

# The role of grit and self-efficacy in teacher engagement and burnout

Nor Lailla<sup>1</sup>, Don Gusti Rao<sup>2</sup>, Luqman Hakim<sup>3</sup>, Wawan Sadtyo Nugroho<sup>4</sup>

Muhammadiyah University of Jakarta, Tangerang Selatan, Banten, Indonesia<sup>1,3</sup>

Politeknik Ketenagakerjaan, Jakarta Timur, Jakarta, Indonesia<sup>2</sup>

Muhammadiyah University of Magelang, Magelang, Jawa Tengah, Indonesia<sup>4</sup>

[nor.lailla@umj.ac.id](mailto:nor.lailla@umj.ac.id)<sup>1</sup>, [dongusti@politeknaker.ac.id](mailto:dongusti@politeknaker.ac.id)<sup>2</sup>, [luqman.hakim@umj.ac.id](mailto:luqman.hakim@umj.ac.id)<sup>3</sup>,

[ws.nugraha@unimma.ac.id](mailto:ws.nugraha@unimma.ac.id)<sup>4</sup>



## Article History

Received on 11 June 2025

1<sup>st</sup> Revision on 03 August 2025

2<sup>nd</sup> Revision on 11 August 2025

Accepted on 13 August 2025

## Abstract

**Purpose:** The purpose of this study is to examine the influence of grit and self-efficacy on work engagement, to identify the relationship between grit and self-efficacy, and to determine how work engagement affects burnout.

**Research Methodology:** This uses a quantitative approach with a type of study. Population in the study: This is a vocational school teacher in seven schools in Jakarta, Bogor, Tangerang, Depok, and South Tangerang. The sample was determined using non-probability sampling techniques, especially convenience sampling. The number of respondents is as many as 107. Data collection techniques use Google Forms. Data analysis techniques using SmartPLS.

**Results:** The results show a positive influence of grit on work engagement, a positive influence of self-efficacy on work engagement, a positive relationship between grit and self-efficacy, and a negative influence of work engagement on burnout.

**Conclusions:** This study concludes that grit and self-efficacy positively influence work engagement, with teachers displaying greater emotional, cognitive, and physical involvement in their work. Grit also enhances self-efficacy, which strengthens engagement, ultimately reducing burnout. These findings emphasize the importance of fostering perseverance and confidence to improve workplace health and productivity in education.

**Limitations:** This study discusses the variables of grit, self-efficacy, work engagement, and burnout. However, there are still many other factors that influence teacher engagement and work burnout, such as principal leadership, organizational support for work-life balance, or other external factors.

**Contribution:** This research suggests that grit and self-efficacy have an important role in work engagement and reducing burnout in teachers, as well as being the basis for developing teacher welfare, especially in Indonesia.

**Keywords:** *Burnout, Grit, Self-Efficacy, Work Engagement*

**How to Cite:** Nugroho, A. J. S., Marjukah, A., Setyawanti, D., Haris, A., Almasitoh, U. H., & Tasari. (2025). A model of student smoking cessation behavior based on pictorial health warnings as an intervening variable. *Annals of Human Resource Management Research*, 5(4), 15-26.

## 1. Introduction

Education is the delivery of information and knowledge, and it encourages participants to learn, increase their confidence, and build a positive learning environment (Lan, 2022). In some years final improvement in interest in teacher work engagement, supporting the role of teacher work involvement in student study outcomes (Perera, Vosicka, Granziera, & McIlveen, 2018). Important factors associated

with engagement are conceptualized teacher grit as perseverance and passion (Noughabi, Ghonsooly, & Jahedizadeh, 2024), and in achieving his profession, the individual needs to be long-term (Duckworth, Peterson, Matthews, & Kelly, 2007). Teachers with persistence and higher engagement will bring good results for their students (Robertson-Kraft & Duckworth, 2014). Those who are more involved in their job tend to have a little experience with symptoms of depression, are more committed to the organization, and make more of an effort at work (Juliana, Saffardin, & Teoh, 2021). The importance of pleasure in teaching is related to well-being, grit, and teacher engagement (Xiao, Fathi, & Mohammaddokht, 2022).

Grit is essential in creativity teaching. Trend: To maintain commitment, focus, and effort in the fight for objective learning, as the term long required by teachers to build creativity teaching matters (Widodo & Gunawan, 2021). This is related to the awareness of teachers who show a high level of tenacity in completing their teaching. Grit is related to results for all circles, such as satisfaction with work, effective work, results, and motivation (Guo, Tang, & Xu, 2019). Grit is an important factor in academic performance (Lee, 2022; Wei, Gao, & Wang, 2019). Grit is useful in real-life situations (Y. Wang, Derakhshan, & Zhang, 2021). Research results show that individuals with high grit levels have a positive outlook on work (K. Wang, 2024).

Involving teacher work is something positive related to self-efficacy and reflection (Han & Wang, 2021), welfare, and academic student involvement (Rusu & Colomeischi, 2020; Zhang & Yang, 2021). Engagement work is also related to fulfillment patterns and positive thinking (Zeng, Chen, Cheung, & Peng, 2019). Teacher self-efficacy, which shows belief in an individual's competence as a teacher (Bandura, 1989), is widely acknowledged to have an impact on the involvement and experience of educators (Granziera & Perera, 2019). Teacher self-efficacy reflects teachers' belief in their ability to achieve success in class (Huang & Zhou, 2024).

