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Student Engagement, Life Satisfaction, and Academic Burnout Among Polish Tertiary Students: A Mixed-Methods Analysis (pp. 441–462)

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Abstract

Objective of the study: Given the scarcity of research in this area, the present study was carried out to examine the relationship between student engagement, life satisfaction, and academic burnout in the Polish academic setting. Additionally, a qualitative analysis was conducted to explore the factors that sustain student engagement.

Research method: This study uses both quantitative and qualitative methodologies. In Phase 1, Spearman's rank correlation coefficient was used to analyze the relationship between the primary variables. In Phase 2, inductive thematic analysis was applied to qualitative data collected from seven respondents.

A short description of the context of the issue: Over the past two decades, educational researchers have become increasingly interested in the impact of positive factors on various aspects of human functioning (Dewaele et al., 2019). Despite extensive research in the area, it transpires that the nature of the relationship between some variables remains somewhat underexplored, including the interplay between student engagement, life satisfaction, and academic burnout. This study addresses this gap in the literature and delves into the factors that enhance student engagement within the Polish academic environment.

Research findings: The study identified a strong, negative correlation between levels of life satisfaction and several dimensions of academic burnout, including lack of engagement (-0.355) and fatigue (-0.454). The findings indicate that students who are content with their lives are significantly more likely to report higher academic engagement and are less susceptible to experiencing burnout. The qualitative analysis revealed three main sources of sustained engagement: a growing sense of personal agency, teacher approachability, and peer support.

Conclusions and recommendations: Given that the majority of participants reported difficulty in balancing their academic and personal responsibilities, it is recommended that academic curricula should be structured to facilitate a healthy balance between these domains. As this study shows that higher life satisfaction promotes student engagement, well-balanced curricula could not only contribute to higher life satisfaction among the active student population but also positively impact their academic involvement.

Keywords: life satisfaction, student engagement, academic burnout, thematic analysis

1. Introduction

It was only in the 1980s that happiness became a focal point of psychological research. Since then, various academic disciplines with psychological components have increasingly concentrated on the psychology

of happiness. Over the last two decades, this trend has also been observable in educational research, with growing attention being devoted to positive factors (Dewaele et al., 2019). Despite numerous studies on the topic, the interplay between some variables remains relatively understudied. One such potential research avenue is the relationship between student engagement, life satisfaction, and academic burnout. To the best of the authors' knowledge, these variables have not been jointly analyzed, except for a single research project carried out in the Indian context (Rastogi et al., 2018). This investigation was therefore designed to fill this gap in the existing literature.

2. Theoretical framework

2.1. Student engagement

Student engagement (SE) has garnered increasing attention in recent years. Fredricks et al. (2004) conceptualized SE as a three-dimensional construct, consisting of three components: behavioral (participation in academic and non-academic activities), affective (type of emotionality experienced towards school community), and cognitive (thoughtfulness and willingness to grow). A similar model was proposed by Schaufeli et al. (2002), who viewed SE as an amalgam of three elements: (i) *vigor*, defined as the ability to commit to one's studies, maintain a positive attitude, and demonstrate mental flexibility; (ii) *dedication*, understood as overall enthusiasm, a sense of importance, well-anchored self-esteem, and inspiration; and (iii) *absorption*, which refers to being fully immersed and voluntarily engaged in one's study.

A plethora of studies have examined the impact of student engagement (SE) on academic success; however, there is currently no definitive consensus on this topic. To begin with, studies that support the mediating role of SE, Reyes et al. (2012) found that learning effectiveness is highly dependent on the degree to which students are engaged in classroom activities. Similarly, Delfino (2019) identified SE as a critical predictor of a positive attitude toward the teaching-learning process. Other

research also suggests that certain facets of SE may indeed contribute to more favorable outcomes in education. For example, a strong correlation has been found between academic success and behavioral engagement (Furrer & Skinner, 2003; King, 2015), emotional engagement (King, 2015), and cognitive engagement (Pietarinen et al., 2014). On the other hand, some studies have found no significant correlation between SE and academic outcomes (Appleton et al., 2006; Shernoff & Schmidt, 2008). While further research is clearly needed to fully understand the importance of SE for academic success, Lei et al. (2018) suggested that these inconsistencies may stem from a variety of moderating factors, such as self-assessment of progress, cultural values, gender, and learners' predispositions.

