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EFFECT OF RESILIENCE ON BURNOUT IN ONLINE LEARNING ENVIRONMENT

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Abstract. The COVID-19 virus outbreak has affected all aspects of human life. The challenges of education during the pandemic could have an impact on coping with stress. The aim of the current study was to explore the effects of people's resilience to stress on burnout symptoms. We used The Maslach Burnout Inventory (Maslach, 1982), while the capacity to cope with stress and recover was measured with the Connor-Davidson Resilience Scale (2003). There were 375 participants, 235 women and 140 men, between the ages of 18 and 48 years old (M = 21.43; SD = 3.93), learning in higher education institutions. We performed several regression analyses using a stepwise method. Adaptability (β = -.38, $p < .01$), external control (β = .23, $p < .01$), seeking social support (β = -.26, $p < .01$), and decisiveness (β = .17, $p < .01$) were found to be significant predictors of emotional exhaustion (R^2_{adj} = .175). When it comes to personal accomplishments significant predictors were purposefulness (β = .29, $p < .01$), decisiveness (β = .19, $p < .01$), and adaptability (β = .13, $p < .01$) (R^2_{adj} = .304). Social support (β = -.36, p = .00), external control (β = .24, $p < .01$) and purposefulness (β = -.18, $p < .01$) were significant predictors of depersonalization (R^2_{adj} = .186). The findings from the present study show that high levels of resilience to stress have a protective effect on the manifestations of burnout symptoms. These results have implications for proposing theoretical foundations for burnout prevention strategies in an online learning context. Also, enrich intervention techniques connected with achieving higher adaptability.

Keywords: resilience; burnout; online learning; COVID-19

1. Introduction

The COVID-19 pandemic has represented the biggest shift to people's daily lives since the Second World War. The pandemic and its restrictions imposed by governments over the world resulted in tremendous changes in the way people

operated in a personal and a professional level. For instance, there were strict requirements about working from home, avoiding socialising activities, and the temporary closure of public spaces cafés, restaurants, theatres, cinemas, etc. Another big adjustment was the sphere of educational as there was a quick switch from in-person teaching to online only. Both students and teachers/lecturers had to adapt to a new format of distance learning. This unexpected situation had people facing many new challenges, such as increasing workloads, the need to use new technologies, changes to daily routines, and uncertainty about the future (Allen, Jerrim, & Sims 2020; Cipriano & Brackett 2020). These difficulties were related also to the need for physical distancing from friends and colleagues.

As schools and universities worldwide grappled with the challenges of social distancing and lockdown measures, they turned to online learning as a viable alternative to ensure continuity of education. The sudden shift from traditional in-person classrooms to virtual learning environments has sparked significant interest and concern regarding its effects on students.

We investigated the impact of the pandemic on students' academic performance, mental health, and social interactions according to the recent changes in the process of education. We specifically explored the effects on well-being because of the imposed governmental measures which might have led to psychological distress, anxiety, and depression (Cao et al., 2020; Essadek & Rabeyron 2020; Li et al., 2020; Odriozola-González et al. 2020), and caused cause a significant impact on students' performance (Villanova & Roman 2002), mental health (Ahola et al. 2006; Eslami 2011), motivation (Lee et al. 2020). Prior studies reported that having a sense of belonging to the university, educators, and other students is crucial in improving academic engagement and achieving better performance (Astin 1999; El-Ghoroury et al. 2012; O'Keefe 2013; Schlemper 2011).

Furthermore, the pandemic has resulted in increased anxiety and uncertainty among students (Elmer et al. 2020). Concerns about health and safety, economic instability, and the impact on future prospects may significantly impact students' mental well-being. The abrupt changes to routines and uncertainties surrounding the duration and severity of the pandemic further exacerbate stress levels and may lead to emotional distress and psychological symptoms (Daly et al. 2020).

These changes may lead to feelings of overwhelm and exacerbate existing stressors, potentially contributing to higher levels of burnout. The lack of face-to-face connections with peers, limited access to extracurricular activities, and reduced engagement in campus life may contribute to a sense of isolation and detachment, further intensifying feelings of burnout (Son et al. 2020). The blurring of boundaries between personal and academic life due to remote learning may also lead to a constant state of being "on", making it challenging for students to disengage and recover from academic stressors (Xiao et al. 2020). Job losses, reduced income, and concerns about future employment prospects may increase financial strain, thereby

exacerbating burnout levels. The combination of academic and financial pressures can be particularly overwhelming for students, making them more susceptible to burnout (Zhang et al. 2020).

The burnout symptoms caused by academic issues may manifest as exhaustion due to excessive academic workload and expectations, lack of interest, and inefficiency (Nuemann et al. 1990). Typical symptoms include disengagement, lack of attention, high anxiety levels, feeling detached from others, and pessimism over academic success (Bikar et al. 2018; Demir et al. 2017). Burnout symptoms in students were characterized by a lack of motivation, and external factors of motivation and self-regulation (Lee et al. 2020).