Factors related to teacher welfare experienced significant improvement over the years. Burnout seems to be still become problem general in teachers job (Pyhältö, Pietarinen, & Salmela-Aro, 2011; Richards, Hemphill, & Templin, 2018; Salmela-Aro, Hietajärvi, & Lonka, 2019). Burnout is a common phenomenon among teachers. Heavy workload combined with a lack of commitment to work, as well as continuous work changes, has been identified as one of the most important factors for teachers to consider when leaving their profession (Amitai & Houtte, 2022; Juvonen & Toom, 2023; Räsänen, Pietarinen, Pyhältö, Soini, & Väisänen, 2020). On the other hand, the source Power in place Work has been found to increase involvement in work and, conversely, prevent burnout (Bakker, Schaufeli, Leiter, & Taris, 2008).

## **2. Literature review**

### **2.1. Work Engagement**

First, conceptualize engagement as a condition in which an individual realizes their identity, cognitive, emotional, and physical they through performance work, which leads to increased commitment and a decline in the desire to leave jobs (Kahn, 1990). On the other hand, individuals who are not involved show interesting self-interest in matter disconnection, physical, cognitive, or emotional, from work (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Work involvement is characterized by satisfaction with work, passion, persistence, active involvement, and deep absorption (Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). In the context of Education, teacher work is defined as variable affective, which shows devotion, voluntary instructor to source Power physical, cognitive, and emotional. For practice, special teaching (Klassen et al., 2012). Teachers contribute to students' engagement and achievement. Academic participants who educate others more often carry on (Zhang & Yang, 2021).

### **2.2. Grit**

Duckworth et al. (2007) introduce the concept of grit, defining it as perseverance and passion, an individual For reaches an objective, though faces a challenge. According to Duckworth et al. (2007), tenacity has two dimensions: perseverance in efforts, which reflects the pursuit of sustainable goals, and consistent interest, which indicates motivation that is not shaken in the middle of challenges. Grit

grows continued dedication, even in the face of difficulties (MacIntyre & Khajavy, 2021). Teacher grit refers to teachers' dedication, perseverance, and passion in fulfilling objective teaching (Robertson-Kraft & Duckworth, 2014). In the context of education, grit influences academic performance (Alhadabi & Karpinski, 2020).

### **2.3. Self-efficacy**

Self-efficacy, as defined by Bandura (1989), refers to the assessment of an individual's ability to reach the desired performance through organized and implemented actions. Wyatt (2018) defines teacher self-efficacy as a belief in their ability to support learning in various method-specific cognitive, metacognitive, affective, and social tasks and contexts. In teaching activities, teacher self-efficacy reflects teachers' belief in their ability to teach eye lesson in a way effectively, motivating students, and managing the class (Skaalvik & Skaalvik, 2023). Self-efficacy is a product of the learning process that originates from four main sources: knowledge, emotion, practice vicarious, verbal persuasion, and physiological response (Bandura, 1997). Self-efficacy refers to the ability and belief of teachers to influence students to achieve better results and produce good output (Brouwers & Tomic, 2000).

### **2.4. Burnout**

Burnout consists of three core dimensions: emotional fatigue, cynicism, and inefficiency or professional dissatisfaction (Maslach & Leiter, 2016). There are several reasons for teachers' burnout, namely anxiety, inability to manage class and overcome behavior of students who make problems, burden overwork, dissatisfaction with the work environment and position, injustice, conflict in the workplace, lack of social support, lack of bait come back, lack of involvement in taking decisions, and lack of teacher independence (Akbari & Eghtesadi Roudi, 2020). According to the teacher, fatigue is associated with decreased capacity for work, absenteeism, and finally, performance academic participant's bad education. Demographic factors related to teacher fatigue have also been examined (Chang, 2009). Kara (2020) there is a significant connection between individual variables such as type, gender, years of experience, marital status, and fatigue. Jamaludin and You (2019) also showed that experience and level of education among men and women show a significant connection with fatigue, emotional issues, and reduced personal performance.

### **2.5. Hypothesis Study**

Grit has been associated with increased work engagement, where the level of grit is greater, leading to management spending more time more effectively and balancing Good between life and personal and professional (Khan & Khan, 2017). Research shows that more tough individuals tend to maintain interest and effort until they reach their objective, although they experience setbacks and difficulties. Research in environmental education has shown a positive correlation between grit and academic work engagement, indicating that students who demonstrate a higher level of grit tend to be more involved academically (Datu, Buenconsejo, Shek, Choy, & Sou, 2023; Eroglu & Kaya, 2023; Hodge, Wright, & Bennett, 2018; Muenks, Wigfield, Yang, & O'Neal, 2017; Vahedi, 2022; Zhao, Zhang, & Heng, 2024). Obeng et al. (2025) find the effect positive and significant from grit to engagement learning. Based on the above description, the hypothesis is as follows:

#### **H<sub>1</sub>: Grit has a positive influence on Work Engagement**

Research conducted by Bakker and Wingerden (2021) showed that self-efficacy becomes important when employees experience difficulties at work. Empirical evidence states that self-efficacy plays a role in creating a positive environment, such as increasing attachment to work, especially in demanding work (Bakker & Demerouti, 2017). Employees involved deploy energy in performing tasks related to work (Costa, Passos, & Bakker, 2016). According to Chan, Ho, Ip, and Wong (2020), self-efficacy work relates positively and significantly with dimensions of work involvement. According to Abu-Hilal and Al Abed (2019), self-efficacy significantly predicts students' involvement. According to Pérez-Fuentes et al. (2018) self self-efficacy correlates positively with passion, dedication, and absorption, which is further supported by (Hopkins, Ferrell, Ferrell, Hopkins, & Merkle, 2020). This is under research that reveals that self-efficacy is positively related to engagement (Halbesleben, 2010). Based on the above description, the hypothesis is as follows:

#### **H<sub>2</sub>: Self-efficacy's positive influence on Work Engagement**

Bandura (1989) states that an individual with strong self-efficacy will endure challenges. Duckworth et al. (2007) identified persistence as the main determinant of success in various fields. Credé, Tynan, and Harms (2017) found that self-efficacy not only predicts academic and career success but also persistence and motivation, which are the key factors underlying persistence. Individuals with higher self-efficacy persist in pursuing long-term goals, a characteristic central to the concept of persistence (Fayaz & Gulzar, 2025). Fabelico and Afalla (2020) found a positive connection between grit and self-efficacy. Based on the description above, the hypothesis in the study is

**H3: Grit has a positive influence on Self-efficacy**

Salmela-Aro et al. (2019) studied work engagement and burnout among educators using an individual-based method and showed that educators involved in their own level jobs and resources have high personality, including regulation and flexibility, while educators with burnout and high engagement experience work burden. Faskhodi and Siyyari (2018) found a significant negative correlation between attachment to work and burnout. D’Amico, Geraci, and Tarantino (2020) confirmed that emotional intelligence mediates the correlation between teacher work engagement and burnout. Heidariaghlab and Talepasand (2021) found that teacher engagement in educational contexts is important for reducing burnout.

**H4: Influence of Work Engagement on Burnout**

### 3. Methodology

This study uses a quantitative approach with a type of study. Population in the study: This is a vocational school teacher in seven schools in Jakarta, Bogor, Tangerang, Depok, and South Tangerang. The sample was determined using non-probability sampling techniques, especially convenience sampling. This technique was chosen because sampling based on convenience access and the availability of willing teachers is challenging. A total of 107 respondents participated in the study. Data were collected using Google Forms. The questionnaire was arranged based on indicators from the variables studied and used a Likert scale of 1–5. Data analysis techniques using SmartPLS.

Table 1. Population

School name	Returned Questionnaire
Putra Satria Vocational School, Jakarta	13
State Vocational High School 29 Jakarta	10
State Vocational High School 9 Tangerang	34
Muhammadiyah Vocational School, Parung, Bogor	14
Muhammadiyah 1 Vocational School, Ciputat, South Tangerang	13
Darussalam Vocational School, Ciputat, South Tangerang	6
Islamic Vocational School Serua, Depok	17
<b>Total</b>	<b>107</b>

Source: Data processed by researchers in 2025

### 4. Results and discussion

#### 4.1. Result

Table 2. Profile of Respondents Study

Profile Respondents	Frequency	Percentage
<b>Gender</b>		
Man	51	48%
Woman	56	52%
<b>Years of service</b>		
< 5	36	34%
> 5 years	22	21%
> 10 years	49	46%

<b>Age</b>		
25 – 30 years	28	26%
31 – 40 years	19	18%
> 40 years	60	56%

Source: Data processed by researchers in 2025

Based on Table 2, the type of sex. The majority of teachers were women (56 people or 52 %). The majority of teachers' work periods are > 10 years, with 49 people (46 %). The age of the majority of teachers is > 40 years, as many as 60 people, or 56%.

Table 3. Construct Reliability and Validity

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>AVE</b>
Grit	<b>0.666</b>	<b>0.719</b>	<b>0.853</b>	<b>0.745</b>
Self-efficacy	0.874	0.885	0.908	0.663
Work Engagement	0.867	0.871	0.904	0.653
Burnout	0.684	0.846	0.854	0.747

Source: Data processed by researchers in 2025

Based on Table 3, Cronbach's Alpha and Composite Reliability are reliable. The Cronbach's alpha value was at least 0.60, and the Composite Reliability was at least 0.70. The loading factor values for all indicators were above 0.50. The square root value of the average variance extracted (AVE) also exceeds 0.5, so that can be concluded that the indicator fulfills the valid criteria. The results of the discriminant validity test for every construct showed a marked correlation between the constructs in the model.

Table 4. Structural Model Test Results

<b>Collinearity Assessment (VIF)</b>				
	<b>Burnout</b>	<b>Grit</b>	<b>Self-efficacy</b>	<b>Work Engagement</b>
<b>Burnout</b>				
<b>Grit</b>			1,000	2,118
<b>Self-efficacy</b>				2,118
<b>Work Engagement</b>	1,000			

Source: Data processed by researchers in 2025

Table 5. R-Square

	<b>R-Square</b>	<b>R Square Adjusted</b>
Burnout	0.183	0.175
Self-efficacy	0.528	0.523
Work Engagement	0.594	0.586

Source: Data processed by researchers in 2025

Table 6. Predictive Relevance (Q-Square)

	<b>SSO</b>	<b>SSE</b>	<b>Q<sup>2</sup> (=1-SSE/SSO)</b>
Burnout	22,611	20,224	0.106
Grit	39,879	39,879	
Self-efficacy	79,585	66,944	0.159
Work Engagement	86,047	47,553	0.447

Source: Data processed by researchers in 2025

It is recommended to examine the Inner VIF value coefficient determination (R<sup>2</sup>), model suitability, and predictive relevance (Q<sup>2</sup>) for assessing structural (inner model) (Hair Jr et al., 2021). The test results show a VIF value for all construct variables under 10. Thus, all variables are independent of their own VIF values < 10, so it can be concluded that there is no multicollinearity between variables. The results show that the Mark R-Square (R<sup>2</sup>) or coefficient determination from the Work Engagement construct was 0.594. The results show that the endogenous variable Work Engagement can be explained by

exogenous variables by 59.4%, while the rest is explained by exogenous variables outside the study. Test results show that a  $Q^2$  value greater than zero for certain endogenous latent variables shows that the PLS path model has predictive relevance for the construct.