2.2. Life satisfaction

Life satisfaction (LS) is a key component of the broader tripartite model of subjective well-being, which includes life satisfaction, and positive and negative affect (Andrews & Withey, 1976). Wang et al. (2019, p. 2) defined LS as "an individual's conscious evaluation of life quality based on a self-imposed set of standards." However, as individuals differ substantially in their internal characteristics and needs, assessing one's LS may entail the risk of certain biases, making the concept somewhat challenging to investigate. Nonetheless, Schmitter et al. (2003) linked high LS with factors such as finding pleasure in life, a sense of life's meaning, achievement, positive self-evaluation of identity, physical well-being, quality of social relationships, and financial security. Conversely, LS is believed to lead to several positive outcomes, including more meaningful social relationships, increased commitment (Barger et al., 2009), and career satisfaction (Erdogan et al., 2012).

Although research on student LS is still in its infancy, several studies have begun to examine its impact. For instance, in a study of 373 Turkish undergraduates, Gündoğar et al. (2007) found that students who were satisfied with their academic experiences and perceived educational opportunities as adequate were more likely to report higher overall LS. Other studies that sought to validate the relationship between LS and academic outcomes yielded similar findings (Duffy et al., 2012; Ojeda et al.,

2011). In a large-scale study of U.S. undergraduates, Renshaw and Cohen (2014) concluded that LS, combined with the absence of negative affect, is a strong predictor of engagement and academic achievement. Similarly, Heffner and Antaramian (2016, p. 1683) argued that LS provides “incremental validity over affective states in predicting student engagement and some aspects of academic achievement.” LS has also been found to contribute to more positive academic expectations, stronger academic self-efficacy, unbiased self-assessment, and fewer negative emotions in academic settings (Antaramian, 2017).

2.3. Burnout

The concept of burnout has been a subject of considerable research interest in psychology and was first used to describe a syndrome of severe mental exhaustion and cynicism observed in healthcare workers (Hu & Schaufeli, 2009). Maslach and Jackson (1981) characterized burnout as comprising three elements: emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment. Emotional exhaustion is typically associated with feelings of tiredness and mental overload, often leading to long-term emotional fatigue (Maslach & Jackson, 1981). Regarding depersonalization, Duru et al. (2014, p. 13) explained that it refers to “negative, rigid, and/or unemotional attitudes and behaviors of a person against others.” Lastly, those experiencing burnout may struggle to adequately assess their ability to succeed, resulting in a reduced sense of efficacy (Hu & Schaufeli, 2009).

It soon became evident that the detrimental impact of burnout extends beyond the medical profession, leading to studies in various contexts, including education. In their study of academic burnout (AB), Zhang et al. (2007) defined AB as a combination of emotional exhaustion, cynicism, and a reduced sense of academic efficacy. Although some symptoms of AB may resemble those found in other domains of life, certain manifestations are unique to the educational setting, including poor attendance, disengagement from in-class activities, and an overwhelming sense of meaninglessness (Yang & Farn, 2005). Over the past two decades, the impact of AB on student performance has been extensively

researched. Hu and Schaufeli (2009) suggested that AB should be viewed as a key indicator of inadequate academic achievement, a finding echoed in other independent studies (Caballero et al., 2007; Galbraith & Merrill, 2014; Salmela-Aro et al., 2009; Zhang et al., 2007). AB has also been linked to negative aspects of the learning experience, including ineffective study strategies and increased outcome-related anxiety (Boudreau et al., 2004), poor management of study workload (Yang & Farn, 2005), and dissatisfaction with the quality of the learning experience (Charkabi et al., 2013). Notably, AB has been studied alongside other psychological factors, with several studies highlighting the potential moderating effects of high emotional intelligence (Durán et al., 2006; Kant & Shanker, 2021; Przybylska, 2016) and strong efficacy beliefs (Capri et al., 2012; Charkabi et al., 2013; Rahmati, 2015; Özhan, 2021) in mitigating the development of burnout symptoms amongst members of academia.

3. Research rationale

The impact of academic burnout (AB), life satisfaction (LS), and student engagement (SE) on academic outcomes has been extensively studied over the past two decades. Several studies have linked higher SE with a significantly lower likelihood of experiencing AB (Charkabi et al., 2013; Kiema-Junes et al., 2020; Palos et al., 2019; Salmela-Aro et al., 2022). Likewise, some independent studies have found a strong negative correlation between LS and AB (Cazan & Năstasă, 2015; Ye et al., 2021). However, to the best of the authors' knowledge, the interplay between these variables has not been analyzed together, except in a single study conducted in the Indian context by Rastogi et al. (2018). That analysis pointed to a strong positive correlation between SE and LS, while SE was found to be negatively associated with AB. Given that all of these factors have been shown to influence academic performance to some extent, it is reasonable to hypothesize that higher levels of LS and SE may reduce the likelihood of experiencing AB. Thus, this study seeks to fill a gap in the existing literature by addressing the following research questions:

- 1) Is there a correlation between academic burnout and life satisfaction in the Polish academic setting?
- 2) Is there a relationship between student engagement and life satisfaction in the Polish academic setting?
- 3) What are the factors that contribute to the sustainability of student engagement in the Polish academic setting?