While the negative impacts of the pandemic on students' well-being are evident, it is important to acknowledge the potential mediating factors and resilience demonstrated by students during these challenging times. Factors such as personal coping strategies, social support systems, and access to resources can play a critical role in mitigating the negative effects and promoting students' well-being (Brooks et al. 2020). Understanding these protective factors is essential for informing interventions and support systems to enhance students' resilience and well-being.

Resilience is defined as the ability to adapt to stressful situations and could be considered a personal trait that contributes to well-being, promote mental health, and prevents negative emotions and distress (Tugade & Fredrickson 2004). Resilience can contribute to positive functioning and optimal development and reduce the adverse effects of stress factors on mental health due to the significant life changes caused by the pandemic.

The significance of resilience in the educational context cannot be understated. Academic success is not solely determined by cognitive abilities. Resilient individuals exhibit greater persistence, problem-solving skills, and self-regulation, which are crucial factors contributing to academic achievement. Moreover, resilience plays a vital role in mitigating the negative effects of stress, adversity, and academic setbacks, helping students maintain their performance and overall well-being.

Resilience was negatively related to emotional exhaustion and stress, and positively to psychological well-being, life satisfaction, and positive affect (Yildirim & Solmaz 2020). Promoting resilience is crucial in reducing mental ill-health, improving academic performance, and coping with stress (Gray 2015; Hartley 2011). Examining resilience levels in students in a situation of change may assist the development of suitable positive education programs in supporting well-being and improving the capacity to cope.

In addition to individual factors, social support plays a significant role in fostering resilience and promoting academic performance. Teachers, peers, and families all contribute to the development of resilience by providing emotional support, encouragement, and opportunities for growth. Recognizing

the importance of social support networks and understanding their impact on resilience is crucial for educational practitioners seeking to create supportive learning environments.

The present research paper seeks to contribute to the existing body of knowledge on the effects of the COVID-19 pandemic on students' well-being, burnout, and resilience. By examining the multifaceted impacts of the pandemic, identifying potential mitigating factors, and exploring the implications for educational institutions, this study aims to inform policies and interventions and support systems that address and alleviate stress and anxiety among students. It further aims to inform educators, policymakers, and researchers in their efforts to create resilient and thriving learning environments.

2. Objectives

The aim of the research was to establish the effect of resilience to stress on burnout symptoms in university students in an online learning environment due to the COVID-19 outbreak.

We hypothesised that resilience will be a significant predictor of students' emotional exhaustions (H1). We also hypothesised that resilience will be a significant predictor of students' personal accomplishment (H2). Finally, we hypothesised that resilience will be a significant predictor of burnout symptoms (H3).

3. Methods

3.1. Participants

A total of 375 participants completed the study, 235 women and 140 men, between the ages of 18 and 48 years old (M = 21.43; SD = 3.93), learning in higher education institutions in Bulgaria. All of them studying at least one year in the conditions of online learning.

3.2. Design and Procedure

The survey was conducted via an online platform at the end of 2021. Participants were able to fill out the questionnaires completely confidentially. The participants saw an informed sheet detailing the purpose of the study was presented and explaining how their data will be used. They signed a consent form at the beginning of the survey and saw a debrief form at the end.

3.3. Instruments

We used a few different questionnaires for the purposes of the present study. Firstly, we measured burnout symptoms of university students by using an adapted to the format of online education version of The Maslach Burnout Inventory (Maslach 1982). The questionnaire included 18 items with a 6-point scale ranging from 1 (never or several times in the school year) to 6 (every day). The three

dimensions of burnout symptoms included – Emotional Exhaustion (α=.87), Personal Accomplishments (α=.82), and Depersonalization (α=.78).

Secondly, we measured the students' capacity to cope with stress and recover in an online learning context with the Connor-Davidson Resilience Scale (2003), adapted for the Bulgarian population by Zankova (2012). It comprised of 25-items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire included five subscales – Adaptability (α=.85), Purposefulness (α=.88), Decisiveness (α=.79), External Control (α=.71), and Social Support (α=.63).

4. Results

Regression analyses

We performed several regression analyses to explore the effect of resilience to stress on different burnout symptoms in university students.

The first analysis was focused on the effect of different aspects of resilience on emotional exhaustion due to online learning. We found that adaptability ($\beta = -.38$, $p < .01$), external control ($\beta = .23$, $p < .01$), seeking social support ($\beta = -.26$, $p < .01$), and decisiveness ($\beta = .17$, $p < .01$) as resilience factors were found to be significant predictors of emotional exhaustion. The model explains 17.5% of the variation ($R^2_{adj} = .175$). Therefore, students with lower levels of adaptability as well as students higher need of social support had lower levels of emotional exhaustion. However, those with higher external control and those who rated themselves as more decisive exhibited higher levels of emotional exhaustion.

