

MENTAL RESILIENCE AND BURN OUT IN GREEK TEACHERS, AFTER THE COVID-19 PANDEMIC

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Abstract: The COVID-19 pandemic has ushered in unprecedented challenges across the globe, affecting various facets of daily life. Among those significantly impacted are educators, who have been at the forefront of adapting to the abrupt shift in teaching paradigms. The post-COVID-19 educational landscape in Greece presents an intricate tapestry of opportunities and challenges. As the country charts its course towards educational recovery, the mental well-being of teachers emerges as a linchpin for the sustainable development of the education system. Examining how mental resilience and burnout intersect with pedagogical innovation, technological integration, and policy changes allows for a comprehensive understanding of the nuanced dynamics at play. This exploration into the mental resilience and burnout among Greek teachers (N=114) after the COVID-19 pandemic sheds light on the current state of the education system and serves as a compass for future reforms. While individual experiences and levels of burnout components like emotional exhaustion and depersonalization may vary, these do not translate into significant differences in resilience based on gender, education, or age. This understanding reinforces the importance of comprehensive, universally targeted strategies in promoting resilience and well-being.

Keywords: Mental resilience, Burn out, Greek teachers, COVID-19 pandemic

1. INTRODUCTION

Early research on resilience focused on the characteristics or variables that help people overcome adversity. We can categorize these findings into intrapersonal and environmental influences. Cognitions and special abilities are examples of recognized intrapersonal factors. A belief system that provides existential meaning, a coherent life story, and appreciation of one's individuality are among the cognitive components, along with optimism (Chang & Sanna, 2001), intelligence (McKnight & Loper, 2002), creativity (Simonton, 2000) and humor (Masten, Narayan, 2012; Urman et al., 2001).

A variety of coping mechanisms, social skills, academic ability, and above average memory are qualities that contribute to resilience (Barbarin et al., 2001; Rouse, 2001). It has also been suggested that physical attractiveness increases a person's capacity for resilience (Kaufman & Zigler, 1989). Internal variables that lead to increased levels of resilience can be considered internal protective factors (Dias & Cadime, 2017). Life events and perceived social support or sense of closeness are examples of environmental factors that influence resilience. Social support has been cited as a key component in several areas related to resilience (Masten, Narayan, 2012).

The process of maintaining relationships as well as the measurable amount of social resources are included in a simple definition. A person and their environment engage in a transaction when providing social support. As a result, the definition of social support includes not only the amount or type of social ties but also how these relationships are perceived. Individuals who have a negative attitude toward the support provided may resist it, resulting in receiving and perceiving less help (Varni et al., 1992). A person is not just a passive recipient of social support. In contrast, social support is a dynamic, reciprocal process. For example, parental support has been found to be moderately to highly associated with adolescent resilience across domains (Tusaie-Mumford, 2001). However, there is strong evidence linking parental overprotection to children's substance abuse, antisocial behavior, and low psychosocial resilience, as well as to a lack of self-regulation and effective achievement. Consequently, protective factors vary by condition and the dosage or level of the agent. Numerous studies have revealed that resilience is directly influenced by the amount and recency of negative life events. The amount of events that the individual perceived as negative had a greater impact on resilience than did life change in general. However, because not all people who experience negative life events have low resilience, this research on life events raised issues that validated the importance of a transactional interaction between the components (Masten, 2012).

Despite decades of research on the topic, there is still no agreement on how resilience should be defined, conceptualized or measured. In the context of severe mental illness, these problems with resilience are even more apparent (Pai & Vella, 2018). Although there is no universally accepted definition of resilience, all definitions include

reference to both difficulties and successful outcomes. Resilience is sometimes defined as the ability to recover from or overcome any difficult situation or incident in order to achieve positive outcomes.

Furthermore, resilience is known to operate at and interact with various systems or levels. The dynamic process by which a biopsychosocial system returns to its previous level of functioning after disruption by a stressor is how Hill et al. (2018) defined resilience. According to this concept, resilience is a dynamic process that affects various systems. Additionally, it is the process and outcome of overcoming difficult or challenging life situations, especially through mental, emotional and behavioral flexibility and adaptation to internal and external challenges. How well people adapt to adversity depends on a number of factors, the following being the most important (American Psychological Association, 2012):

- the ways in which individuals see and cope with the world,
- the availability and quality of social resources,
- specific coping strategies.