4. Methods

4.1. Participants and Sampling

Convenience sampling was used to select participants for this study. In Phase 1, quantitative data were collected through two psychometric instruments (described below), which were adapted to an online format. The request to participate was distributed among active students at the University of Rzeszow. In the first part of the online questionnaire, participants were asked to provide consent for their responses to be used in the study. Respondents' demographic information, including age, gender, and level of study, was also collected. A total of 159 valid responses were received (Female: 121, 76.1%; Male: 38, 23.9%). The age of the participants ranged from 18 to 52 (Mean: 22.8, SD: 4.3). The sample included students from five years of study: 59 (37.1%) were freshmen, 22 (13.8%) sophomores, 11 (6.9%) juniors, 58 (36.5%) in their fourth year, and 9 (5.7%) in their final year.

For the qualitative phase, data were drawn from respondents who expressed willingness to participate in follow-up interviews during Phase 1. Since the primary aim of including qualitative data was to elicit insights into the sustainability of student engagement, the responses were screened to ensure that the final sample included students who demonstrated consistent commitment to their studies. Consequently, the accounts of seven participants (Female: 4, 57.1%; Male: 3, 42.9%) were selected for further analysis.

4.2. Tools

The levels of student burnout and engagement were measured using the Oldenburg Burnout Inventory (OLBI) questionnaire, developed by Demerouti et al. (2010). This instrument focuses on two dimensions of burnout: fatigue and disengagement. The questionnaire consists of 16 statements, both positively and negatively worded, with responses arranged on a 4-point Likert scale. Since the OLBI was not originally designed to assess burnout in academic settings, the items were rephrased to better reflect the context of this study. Additionally, the scale was translated into Polish, following a translation-back translation procedure to ensure equivalence on both linguistic and conceptual levels. Considering the novel context of this research, the internal consistency of the instrument was evaluated (Cronbach's alpha = 0.87).

The **Satisfaction with Life Scale (SWLS)**, created by Diener et al. (1985), was used to measure participants' overall life satisfaction. This 5-item scale is specifically designed to assess cognitive judgments of a person's life satisfaction. Responses are arranged on a 7-point Likert scale (7 = strongly agree; 1 = strongly disagree). The SWLS statements were translated into Polish using the same translation procedure applied to the OLBI. The demonstrates strong internal consistency (Cronbach's alpha = 0.88). In this study, the internal consistency of the SWLS was also assessed, yielded a score of 0.89.

In the qualitative phase, data were collected using a semi-structured interview protocol designed specifically for this research. Before the interviews, respondents were briefed on the methodology of the study and asked to sign a written consent form. The interviews were carried out in English with no set time limit. Participants were asked to elaborate on topics such as the intensity of their engagement, study-life balance, and factors contributing to the sustainability of their commitment. To elicit in-depth insights, typical interviews also incorporate several follow-up questions.

4.3. Data Analysis

As this study employs both quantitative and qualitative data, the analysis proceeded in two phases. In the first phase, Spearman's rank correlation coefficient was used to examine the relationships between the variables under investigation, reflecting the non-normal distribution of the data. The purpose of the qualitative analysis was to expand on the quantitative findings by identifying factors that contribute to increased engagement among Polish tertiary students. Given the previously discussed scarcity of studies investigating these variables in combination, and the corresponding need for more elaborate interpretations, inductive thematic analysis was chosen as the most suitable method for this study (Braun & Clarke, 2007).

First, the interview data were transcribed and repeatedly reviewed to gain a thorough understanding of individual responses. In the next phase, the essential sections of the data were highlighted using different colors, and a set of labels (codes) was developed. The codes were then reviewed to identify recurring patterns, and vague or irrelevant codes were discarded. As an additional validity measure, both authors conducted the coding process, achieving an inter-rater agreement of 95%. Minor discrepancies were discussed and resolved.

5. Findings

5.1. The Relationship Between Student Engagement, Life Satisfaction, and Academic Burnout

In this study, Spearman's rank correlation coefficient was used to examine the strength and direction of the relationships between LS, AB, and SE. Table 1 provides a concise summary of the results.