When it comes to personal accomplishments significant predictors were purposefulness ($\beta = .29$, $p < .01$), decisiveness ($\beta = .19$, $p < .01$) and adaptability ($\beta = .13$, $p < .01$). The model explains 30.4% of the variation ($R^2_{adj} = .304$). Our findings indicated that the higher the students rated themselves on each of the three dimensions, the higher their perceived levels of personal accomplishments.

The third model explores the effect of resilience factors on depersonalization as a component of burnout syndrome. Social support ($\beta = -.36$, $p < .01$), external control ($\beta = .24$, $p < .01$), and purposefulness ($\beta = -.18$, $p < .01$) were significant predictors of depersonalization, explaining 18.6% of the variation ($R^2_{adj} = .186$). These results showed that students experiencing lower levels of social support and purposefulness had lower levels of depersonalisation. On the other hand, those with higher levels of external control seemed to have lower levels of depersonalisation.

5. Discussion

This study examined resilience and burnout in university students in the conditions of online learning due to the implemented social distancing restrictions in Bulgaria during the COVID-19 outbreak. The findings reported that most of the resilience to stress dimensions have a significant effect on burnout symptoms in university students studying for at least a year in an online learning environment.

Our results showed that the ability to adapt to stress has a protective effect on the negative effects of emotional exhaustion caused by the challenges of online learning, and positively contributes to the subjective assessment of personal achievements in training and in relationships with others. These results are in line with previous findings by McGillivray and Pidgeon (2015). They reported that students possessing a higher level of resilience displayed a lower level of psychological distress and a higher level of mindfulness. Furthermore, we also found that decisiveness as contributing to resistance to stress influences the subjective perception of personal achievements, but at the same time leads to higher levels of emotional exhaustion.

Next, our findings indicated that purposefulness was a positive predictor of the perception of personal achievement, and the lack of clearly defined goals contributed to depersonalization as a symptom of burnout. Similarly, Salami et al. (2017) reported that the level of academic burnout was positively associated with increased perceived academic performance. In addition, Lee et al. (2020) found that distressed students struggled to find meaning in their study or to experience joy of studying (Lee et al. 2020).

Our study also alluded to the fact that access to a supportive social environment leads to lower levels of emotional exhaustion and depersonalization as manifestations of burnout syndrome. These are in line with Pidgeon et al. (2014) who concluded that students with a higher level of resilience reported a higher level of social support and social connectedness, and a lower level of psychological distress. Other research has also confirmed that social support could reduce burnout through resilience (King et al. 1998; Amanda et al., 2012)

The measure for external control was a positive predictor of emotional exhaustion and depersonalization in the present study. These results are consistent with previous studies indicating that distressed students have low internal motivation (Lee et al. (2020). Finally, the capacity to cope with stress turned out to be an important factor for the manifestation of burnout symptoms and high levels of resilience to stress have a protective effect.

Implications and Recommendations

The findings of this study have several implications for educational institutions, policymakers, and student support services in the context of online learning. Recognizing the impact of resilience dimensions on burnout symptoms, the following recommendations are provided:

Resilience-Building Interventions: Educational institutions should consider incorporating resilience-building interventions into online learning programs. These interventions can focus on developing self-efficacy, optimism, social support networks, adaptive coping strategies, and self-regulation skills among students. Providing workshops, counseling services, and resources that foster resilience can

help students effectively navigate the challenges of online learning and reduce burnout symptoms.

Strengthening Social Support: Institutions should promote the development of robust social support networks in online learning environments. This can be achieved through facilitating virtual communities, discussion forums, mentorship programs, and peer support groups. Encouraging collaborative learning experiences and fostering connections between students, faculty, and support staff can enhance social support and alleviate burnout symptoms.

Promoting Adaptive Learning Strategies: Institutions should provide resources and training on adaptive learning strategies that help students cope with the unique demands of online education. This may include guidance on time management, goal setting, technology proficiency, and effective study habits. Empowering students with adaptive skills can enhance their resilience and reduce the likelihood of burnout.

Prioritizing Student Well-being: It is crucial for institutions to prioritize student well-being and mental health in the online learning environment. This involves creating a supportive and inclusive academic culture that acknowledges and addresses the challenges students face. Offering accessible mental health services, stress management workshops, and proactive communication channels can contribute to a healthier learning environment.

Future Research Directions: Further research is warranted to explore additional factors that may influence burnout symptoms in online learning environments. Longitudinal studies can provide insights into the dynamic nature of resilience and burnout, examining how these dimensions change over time and their impact on academic outcomes. Additionally, qualitative studies can provide a deeper understanding of students' experiences and perceptions of resilience and burnout in the online learning context.

In conclusion, this study contributes to the understanding of the relationship between resilience to stress dimensions and burnout symptoms among university students engaged in online learning for at least one year. The findings highlight the importance of fostering resilience to mitigate burnout symptoms and promote student well-being in online learning environments. By implementing targeted interventions and support mechanisms, educational institutions can create an environment conducive to resilience and enhance the overall learning experience for students.

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