Table 7. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t- statistics	P Values
Grit -> Work Engagement	0.552	0.546	0.104	5,335	0,000
Self-efficacy -> Work Engagement	0.269	0.271	0.128	2,101	0.038
Grit -> Self-Efficacy	0.727	0.737	0.045	16,091	0,000
Work Engagement -> Burnout	-0.427	-0.436	0.088	4,840	0,000

Data processed by researchers in 2025

Table 7 above displays the coefficient track along with statistics related, like T- T-value and P- P-value for test significance connection. Indicator statistics. This helps determine whether the data support the hypothesized path between variables. In general, a track is considered significant in terms of statistics. If the -value exceeds 1.96 and the p-value is below 0.05 (Hair Jr et al., 2021). This provides an outlook on the strength and direction that influences every variable, independent of the variable, and dependent.

## 4.2. Hypothesis Testing

### 4.2.1. Influence Grit with Work Engagement

The grit factor has a coefficient track of 0.552 with a T value of 5.335 > 1.96 and a P value of 0.000 < 0.05. This shows that grit has a positive and significant impact on work engagement. Research results. This is in line with a study Zhou and Hou (2025), who stated that grit is the main booster of involvement, which reflects the importance of trusting oneself and the teacher's perseverance. This shows that mark persistence in environmental education will increase student commitment (Jung & Lee, 2018). Therefore, important teacher support can create a conducive environment for the development of grit (Derakhshan & Fathi, 2024). Grit can also, in a way, directly increase involvement with contribute to attitude positive professional and improve the required resilience for managing demands at work (Ma, 2023). Teachers who show high-level tenacity are more ready to deal with stress-related demanding work, allowing them to maintain involvement from time to time. Noughabi et al. (2024) continuous efforts and capabilities to adapt are important in the teaching profession.

### 4.2.2. Influence Self-efficacy Towards Work Engagement

The self-efficacy coefficient track was 0.269 with a T value of 2.101 > 1.96 and a P value of 0.038 < 0.05. This shows that self-efficacy has a positive and significant impact on work engagement. This research is in line with the study by Edokpolor, Otache, and Osifo (2022), who state that high self-efficacy with the implementation environment, dynamic and efficient work can increase the chance of lecturers being involved in cognitive, physical, and emotional work. Self-efficacy correlated positively with attachment work nurses, where the taller self-efficacy nurse so the taller attachment work nurses (Salahat & Al-Hamdan, 2022). Self-efficacy and work engagement in creating a climate-positive class climate. Findings show that teachers who believe in their abilities tend to show more motivation, commitment, and enthusiasm in their role (Liu, Chu, & Wang, 2021; Perera, Granziera, & McIlveen, 2018). Individuals with low self-esteem tend to avoid or give up tasks when faced with more complicated problems. The importance of implementing strategy involves more in-depth learning, as it features main involvement in cognitive, related to self-efficacy (Vidić, 2021).

### 4.2.3. The Influence of Grit on Self-efficacy

Grit has a coefficient track of 0.727 with t of 16.091 > 1.96 and a P-value of 0.000 < 0.05 p. This shows that grit influences self-efficacy. This is in line with a study Fabelico and Afalla (2020) that teacher's perseverance in his efforts has motivated them For own efficiency a better self tall in fulfill their needs, inspire students, and face change in self they. This shows that grit can reach purpose and quality, which is associated with strong self-efficacy; individuals who believe in themselves and their abilities tend to show tenacity and passion in reaching their long-term objectives (Fayaz & Gulzar, 2025). Therefore, a

potential increase in balance life work. In addition, role self-efficacy, grit, and teacher support increase psychological welfare (Tang & Zhu, 2024).

#### *4.2.4. The Influence of Work Engagement on Burnout*

Burnout had a coefficient track of -0.427 with a t of 4.840 > 1.96 and a P value of 0.000 < 0.05 p. This shows that work engagement has a negative influence on burnout (Leiter & Maslach, 2017). Heidarilaghab and Talepasand (2021) found that teacher involvement in contextual education is an important issue in reducing burnout. This shows that although teaching is work that provides service to a full human being, it is a challenge that can cause teachers to experience fatigue (Schaufeli, Leiter, & Maslach, 2009). Studies have previously shown that many factors influence individuals and the environment, such as teachers personalities, proactive strategies, and culture (Richards et al., 2018), as well as a variable-level student (Saloviita & Pakarinen, 2021). This is related to teacher welfare. In addition, according to the demands work source power (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), for example, teacher resilience, efficacy self, and social relationships at school are found to relate to involvement in work and fatigue (Salmela-Aro et al., 2019). The most frequent stressors for teachers are time pressure, disruptive student behavior, changes in administrative disposition, and complicated relationships with parents, students, and colleagues.

## **5. Conclusions**

### **5.1. Conclusion**

Based on the research results, we can conclude that grit and self-efficacy have a positive and significant effect on work engagement, where teachers who have perseverance and confidence in their abilities tend to be more emotionally, cognitively, and physically involved in their work. In addition, grit contributes directly to increasing self-efficacy, which in turn strengthens work involvement. Work engagement has also been shown to reduce burnout significantly, meaning that the more engaged a teacher is in their work, the less burnout they experience. Findings This confirms the importance of growing persistence and efficacy as an effort to reduce fatiguing work and create a healthier and more productive environment in the world of education.