Table 1. Correlation between SWLS and OLBI

			OLBI Lack of engagement scale (8–32)	OLBI Exhaustion scale (8–32)	OLBI General level of burnout (16–64)
Spearman's rho	SWLS levels of life satisfaction (5–35)	Correlation coefficient	-0.355**	-0.454**	-0.450**
		Significance (two-tailed)	0.000	0.000	0.000
		N	159	159	159

The analysis confirmed a strong, negative relationship between OLBI scores for burnout, fatigue, lack of engagement, and SWLS scores. Specifically, the strongest correlation was found between SWLS and the fatigue element of OLBI (-0.454). While the other correlations are slightly less strong, the overall results suggest that students who are more satisfied with the quality of their lives are significantly more likely to exhibit higher engagement and are less likely to experience academic burnout.

5.2. Factors Contributing to Sustained Engagement Among Polish Tertiary Students

Inductive thematic analysis identified three main themes. Sustained student engagement was linked to three distinct factors: (i) an increasing sense of agency; (ii) teacher approachability; and (iii) peer support. For clarity, these factors will be discussed individually.

5.2.1. An Increasing Sense of Agency

When asked about the reasons for their engagement, all participants revealed that academic involvement helps them fulfill certain personal needs. For example, P1 admitted that although juggling the demands of academic and personal life can sometimes be cumbersome, it undoubtedly enhances her personal and professional sense of agency:

It is challenging in the sense that I often have to step outside my comfort zone, but because of that, I have grown as a person. Each and every project makes me more open-minded to different aspects of my profession, which will definitely help when I am looking for a job.

A similar perspective was shared by P3, who acknowledged that although she occasionally experiences both physical and mental fatigue due to a high volume of academic workload, staying involved in various academic pursuits is essential for maintaining her engagement and addressing doubts about her career choice:

Sometimes I feel exhausted because of different responsibilities and demanding in-class activities. But the truth is that the harder I work, the more motivated and engaged I become. It feels great when I manage to overcome a challenge of some sort. It makes me feel like I have what it takes to do the job and that my engagement really matters.

Likewise, despite occasional challenges, P6 feels that his engagement contributes to both personal and professional growth and makes his life more meaningful:

It makes me feel like I'm constantly growing and developing as a person. It gives me a sense of purpose, and I'm sure it will help me become the exact type of teacher I want to be in the future.

5.2.2. Teacher approachability

While the most recurring theme in the dataset was the growing sense of agency stemming from increased engagement, several participants also mentioned that their commitment was continuously fueled by the support of the academic staff at their university. Specifically, the analysis revealed that the approachability of academic teachers may inspire greater student engagement:

P2: I think what motivates me the most is that my lecturers are always there to help. Some of them are truly inspirational, really. I am amazed at how open and kind they are. I want to be like them, both professionally and personally.

A similar sentiment was expressed by P5, who emphasized the impact of teacher approachability on his engagement:

P5: I would have given up on all those extra projects had it not been for some of the lecturers. You can really tell that they love working with us. Even though they're incredibly busy, they always find the time to talk with us about our personal lives. They truly care, you know? I think that's amazing.

5.2.3. Peer Support

Several respondents shared that discussing their personal and academic difficulties with fellow students helped them maintain their commitment to academic life. P4's account illustrates this well. Despite having to make personal sacrifices to meet her academic responsibilities, she found difficult periods far easier to deal with thanks to peer support:

P4: I spend most of my time studying and participating in other university activities, which leaves very little time for my personal life. I often get nervous and stressed because of that. But thanks to my involvement, I've met a lot of valuable people, and they've been a great help. Whenever I'm feeling down, they always encourage me to see the positive side of things and treat each day as a new challenge.

The account shared by P7 was similar in the sense that the respondent also highlighted the importance of peer support for sustaining his engagement. Unlike P4, however, P7 never struggled with balancing his personal and academic life. Instead, he found that connecting with like-minded individuals made his academic experience much more fulfilling:

P7: Why did I get involved? Well, at first, I was not sure if this would be my cup of tea, but then I met all these amazing people. Back in high school, I did not have a lot of friends. I was a good student, and I guess people thought I was competing with them or something. But here, it's

completely different! People like my ideas and are really supportive!
It is great to know that there are people who think the same way—it really keeps me going.

6. Discussion

Regarding the first research question, the quantitative analysis revealed a negative relationship between life satisfaction and academic burnout (-0.450). These results coincide with findings from previous studies (Cazan & Năstasă, 2015; Ye et al., 2021). Additionally, it was found that life satisfaction is negatively correlated with other dimensions of burnout, including lack of engagement (-0.355) and fatigue (-0.454). These findings lead to a tentative conclusion that students who are more engaged in their academic pursuits report higher life satisfaction and are less likely to experience symptoms of academic burnout. However, given the preliminary nature of this investigation, further research is needed to explore the relationship between AB, SE, and LS, and to determine whether these findings from the Polish context can be extrapolated to other settings.