Teacher resilience has been specifically defined as a skill, process and outcome (Mansfield et al., 2016). According to the above authors, a resilient educator can use personal characteristics and situational factors to help them manage obstacles, grow, and achieve professional satisfaction over time while promoting well-being. Given the growing number of studies linking the development of resilience skills to higher levels of employee subjective well-being, psychosocial outcomes, job satisfaction and performance, the development of resilience in teachers becomes even more critical (Robertson et al., 2015).

Research on teacher resilience has also examined teacher resilience in relation to contextual or ecological factors, both positive and negative, such as school support, family support, behavior management policies, professional learning, the socio-emotional competence and socio-economic factors of the school's clientele, among others. This is based on the idea that resilience can be developed (Day et al., 2006). In conclusion, characteristics including job satisfaction, commitment, teaching effectiveness, motivation, well-being and sense of professional identity are believed to be characteristics of resilient teachers (Day & Hong, 2016).

In the late 1980s burnout was more and more noticed also outside the work with patients and care recipients (Demerouti et al., 2001). In a more general way burnout can be seen as “a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform” (Maslach et al., 1996, p. 20). Researchers agree that stressors leading to burnout in human services can also be found in other occupations (Burisch, 2006; Demerouti et al., 2001). Maslach & Leiter (1997) provide one of the most radical definitions of burnout: “Burnout is the index of the dislocation between what people are and what they have to do. It represents an erosion in value, dignity, spirit, and will – an erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it's hard to recover.”

The effects of work stress and burn out on people can be categorized into four groups. Physical symptoms, emotional-psychological symptoms, spiritual symptoms and symptoms affecting behavioral manifestations in the workplace (Bhui et al., 2016). The physical manifestations of stress at work Epidemiological studies have demonstrated the existence of a strong relationship between stress and physical health since the 1970s, specifically between stress and cardiovascular disease and hypertension (Keller et al., 2012). According to Sarafino (1990), the association between stress and disease can occur both directly and indirectly as a consequence of stress-induced changes in organ function and affecting human habits and behaviours (diet, sleep, etc.).

2. MATERIALS AND METHODS

The purpose of this study is to investigate professional levels of burnout in Greek teachers during the COVID-19 pandemic, as well as to examine professional burnout based on mental resilience. Participation in the present study was voluntary, anonymous and questionnaires were sent via Google Docs. The *Maslach Burnout Inventory* (MBI) is well established in the literature. We used the Greek adaptation of the questionnaire specifically for teachers with 7 point self-assessment Likert scale (Papadatou, D., Anagnostopoulos, F. & Monos, D, 1994; Kokkinos, 2006). There are defined the 3 burnout factors: Emotional exhaustion, Depersonalization and Personally accomplishments.

The Connor-Davidson Resilience Scale (CD-RISC) was also used, adapted into Greek and weighted by Dimitriadou & Stalika (2012).. The scale consists of 25 self-report statements of five point Likert scale, related to resilience conceptual constructs and correspond to the following five factors: (1) Personal Competence, High Standards, and Perseverance – (2) Trust in personal instinct, Long-suffering in terms of negative mood, and Strengthening effect of stress – (3) Positive acceptance of it change and Secure Relationships – (4) Control – and (5) Spiritual influences. The grading is based on how the respondents have felt during it last month and scores range from 0 to 100, with the highest scores to indicate greater resilience. In the present study, we report Sustainability as an overall index of all factors. The scale test both in general population as well as in clinical samples showed good

internal consistency (Cronbach $\alpha = 0.89$) and also good test-retest reliability (intercorrelation coefficient = 0.87). The analysis was performed with SPSS, version 23.

3. RESULTS

The survey explored the relationships between emotional exhaustion, depersonalization, personal accomplishment, and resilience using Pearson correlation coefficients. In the demographics of the study involving 114 participants from the agricultural sector in Pieria, a comprehensive understanding emerges through the analysis of gender, age, marital status, educational level, years of seniority, mental resilience, and burnout in relation to the pandemic.

Gender distribution within the sample is significantly skewed with females comprising a majority at 81,6%, totaling 93 respondents, while males constitute a smaller segment at 18,4% with 21 respondents. This disproportionate representation highlights the predominant role of women in this agricultural community or perhaps a greater interest or availability among them to participate in the survey.

