological capital will mediate the relationship between grit and teacher burnout, amplifying the positive effect of grit in reducing burnout.

3. Methods

3.1 Research Design and Sampling

This study employed a correlational design to explore the relationships between multiple variables through research questions or hypotheses, utilizing correlation analysis as the primary statistical technique (Fraenkel, Wallen, & Hyun, 1993; Wood & Brink, 1998). Specifically, the study aimed to examine the mediating role of psychological capital in the effect of grit on teacher burnout. Convenience sampling was employed, selecting participants based on practical criteria such as accessibility, geographical proximity, availability, and willingness to participate (Etikan, Musa, & Alkassim, 2016; Farrokhi & Mahmoudi-Hamidabad, 2012).

The sample consisted of 600 Korean elementary and secondary school teachers from various regions, including Seoul, Busan, Daegu, Gwangju, and Ulsan, collected in November 2019. Each participant consented to the survey, which took approximately 15 minutes to complete. Of the initial 600 participants, 574 completed the survey and their responses were included in the final analysis. The sample included 263 male teachers (45.8%) and 311 female teachers (54.2%). In terms of school type, 367 teachers worked in public schools (63.9%) and 207 in private schools (36.1%). The sample also included 211 elementary school teachers (36.8%), 179 middle school teachers (31.2%), and 184 high school teachers (32.1%). Regarding teaching experience, 115 teachers had worked for less than five years, 165 had between 6 to 10 years, 187 had between 11 to 20 years, and 107 had more than 21 years of experience.

3.2 Measures

The study employed validated questionnaires to measure grit, psychological capital, and teacher burnout. However, it is important to note that these measures rely on the subjective perceptions and beliefs of participants, rather than objective assessments of their abilities, which may limit the accuracy and objectivity of the results. The specific measures used are as follows:

3.2.1 Grit

Grit was measured using the Grit Scale, developed and validated by Duckworth, Peterson, Matthews, and Kelly (2007). The scale consists of 12 items across two sub-dimensions: consistency of interests (α = .84; 6 items, e.g., “I often set a goal but later choose to pursue a different one”) and perseverance of effort (α = .78; 6 items, e.g., “I finish

whatever I begin"). The overall scale had a Cronbach's alpha of .85. Items were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In the current study, the consistency of interests subscale had a Cronbach's alpha of .87, and perseverance of effort had a Cronbach's alpha of .91, with an overall scale reliability of .76.

3.2.2 Teacher Burnout

Teacher burnout was assessed using the Teacher Burnout Scale, validated by Lee and Ryu (2017). This scale contains 19 items divided into four sub-dimensions: teacher satisfaction (α = .81; 5 items, e.g., "I do not want to continue teaching"), administrative support(α = .80; 6 items, e.g., "Managers won't help me when I have a problem in the classroom"), job stress (α = .76; 5 items, e.g., "My teaching life depresses me"), and attitude toward students (α = .78; 3 items, e.g., "Students come to school with an unfaithful attitude"). Responses were measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In the current study, Cronbach's alpha for the sub-dimensions were teacher satisfaction (α = .89), administrative support (α = .87), job stress (α = .87), and attitude toward students (α = .82), with an overall scale reliability of .77.

3.2.3 Psychological Capital

Psychological capital was measured using the Korean Version of Psychological Capital, validated by Lim (2014). The scale consists of 18 items across four sub-dimensions: self-efficacy (α = .82; 5 items, e.g., "I can achieve most of my goals"), optimism (α = .88; 5 items, e.g., "I am always optimistic about my future"), hope (α = .87; 5 items, e.g., "I can come up with many ways to reach the goal"), and resilience (α = .72; 3 items, e.g., "I recover quickly even though I have a hard time"). Responses were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). In the current study, Cronbach's alpha for the sub-dimensions were self-efficacy (α = .95), optimism (α = .94), hope (α = .95), and resilience (α = .92), with an overall scale reliability of .97.

3.3 Data Analysis

Descriptive statistics and correlation analyses were conducted using SPSS version 23 to summarize the sample demographics and explore relationships between the study's dependent and independent variables. Correlation analysis was used to examine the associations between grit, psychological capital, and teacher burnout.

To determine whether psychological capital mediates the relationship between grit and teacher burnout, mediation analysis was performed using the SPSS PROCESS macro, version 3.4 (model 4), developed by Hayes (2018). This method tests whether grit (independent variable) affects teacher burnout (dependent variable) indirectly through psychological capital (mediator).