In this study, inductive thematic analysis was used to identify common factors that contribute to sustained student engagement in the Polish academic context. Three prominent themes emerged: a growing sense of agency, teacher approachability, and peer support. Starting with the most recurring theme, many participants noted that their increased commitment to academic pursuits, although involving certain sacrifices, positively impacted their sense of personal agency. As respondents often had to step outside their comfort zones to meet academic demands, they were provided with numerous opportunities to develop strong efficacy beliefs. Interestingly, while participants were acutely aware of the personal sacrifices required, the sense of personal growth associated with their increased commitment appeared to foster their long-term engagement. This finding is in line with several previous studies that have highlighted the predictive role of agency beliefs in sustaining student engagement over time (Azila-Gbettor et al., 2021; Chang & Chien, 2015).

Notably, while higher levels of engagement contributed to the development of students' overall sense of agency, changes were also observed in more specific agency beliefs, such as those related to their future professions. Although balancing academic and personal responsibilities gave participants many opportunities to build their agency, one practical recommendation to be put forward here is that academic curricula should be structured in a way that allows students to maintain a healthy balance between academic and personal commitments, and, thus, contribute to their higher life satisfaction.

Turning to the second theme, increased student engagement was also linked to teacher approachability, as some respondents noted that the openness of academic staff consistently fueled their commitment. This coincides with the findings of Korthagen et al. (2014), who identified positive teacher-student relationships as a key determinant of student engagement. Similar conclusions have been drawn in other independent studies (Estep & Roberts, 2015; Zhou, 2021). Additionally, it should also be highlighted that the effects of this positive relationship extend beyond the academic sphere, as several participants explicitly stated they viewed their teachers as role models. While most research on the motivational impact of social contagion tends to focus on peer-to-peer dynamics (Burgess et al., 2018; Mendoza & King, 2020), the analysis of this dataset suggests that certain emotions and behaviors may also transfer between teachers and students. However, further research is needed to validate this observation.

Lastly, based on the insights gathered, peer support emerged as a factor in sustaining student engagement. The role of peer support is multifaceted; while P4 made it quite clear that she found difficult periods far easier to deal with by sharing those challenges with peers, P7 focused more on the social side of peer support, noting that being part of a group of driven and engaged individuals fulfilled his need for belonging. This suggests that a strong sense of community on campus is almost certainly essential for maintaining high levels of engagement among active students. Although the present study has a limited sample size, and further research is warranted, it can be concluded that when students are given the opportunity—and are encouraged—to participate actively in a broader

academic community, their satisfaction with life (SWLS) is likely to increase significantly. This, in turn, could positively influence the negative aspects identified in the OLBI.

7. Concluding remarks and limitations

This research provides preliminary data on the interplay between life satisfaction, academic burnout, and student engagement among active university students. Specifically, the quantitative analysis indicated a strong negative relationship between life satisfaction and various dimensions of burnout, including lack of engagement. Based on these findings, it can be concluded that students who are more satisfied with their quality of life are significantly more likely to exhibit higher levels of engagement and are less prone to academic burnout. However, given the limited number of similar studies to date, further research is necessary to gain a more extensive understanding of the relationships among these variables.

Additionally, the qualitative analysis revealed that in the Polish academic context, sustained student engagement can be attributed to several factors, including a growing sense of agency, teacher approachability, and peer support. Nonetheless, many respondents, to varying degrees, reported issues with successfully balancing their personal and academic obligations. Therefore, the most imperative conclusion from this study is that academic curricula should be designed to promote a healthy balance between academic and personal responsibilities. As the findings suggest that higher life satisfaction fosters student engagement, well-balanced curricula may not only improve students' overall life satisfaction but also positively influence their level of academic engagement.

The present study does have limitations. Firstly, convenience sampling was used, and the data were collected from students at a single university. As this may limit the generalizability of the results, it would be recommendable for future research to include students from a broader range of academic institutions across Poland. Additionally, comparing student experiences in Poland with those in other countries would offer a more

comprehensive understanding of the interplay between life satisfaction, burnout, and engagement, and help determine how Polish universities conform to international standards. Secondly, the qualitative analysis involved a relatively small sample due to the limited availability of participants. Further research is needed to confirm whether the findings can be generalized to a larger population.

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