### **5.2. Limitations**

Research result. This shows the importance of building and strengthening teachers' grit and inner self-efficacy to increase work engagement, which can lower the risk of burnout. Factors that must be noted are intervention development, professional training, and psychological and environmental supportive work, which are very important in the world of education.

### **5.3. Suggestions**

Teachers must increase their involvement by working with increased motivation and autonomy. A high level of teacher independence enables teachers to have a strong sense of fulfillment. Friendly relationship with colleagues and participants, educated to be able to increase identity teacher professionalism, involvement in work, so that teachers can to motivated and involved in their work, so that they can contribute to the education system. Relationship positive and context of education. This will increase the trend of educators engaging in additional activities outside work that they enjoy, such as helping other educators.

## **Acknowledgment**

We thank all the parties that helped with this research study. This especially includes vocational schools that are willing to help fill in the questionnaire study.

## **References**

Abu-Hilal, M. M., & Al Abed, A. S. (2019). Relations among Engagement, Self-Efficacy, and Anxiety in Mathematics among Omani Students. *Electronic Journal of Research in Education Psychology*, 17(48), 241-266. doi:<https://doi.org/10.25115/ejrep.v17i48.2182>



- Akbari, R., & Eghtesadi Roudi, A. (2020). Reasons of Burnout: The Case of Iranian English Language Teachers. *Psychological Studies*, 65(2), 157-167. doi:<https://doi.org/10.1007/s12646-019-00541-y>
- Alhadabi, A., & Karpinski, A. C. (2020). Grit, Self-Efficacy, Achievement Orientation Goals, and Academic Performance in University students. *International Journal of Adolescence and Youth*, 25(1), 519-535. doi:<https://doi.org/10.1080/02673843.2019.1679202>
- Amitai, A., & Houtte, M. V. (2022). Being Pushed Out of the Career: Former Teachers' Reasons for Leaving the Profession. *Teaching and Teacher Education*, 110(1), 1-12. doi:<https://doi.org/10.1016/j.tate.2021.103540>
- Bakker, A. B., & Demerouti, E. (2017). Job Demands–Resources Theory: Taking Stock and Looking Forward. *Journal of Occupational Health Psychology*, 22(3), 273-285. doi:<https://doi.org/10.1037/ocp0000056>
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work Engagement: An Emerging Concept in Occupational Health Psychology. *Work & stress*, 22(3), 187-200. doi:<https://doi.org/10.1080/02678370802393649>
- Bakker, A. B., & Wingerden, J. v. (2021). Do Personal Resources and Strengths Use Increase Work Engagement? The Effects of a Training Intervention. *Journal of Occupational Health Psychology*, 26(1), 20-30. doi:<https://psycnet.apa.org/doi/10.1037/ocp0000266>
- Bandura, A. (1989). Human Agency in Social Cognitive Theory. *American psychologist*, 44(9), 1175-1184. doi:<https://psycnet.apa.org/doi/10.1037/0003-066X.44.9.1175>
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman & Company.
- Beek, I. v., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. (2012). For Fun, Love, or Money: What Drives Workaholic, Engaged, and Burned-Out Employees at Work? *Applied psychology*, 61(1), 30-55. doi:<https://doi.org/10.1111/j.1464-0597.2011.00454.x>
- Brouwers, A., & Tomic, W. (2000). A Longitudinal Study of Teacher Burnout and Perceived Self-Efficacy in Classroom Management. *Teaching and Teacher Education*, 16(2), 239-253. doi:[https://doi.org/10.1016/S0742-051X\(99\)00057-8](https://doi.org/10.1016/S0742-051X(99)00057-8)
- Chan, E. S., Ho, S. K., Ip, F. F., & Wong, M. W. (2020). Self-Efficacy, Work Engagement, and Job Satisfaction Among Teaching Assistants in Hong Kong's Inclusive Education. *Sage Open*, 10(3). doi:<https://doi.org/10.1177/2158244020941008>
- Chang, M.-L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, 21(3), 193-218. doi:<https://doi.org/10.1007/s10648-009-9106-y>
- Costa, P. L., Passos, A. M., & Bakker, A. B. (2016). The Work Engagement Grid: Predicting Engagement from Two Core Dimensions. *Journal of Managerial Psychology*, 31(4), 774-789. doi:<https://doi.org/10.1108/JMP-11-2014-0336>
- Credé, M., Tynan, M. C., & Harms, P. D. (2017). Much Ado About Grit: A Meta-Analytic Synthesis of the Grit Literature. *Journal of Personality and social Psychology*, 113(3), 492-511. doi:<https://psycnet.apa.org/doi/10.1037/pspp0000102>
- D'Amico, A., Geraci, A., & Tarantino, C. (2020). The Relationship between Perceived Emotional Intelligence, Work Engagement, Job Satisfaction, and Burnout in Italian School Teachers: An Exploratory Study. *Psihologijske teme*, 29(1), 63-84. doi:<https://doi.org/10.31820/pt.29.1.4>
- Datu, J. A. D., Buenconsejo, J. U., Shek, C. Y. C., Choy, Y. L. E., & Sou, K. L. E. (2023). Grit, Academic Engagement in Math And Science, and Well-Being Outcomes in Children during the COVID-19 Pandemic: A Study in Hong Kong and Macau. *School psychology international*, 44(4), 489-512. doi:<https://doi.org/10.1177/01430343221147273>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands–Resources Model of Burnout. *Journal of applied psychology*, 86(3), 499-512. doi:<https://doi.org/10.1037/0021-9010.86.3.499>
- Derakhshan, A., & Fathi, J. (2024). Grit and Foreign Language Enjoyment as Predictors of EFL Learners' Online Engagement: The Mediating Role of Online Learning Self-Efficacy. *The Asia-Pacific Education Researcher*, 33(4), 759-769. doi:<https://doi.org/10.1007/s40299-023-00745-x>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and Passion for Long-Term Goals. *Journal of Personality and social Psychology*, 92(6), 1087-1101.