Negative significant correlations were found between Resilience and Emotional Exhaustion ($r = -.352$; $p = .000$), and Resilience and Depersonalization ($r = -.320$; $p = .001$) (Table 1). As expected, the correlation between Personal Achievement and Resilience is positive and significant ($r = .664$; $p = .000$)

Table 1. Correlations between the MBI subscales and Resilience (CD-RISC)

		Resilience
Emotional Exhaustion	Pearson Correlation	-,352**
	Sig. (2-tailed)	,000
Depersonalization	Pearson Correlation	-,320**
	Sig. (2-tailed)	,001
Personal Accomplishment	Pearson Correlation	,664**
	Sig. (2-tailed)	,000
Resilience	Pearson Correlation	1
	Sig. (2-tailed)	

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

Source: Author research

The survey conducted a regression analysis to understand how well personal accomplishment predicts resilience, a key psychological trait in the context of well-being and adaptability. This segment of the study provides a comprehensive look into the regression model, including variables entered and removed, model summary, ANOVA, coefficients, and excluded variables. Table 2 indicates that personal accomplishment was entered into the model as a predictor for resilience using a stepwise method. The stepwise criteria were based on the probability of F-to-enter and F-to-remove, focusing specifically on how personal accomplishment as a variable influences the level of resilience among individuals. In the Model Summary (Table 2a), the R value is ,664, indicating a strong positive correlation between personal accomplishment and resilience. The R Square value is ,441, meaning that approximately 44,1% of the variance in resilience can be explained by personal accomplishment. The Adjusted R Square, which is ,436, adjusts the R Square value for the number of predictors in the model, indicating a good fit. The ANOVA results (Table 2b) provide a test of the overall model fit. The regression line's sum of squares is 8042,710 with a significant F-value of 88,417 ($p < .000$), indicating the model is statistically significant and personal accomplishment is a significant predictor of resilience. The coefficients table (Table 2c) provides the unstandardized (B) and standardized (Beta) coefficients, which tell you how much the dependent variable is expected to increase when that independent variable increases by one, assuming that all other independent variables remain constant. For personal accomplishment, the unstandardized coefficient B is 1,724, meaning for every one-unit increase in personal accomplishment, resilience is expected to increase by approximately 1,724 units. The standardized coefficient Beta is ,664, indicating a strong positive effect of personal accomplishment on resilience. The t-value for personal accomplishment is 9,403, and the significance (p-value) is ,000, confirming that personal accomplishment is indeed a statistically significant predictor of resilience. Table 2d lists excluded variables that were not included in the final model. Both emotional exhaustion and depersonalization were excluded, as indicated by their Beta values and significance levels. The partial correlation for each of these variables is relatively low, and their significance levels do not meet the criteria for inclusion in the model. The collinearity statistics suggest that there is no undue multicollinearity that would affect the reliability of the regression coefficients. The regression analysis clearly shows that personal accomplishment is a significant and strong predictor of resilience, explaining a substantial portion of variance in resilience scores among participants. This finding emphasizes the importance of fostering a sense of

personal accomplishment to enhance resilience. The analysis also indicates that while other factors like emotional exhaustion and depersonalization were considered, they did not significantly contribute to the prediction of resilience in this model. This focused analysis provides valuable insights into the psychological constructs that might be leveraged in interventions or support mechanisms aimed at boosting resilience in individuals.

Table 2. Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Personal Accomplishment		Stepwise (Criteria: Probability-of-F-to-enter ≤ ,050, Probability-of-F-to-remove ≥ ,100).

a. Dependent Variable: Resilience

Source: Author research

Table 2a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,664 ^a	,441	,436	9,53748

a. Predictors: (Constant), personal accomplishment

Source: Author research

Table 2b. ANOVA

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1						
Regression	8042,710	1	8042,710	88,417	,000 ^b	
Residual	10187,922	112	90,964			
Total	18230,632	113				

a. Dependent Variable: Resilience b. Predictors: (Constant), Personal Accomplishment

Source: Author research

Table 2c. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,328	7,496		,044	,965
	Personal Accomplishment	1,724	,183	,664	9,403	,000

a. Dependent Variable: Resilience

Source: Author research

Table 2d. Excluded Variables^a

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Emotional Exhaustion	-,069 ^b	-,875	,383	-,083	,801
	Depersonalization	-,041 ^b	-,515	,607	-,049	,813

a. Dependent Variable: Resilience b. Predictors in the Model: (Constant), personal accomplishment