The analysis employed bootstrapping with 5000 resamples, a recommended technique for testing mediation effects (Shrout & Bolger, 2002). A 95% confidence interval (CI) was generated to assess the significance of the indirect effect. If the CI did not include zero, the mediation effect was considered statistically significant at the 0.05 level. This approach allows for more accurate results, especially in cases of non-normal data distributions or moderate sample sizes.

4. Results

4.1 Descriptive Statistics and Correlations

Table 1. Correlations between the Measured Variables

Variable	*M*	*SD*	Skew	kurtosis	Grit	Teacher Burnout	Psychological Capital
Grit	3.16	.56	-.46	1.22	1		
Teacher Burnout	2.73	.55	-.54	.80	-.20**	1	
Psychological capital	3.46	.80	-.43	-.05	.23**	-.48**	1

** $p < .01$.

The assessment of whether a distribution is normal depends on its skewness and kurtosis values. According to Kline (2005), an absolute value of skewness greater than 3 and kurtosis greater than 10 indicates a violation of normal distribution. As shown in Table 1, the data used in this study fell within the normal range for both skewness and kurtosis across all observed variables. The table also presents the results of the correlation analysis between the study

variables. Overall, statistically significant correlations were found between the observed variables at the 0.01 level. Additionally, there was no evidence of multicollinearity, as none of the correlations exceeded 0.85, which would indicate a highly linear relationship (Kline, 2005).

To verify the research hypotheses, Model 4 of the PROCESS macro (Hayes, 2018) was utilized to investigate the mediating effect of psychological capital on the relationship between grit and teacher burnout.

Figure 2 illustrates the direct path coefficients between the variables. First, the direct path coefficient from grit to teacher burnout was significant at the 0.05 level ($\beta = -0.094$, $p < 0.05$). Second, the direct path coefficient from grit to psychological capital was significant at the 0.001 level ($\beta = 0.231$, $p < 0.001$). Third, the direct path coefficient from psychological capital to teacher burnout was also significant at the 0.001 level ($\beta = -0.459$, $p < 0.001$). As shown in Table 2 and Table 3, the regression models were significant at the 0.001 level.

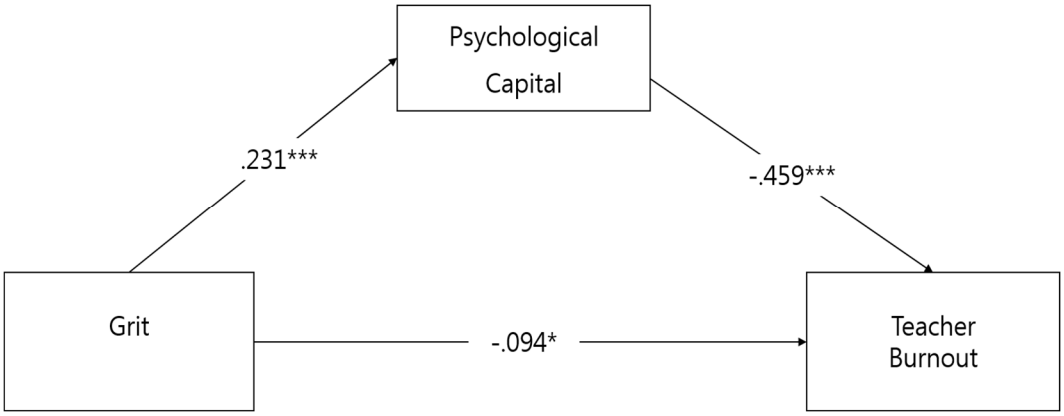

Figure 2. Coefficients between Paths

Table 2. Coefficient from Grit to Psychological Capital

Independent Variables	*B*	*β*	*SE*	*T*	*p*	*LLCI*	*ULCI*
Constant	2.414		.187	12.894	.000	2.047	2.782
Grit	.331	.231	.058	5.667	.000	.216	.445

Regression Model Test: R=.230, R^2=.058, F= 32.116 ($p < .001$)

Table 3. Coefficients from Grit and Psychological Capital to Teacher Burnout

Independent Variables	*B*	*B*	*SE*	*t*	*p*	*LLCI*	*ULCI*
Constant	4.117		.131	31.449	.000	3.855	4.368
Grit	-.092	-.094	.037	-2.506	.013	-.165	-.020
Psychological capital	-.314	-.459	.026	-12.229	.000	-.365	-.264

Regression Model Test: R=.489, R^2=.239, F= 89.756 ($p < .001$)

Table 4. Bootstrapping Analysis for the Mediating Effect Test

Categories	Effect	S.E.	95% confidence interval (CI)	
			LLCI	ULCI
Total effect	-.196	.040	-.275	-.117
Direct effect (grit → teacher burnout)	-.092	.037	-.165	-.020
Indirect effect (grit → positive psychological → teacher burnout)	-.104	.024	-.155	-.061

Table 4 presents the results of the bootstrapping analysis regarding the mediating role of psychological capital in the relationship between grit and teacher burnout (b = -0.104, 95% CI: -0.155 to -0.061). The results were significant, as zero is not included in the confidence interval range. This finding indicates that the indirect effect of psychological capital on the relationship between grit and teacher burnout is significant.