- Edokpolor, J., Otache, I., & Osifo, K. (2022). Work Self-Efficacy and Engagement of Vocational Business Education Lecturers. *Journal of Technical Education and Training*, 14(3), 112-124. doi:<https://doi.org/10.30880/jtet.2022.14.03.011>
- Eroglu, Y., & Kaya, M. D. (2023). Grit and Academic Life Satisfaction: Assessment of the Mediating Role of School Engagement. *African Educational Research Journal*, 11(3), 441-451. doi:<https://doi.org/10.30918/aerj.113.23.066>
- Fabelico, F., & Afalla, B. (2020). Perseverance and Passion in the Teaching Profession: Teachers' Grit, Self-Efficacy, Burnout, and Performance. *Journal of Critical Reviews*, 7(11), 108-119. doi:<https://doi.org/10.31838/jcr.07.11.17>
- 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. doi:<https://doi.org/10.14221/ajte.2018v43n1.5>
- Fayaz, I., & Gulzar, F. (2025). Thrive, Don't Survive: Building Work-Life Balance with Family Support, Grit and Self-Efficacy. *IIMT Journal of Management*, 2(1), 114-138. doi:<https://doi.org/10.1108/IIMTJM-05-2024-0057>
- Granziera, H., & Perera, H. N. (2019). Relations among Teachers' Self-Efficacy Beliefs, Engagement, and Work Satisfaction: A Social Cognitive View. *Contemporary Educational Psychology*, 58, 75-84. doi:<https://doi.org/10.1016/j.cedpsych.2019.02.003>
- Guo, J., Tang, X., & Xu, K. M. (2019). Capturing the Multiplicative Effect of Perseverance and Passion: Measurement Issues of Combining Two Grit Facets. *Proceedings of the National Academy of Sciences*, 116(10), 3938-3940. doi:<https://doi.org/10.1073/pnas.1820125116>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*: Springer Nature.
- Halbesleben, J. R. (2010). A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources, and Consequences. *Work engagement: A handbook of essential theory and research*, 8(1), 102-117.
- Han, Y., & Wang, Y. (2021). Investigating the Correlation among Chinese EFL Teachers' Self-Efficacy, Work Engagement, and Reflection. *Frontiers in Psychology*, 12, 1-11. doi:<https://doi.org/10.3389/fpsyg.2021.763234>
- Heidarilagh, T., & Talepasand, S. (2021). The Mediating Role of Teachers' Work Engagement in Relation to Character Strengths with Burnout. *Educational and Scholastic studies*, 10(3), 317-341.
- Hodge, B., Wright, B., & Bennett, P. (2018). The Role of Grit in Determining Engagement and Academic Outcomes for University Students. *Research in Higher Education*, 59(4), 448-460. doi:<https://doi.org/10.1007/s11162-017-9474-y>
- Hopkins, C., Ferrell, O., Ferrell, L., Hopkins, K., & Merkle, A. C. (2020). Self-Efficacy, Locus of Control and Engagement as Determinants of Grades in a Principles of Marketing Class. *Marketing Education Review*, 30(4), 236-251. doi:<https://doi.org/10.1080/10528008.2020.1837634>
- Huang, P., & Zhou, M. (2024). Are Emotional Labor Strategies Good or Bad for Work Engagement Among Chinese Preschool Teachers? The Mediating Role of Teacher Efficacy and Grit. *Early Education and Development*, 35(8), 1920-1935. doi:<https://doi.org/10.1080/10409289.2024.2360879>
- Jamaludin, I. I., & You, H. W. (2019). Burnout in Relation to Gender, Teaching Experience, and Educational Level among Educators. *Education Research International*(1), 1-5. doi:<https://doi.org/10.1155/2019/7349135>
- Juliana, A., Saffardin, F. S., & Teoh, K. B. (2021). Job Demands-Resources Model and Burnout among Penang Preschool Teachers: The Mediating Role of Work Engagement. *Annals of the Romanian Society for Cell Biology*, 25(3), 6679-6691.
- Jung, Y., & Lee, J. (2018). Learning Engagement and Persistence in Massive Open Online Courses (MOOCs). *Computers & Education*, 122, 9-22. doi:<https://doi.org/10.1016/j.compedu.2018.02.013>
- Juvonen, S., & Toom, A. (2023). Teachers' Expectations and Expectations of Teachers: Understanding Teachers' Societal Role. In M. Thrupp, P. Seppänen, J. Kauko, & S. Kosunen (Eds.), *Finland's*