Source: Author research

4. CONCLUSIONS

The significant statistical interrelationships among emotional exhaustion, depersonalization, personal accomplishment, and resilience delineate a complex psychological landscape that individuals navigate in high-stress environments. The inverse relationship between feelings of efficacy and success and the detrimental aspects of burnout is particularly telling. Personal accomplishment emerges as a potent factor with a strong positive correlation with resilience, suggesting that a sense of achievement acts as a bulwark against the adverse effects of burnout, bolstering an individual's resilience. This finding is instrumental, highlighting that enhancing personal

accomplishment might be a critical strategy in fostering resilience and mitigating the impacts of burnout. The survey's findings have profound implications for understanding and addressing the psychological wellbeing of individuals in stressful work environments. Strategies might include developing programs to manage and reduce emotional exhaustion and depersonalization, perhaps through stress management training, workload adjustments, or promoting a more supportive work culture. Concurrently, enhancing personal accomplishment could involve recognition programs, opportunities for skill development, and fostering a sense of community and support within the workplace. In interpreting these results, it is important to recognize the multifaceted nature of both burnout and resilience. While the survey has delineated clear trends and correlations, individual experiences of burnout and resilience are influenced by a myriad of personal, social, and environmental factors. Therefore, interventions should be nuanced and adaptive, catering to the diverse needs and circumstances of individuals.

5. DISCUSSION

The comprehensive research underlines the critical condition of teacher burnout within the PDE Attica schools, emphasizing that for a significant number of educators, teaching has become an arduous and unpleasant endeavor. This burnout manifests as a combination of physical and psychological exhaustion, rooted deeply in both the lack of capability and the diminished will to exert the necessary effort for proper job performance. These findings echo the energetic and motivational dimensions of burnout as discussed by Schaufeli & Taris (2014), who highlighted the inseparability of inability and unwillingness in the context of burnout.

The research suggests that the root causes of this widespread burnout are multifactorial, with significant contributions from the economic crisis and the COVID-19 pandemic, deeply impacting the emotional and operational lives of teachers. These external pressures are exacerbated by the daily challenges of managing increasingly diverse and complex classrooms, facing student indifference, addressing the needs of non-native speakers, and dealing with behavioral issues, all within a context of inadequate state support. This environment of heightened stress and insufficient resources is aptly described in the work of Bakker et al. (2007), who underscored the protective role of job resources in fostering engagement amidst high job demands.

Furthermore, the transformative potential of leadership styles, as explored by Breevaart & Bakker (2018), suggests that transformational leadership can guide teachers toward greater work engagement, even in challenging circumstances. This research aligns with these findings, suggesting that while the immediate environmental stressors are daunting, the presence of supportive leadership and adequate resources can significantly mitigate the adverse effects of these stressors.

Despite the extensive nature of this study, encompassing the perspectives of 2391 teachers, its findings are presented with a level of caution. The research reflects a specific temporal snapshot and is not immune to the variabilities and unique challenges of different educational contexts. As such, the results should be interpreted as part of a larger conversation about teacher burnout, one that is continuously evolving and subject to various external and internal influences.

The implications of this study are clear: addressing teacher burnout requires systemic, multi-faceted approaches that go beyond individual strategies. It necessitates a reevaluation and reinforcement of support structures like counseling services, interdisciplinary guidance, and continuous professional development, as highlighted by the job demands-resources model. It is not enough for teachers to tackle burnout in isolation; the conditions that breed such stress are systemic and demand comprehensive strategies for mitigation and prevention.

In light of these findings and the extant literature, the call to action is evident. Educational institutions must redefine their support structures, invest in psychological and professional resources for teachers, and cultivate an environment that is conducive to both teacher and student well-being. This approach aligns with the suggestions of Peters et al. (2012) and Demerouti et al. (2017), who emphasized the importance of optimizing job requirements and providing robust support systems in times of crisis.

In conclusion, while the research paints a concerning picture of teacher burnout, it also provides a clear direction for future interventions. Addressing the issue of teacher burnout is not just about alleviating individual symptoms but about fundamentally transforming the educational landscape to support the well-being and effectiveness of teachers. This transformation, while challenging, is essential for the sustainability and quality of education, as the well-being of teachers directly impacts the educational experience of students and the overall health of the educational system.

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