5. Discussion and Conclusion

The findings of this study highlight the significant role of grit in reducing teacher burnout, thereby confirming Hypothesis 1. The results demonstrate that teachers who exhibit sustained passion and perseverance are better equipped to maintain motivation and enhance their performance, even in the face of exhaustion and dissatisfaction. This aligns with previous research indicating that grit serves as a protective factor against burnout in high-stress professions, including medicine and counseling (Halliday et al., 2017; Mullen & Crowe, 2018). Thus, this study underscores the potential of grit as a critical factor in mitigating teacher burnout, suggesting that fostering grit could play a vital role in enhancing teachers' overall well-being and professional efficacy.

Furthermore, the study supports Hypothesis 2 by revealing that psychological capital negatively mediates the relationship between grit and teacher burnout. Teachers possessing higher psychological capital—characterized by efficacy, hope, optimism, and resilience—are better positioned to cope with the inherent challenges of the teaching profession, thereby reducing their risk of burnout (Anderson et al., 2016; Stoffel & Cain, 2018; Vinothkumar & Prasad, 2016). This finding reinforces Luthans et al.'s (2019) assertion that psychological capital not only enhances the impact of grit but also acts as a vital buffer against burnout. Cultivating psychological capital in conjunction with grit offers a dual mechanism for bolstering teacher resilience, ultimately leading to a more sustainable teaching practice.

This study contributes to the theoretical and empirical understanding of the complex interplay between grit, psychological capital, and burnout within the teaching profession. The evidence suggests that grit can significantly alleviate teacher burnout, particularly when coupled with self-confidence, future aspirations, optimism regarding professional growth, and resilience in adversity. These insights have important practical implications for teacher development programs and interventions aimed at reducing burnout.

From a theoretical perspective, this study expands the discourse on teacher burnout by elucidating how grit and psychological capital jointly influence burnout outcomes. The identification of psychological capital as a mediating factor in the relationship between grit and burnout introduces a novel perspective, suggesting that psychological capital not only supports grit but also enhances its effectiveness in preventing burnout. This contributes to the literature on positive organizational behavior, particularly in educational contexts.

Practically, the findings advocate for educational institutions to focus on fostering both grit and psychological capital among teachers to combat burnout effectively. Interventions such as mentorship programs, professional development workshops, and resilience training can help teachers cultivate the perseverance, optimism, and emotional resilience necessary to thrive in challenging environments. Moreover, creating collaborative environments where teachers can share best practices and personal experiences in overcoming obstacles can strengthen collective efficacy and diminish feelings of frustration.

Despite its contributions, this study acknowledges several limitations. The cross-sectional design limits the ability to draw definitive causal conclusions regarding the relationships among grit, psychological capital, and burnout. Future research should employ longitudinal designs to elucidate how these variables interact over time. Additionally, other significant variables, such as job engagement and social support, were not considered in this study and warrant examination in future research.

Furthermore, demographic factors—including age, gender, teaching experience, and school type—were not explored in depth. Future studies could investigate how these variables, along with organizational climate and educational policies, may influence the relationship between grit, psychological capital, and burnout. Understanding these factors could provide a more nuanced framework for effectively addressing teacher burnout.

Lastly, given the global nature of teacher burnout, future research should seek to generalize these findings through international studies, such as those conducted as part of the Teaching and Learning International Survey (TALIS). Cross-cultural studies would be invaluable in determining whether the relationships observed in this study hold across various educational contexts and cultural settings.

Based on the findings, several policy recommendations can be made. Educational policymakers should consider implementing programs aimed at enhancing both grit and psychological capital among teachers. For instance,

resilience-building initiatives, mental health support systems, and professional development opportunities that emphasize perseverance and optimism can be critical in mitigating teacher burnout. Moreover, schools should strive to foster a supportive organizational climate that reduces stressors and promotes job satisfaction, thereby contributing to lower rates of burnout.

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