- Famous Education System: Unvarnished Insights into Finnish Schooling* (pp. 121-135). Singapore: Springer.
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of management Journal*, 33(4), 692-724. doi:<https://doi.org/10.5465/256287>
- Kara, S. (2020). Investigation of Job Satisfaction and Burnout of Visual Arts Teachers. *International journal of Research in Education and Science*, 6(1), 160-171. doi:<https://doi.org/10.46328/ijres.v6i1.817>
- Khan, B. M., & Khan, A. M. (2017). Grit, Happiness and Life Satisfaction among Professionals: A Correlational Study. *Journal of Psychology and Cognition*, 2(2), 123-132. doi:<https://doi.org/10.35841/psychology-cognition.2.2.123-132>
- Klassen, R. M., Aldhafri, S., Mansfield, C. F., Purwanto, E., Siu, A. F., Wong, M. W., & Woods-McConney, A. (2012). Teachers' Engagement at Work: An International Validation Study. *The journal of experimental education*, 80(4), 317-337. doi:<https://doi.org/10.1080/00220973.2012.678409>
- Lan, Y. (2022). The Role of Teachers' Grit and Motivation in Self-Directed Professional Development. *Frontiers in Psychology*, 13, 1-7. doi:<https://doi.org/10.3389/fpsyg.2022.922693>
- Lee, J. S. (2022). The Role of Grit and Classroom Enjoyment in EFL Learners' Willingness to Communicate. *Journal of Multilingual and Multicultural Development*, 43(5), 452-468. doi:<https://doi.org/10.1080/01434632.2020.1746319>
- Leiter, M. P., & Maslach, C. (2017). Burnout and Engagement: Contributions to a New Vision. *Burnout Research*, 5, 55-57. doi:<https://doi.org/10.1016/j.burn.2017.04.003>
- Liu, H., Chu, W., & Wang, Y. (2021). Unpacking EFL Teacher Self-Efficacy in Livestream Teaching in the Chinese Context. *Frontiers in Psychology*, 12, 1-11. doi:<https://doi.org/10.3389/fpsyg.2021.717129>
- Ma, Y. (2023). A Lenz Into the Predictive Power of Language Teacher Emotion Regulation and Self-Evaluation on L2 Grit, Teaching Style Preferences, and Work Engagement: A Case of Chinese EFL Instructors. *BMC psychology*, 11(1), 1-16. doi:<https://doi.org/10.1186/s40359-023-01356-3>
- MacIntyre, P., & Khajavy, G. H. (2021). Grit in Second Language Learning and Teaching: Introduction to the Special Issue. *The Journal for the Psychology of Language Learning*, 3(2), 1-6. doi:<https://doi.org/10.52598/jpll/3/2/1>
- Maslach, C., & Leiter, M. P. (2016). Burnout. *Stress: Concepts, Cognition, Emotion, and Behavior*, 1, 351-357. doi:<https://doi.org/10.1016/b978-0-12-800951-2.00044-3>
- Muenks, K., Wigfield, A., Yang, J. S., & O'Neal, C. R. (2017). How True is Grit? Assessing its Relations to High School and College Students' Personality Characteristics, Self-Regulation, Engagement, and Achievement. *Journal of Educational Psychology*, 109(5), 599-620. doi:<https://psycnet.apa.org/doi/10.1037/edu0000153>
- Noughabi, M. A., Ghonsooly, B., & Jahedizadeh, S. (2024). Modeling the Associations between EFL Teachers' Immunity, L2 Grit, and Work Engagement. *Journal of Multilingual and Multicultural Development*, 45(8), 3158-3173. doi:<https://doi.org/10.1080/01434632.2022.2088766>
- Obeng, P., Srem-Sai, M., Salifu, I., Amoade, M., Arthur, F., Agormedah, E. K., . . . Schack, T. (2025). Linking Students' Grit and Academic Engagement: Mediating Role of Academic Motivation and Self-Regulated Learning. *British Educational Research Journal*, 51(5), 2511-2535. doi:<https://doi.org/10.1002/berj.4185>
- Perera, H. N., Granziera, H., & McIlveen, P. (2018). Profiles of Teacher Personality and Relations with Teacher Self-Efficacy, Work Engagement, and Job Satisfaction. *Personality and Individual Differences*, 120, 171-178. doi:<https://doi.org/10.1016/j.paid.2017.08.034>
- Perera, H. N., Vosicka, L., Granziera, H., & McIlveen, P. (2018). Towards an Integrative Perspective on the Structure of Teacher Work Engagement. *Journal of Vocational Behavior*, 108, 28-41. doi:<https://doi.org/10.1016/j.jvb.2018.05.006>
- Pérez-Fuentes, M. d. C., Molero Jurado, M. d. M., Barragán Martín, A. B., Simón Márquez, M. d. M., Martos Martínez, Á., & Gázquez Linares, J. J. (2018). The Mediating Role of Perceived Stress in the Relationship of Self-Efficacy and Work Engagement in Nurses. *Journal of Clinical Medicine*, 8(1), 1-12. doi:<https://doi.org/10.3390/jcm8010010>

- Pyhältö, K., Pietarinen, J., & Salmela-Aro, K. (2011). Teacher–Working-Environment Fit as a Framework for Burnout Experienced by Finnish teachers. *Teaching and Teacher Education*, 27(7), 1101-1110. doi:<https://doi.org/10.1016/j.tate.2011.05.006>
- Räsänen, K., Pietarinen, J., Pyhältö, K., Soini, T., & Väisänen, P. (2020). Why Leave the Teaching Profession? A Longitudinal Approach to the Prevalence and Persistence of Teacher Turnover Intentions. *Social Psychology of Education*, 23(4), 837-859. doi:<https://doi.org/10.1007/s11218-020-09567-x>
- Richards, K. A. R., Hemphill, M. A., & Templin, T. J. (2018). Personal and Contextual Factors Related to Teachers' Experience with Stress and Burnout. *Teachers and Teaching*, 24(7), 768-787. doi:<https://doi.org/10.1080/13540602.2018.1476337>
- Robertson-Kraft, C., & Duckworth, A. L. (2014). True Grit: Trait-Level Perseverance and Passion for Long-Term Goals Predicts Effectiveness and Retention among Novice Teachers. *Teachers College Record*, 116(3), 1-27. doi:<https://doi.org/10.1177/016146811411600306>
- Rusu, P. P., & Colomeischi, A. A. (2020). Positivity Ratio and Well-Being among Teachers. The Mediating Role of Work Engagement. *Frontiers in Psychology*, 11, 1-10. doi:<https://doi.org/10.3389/fpsyg.2020.01608>
- Salahat, M. F., & Al-Hamdan, Z. M. (2022). Quality of Nursing Work Life, Job Satisfaction, and Intent to Leave among Jordanian Nurses: A Descriptive Study. *Heliyon*, 8(7), 1-10. doi:<https://doi.org/10.1016/j.heliyon.2022.e09838>
- Salmela-Aro, K., Hietajärvi, L., & Lonka, K. (2019). Work Burnout and Engagement Profiles among Teachers. *Frontiers in Psychology*, 10, 1-8. doi:<https://doi.org/10.3389/fpsyg.2019.02254>
- Saloviita, T., & Pakarinen, E. (2021). Teacher Burnout Explained: Teacher-, Student-, and Organisation-Level Variables. *Teaching and Teacher Education*, 97, 1-14. doi:<https://doi.org/10.1016/j.tate.2020.103221>
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 Years of Research and Practice. *Career Development International*, 14(3), 204-220. doi:<https://doi.org/10.1108/13620430910966406>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness studies*, 3(1), 71-92. doi:<https://doi.org/10.1023/A:1015630930326>
- Skaalvik, E. M., & Skaalvik, S. (2023). Collective Teacher Culture and School Goal Structure: Associations with Teacher Self-Efficacy and Engagement. *Social Psychology of Education*, 26(4), 945-969. doi:<https://doi.org/10.1007/s11218-023-09778-y>
- Tang, L., & Zhu, X. (2024). Academic Self-Efficacy, Grit, and Teacher Support as Predictors of Psychological well-being of Chinese EFL Students. *Frontiers in Psychology*, 14, 1-15. doi:<https://doi.org/10.3389/fpsyg.2023.1332909>
- Vahedi, S. (2022). The Relationship of Grit, Psychological Hardiness, and Resilience with Academic Engagement: a Model for Path Analysis. *Educational Psychology*, 18(66), 169-192. doi:<https://doi.org/10.22054/jep.2022.61818.3391>
- Vidić, T. (2021). Students' School Satisfaction: The Role of Classroom Climate, Self-efficacy, and Engagement. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 9(3), 347-357. doi:<https://doi.org/10.23947/2334-8496-2021-9-3-347-357>
- Wang, K. (2024). Grammar Enhancement in EFL Instruction: A Reflection on the Effects of Self-Evaluation, Teacher Support, and L2 Grit. *BMC psychology*, 12(1), 1-10. doi:<https://doi.org/10.1186/s40359-023-01504-9>
- Wang, Y., Derakhshan, A., & Zhang, L. J. (2021). Researching and Practicing Positive Psychology in Second/Foreign Language Learning and Teaching: The Past, Current Status and Future Directions. *Frontiers in Psychology*, 12, 1-10. doi:<https://doi.org/10.3389/fpsyg.2021.731721>
- Wei, H., Gao, K., & Wang, W. (2019). Understanding the Relationship Between Grit and Foreign Language Performance Among Middle School Students: The Roles of Foreign Language Enjoyment and Classroom Environment. *Frontiers in Psychology*, 10, 1-8. doi:<https://doi.org/10.3389/fpsyg.2019.01508>

- Widodo, & Gunawan, R. M. (2021). Effect of Grit on the Teaching Creativity of Indonesian Teachers: The Mediating Role of Organizational Commitment and Knowledge Management. *Cogent Education*, 8(1), 1-17. doi:<https://doi.org/10.1080/2331186X.2021.2006111>
- Wyatt, M. (2018). Language Teachers' Self-efficacy Beliefs: A Review of the Literature (2005-2016). *Australian Journal of Teacher Education*, 43(4), 92-120. doi:<https://doi.org/10.14221/ajte.2018v43n4.6>
- Xiao, Y., Fathi, J., & Mohammaddokht, F. (2022). Exploring a Structural Model of Teaching Enjoyment, Teacher Self-Efficacy, and Work Engagement. *Frontiers in Psychology*, 13, 1-10. doi:<https://doi.org/10.3389/fpsyg.2022.918488>
- Zeng, G., Chen, X., Cheung, H. Y., & Peng, K. (2019). Teachers' Growth Mindset and Work Engagement in the Chinese Educational Context: Well-Being and Perseverance of Effort as Mediators. *Frontiers in Psychology*, 10, 1-10. doi:<https://doi.org/10.3389/fpsyg.2019.00839>
- Zhang, A., & Yang. (2021). Toward the Association Between EFL/ESL Teachers' Work Engagement and Their Students' Academic Engagement. *Frontiers in Psychology*, 12, 1-4. doi:<https://doi.org/10.3389/fpsyg.2021.739827>
- Zhao, H., Zhang, Z., & Heng, S. (2024). Grit and College Students' Learning Engagement: Serial Mediating Effects of Mastery Goal Orientation and Cognitive Flexibility. *Current Psychology*, 43(8), 7437-7450. doi:<https://doi.org/10.1007/s12144-023-04904-7>
- Zhou, S., & Hou, H. (2025). The Interplay of Self-Efficacy, Grit, and Metacognition in Shaping Work Engagement among EFL Teachers: A Comparative Study of Mainland China and Hong Kong. *BMC psychology*, 13(1), 1-17. doi:<https://doi.org/10.1186/s40359-025-02761-6>