

**RELATING LEARNER EMPOWERMENT
TO STUDENT ENGAGEMENT THROUGH PSYCHOLOGICAL CAPITAL
IN COLLEGE STUDENTS**

Szerzők:

Werede T. Gebregergis (Drs.)
Asmara College of Education, Eritrea
University of Debrecen, Hungary

Csilla Csukonyi (Ph.D.)
University of Debrecen, Hungary

Első szerző e-mail címe:

weredetarekeg@gmail.com

Lektorok:

Olteanu Lucián Liviusz (Ph.D.)
Gál Ferenc Egyetem

Lestyán Erzsébet (Ph.D.)
Gál Ferenc Egyetem

és további két anonim lektor...

Absztrakt

*A TANULÓI FELHATALMAZÁS ÉS A HALLGATÓI ELKÖTELEZETTSÉG
KAPCSOLATA A PSZICHOLÓGIAI TŐKE FÉNYÉBEN AZ EGYETEMI
HALLGATÓK KÖRÉBEN*

Annak ellenére, hogy a hallgatók elkötelezettségének széles körben elismert jelentősége van a felsőoktatásban a pozitív tanulási eredmények befolyásolásában, beleértve a tanulmányi sikert, a motivációt és az elégedettséget, a hallgatók elköteleződésének csökkenése régóta jelentős kihívást jelent a felsőoktatási intézmények számára. Feltételezhető, hogy a pszichológiai felhatalmazás hatékony stratégiaként szolgálhat a hallgatók elkötelezettségének előmozdítására, különösen a felsőoktatási környezetben. Hiányoznak azonban az ezt a feltételezést igazoló vizsgálatok, különösen az eritreai felsőoktatás kontextusában. Ezenkívül a pszichológiai tőke potenciális közvetítő hatása ebben a kapcsolatban még nagyrészt feltáratlan. E hiányosság pótlásának érdekében keresztmetszeti tanulmányt végeztünk annak vizsgálatára, hogy a tanulói felhatalmazás milyen mértékben befolyásolja a hallgatók elkötelezettségét a pszichológiai tőkén keresztül. A vizsgálat résztvevői egyetemi hallgatók (N = 448) voltak, akiket kényelmi mintavétellel mértünk fel. Standardizált önbevallásos kérdőíveket használtunk a tanulói felhatalmazás, a pszichológiai tőke és a hallgatói elkötelezettség felmérésére a résztvevők körében. Először leíró statisztikákat végeztünk, majd ezt követően a Pearson-féle korrelációt alkalmaztuk a változók közötti hatás vizsgálatára. Végül hierarchikus

regressziót használtuk az előrejelző és közvetítő hatások meghatározására. A regressziós eredmények azt mutatták, hogy a magasabb szintű tanulói felhatalmazással és pszichológiai tőkével rendelkező hallgatók magasabb szintű elkötelezettséget mutattak a tanulmányi tevékenységeikben. Továbbá a pszichológiai tőke részben közvetítette a tanulói felhatalmazás és az elkötelezettség közötti kapcsolatot, ami arra utal, hogy a tanulói felhatalmazásnak közvetlen és közvetett hatása van a diákok elkötelezettségére. Ezek az eredmények értékes információkkal szolgálhatnak a felsőoktatási intézmények számára, amelyek a tanulók felhatalmazásának és a pszichológiai tőkének az előmozdításával igyekeznek növelni a hallgatók elkötelezettségét. Ezen túlmenően a tanulmány rávilágíthat a tanulói felhatalmazás, a pszichológiai tőke és a hallgatói elkötelezettség közötti dinamikus kölcsönhatásra, hasznos és gyakorlati útmutatást nyújtva az oktatók és a döntéshozók számára, akik a hallgatók oktatási eredményeinek javítására törekednek.

Kulcsszavak: tanulói felhatalmazás, pszichológiai tőke, hallgatói elkötelezettség, egyetemi hallgatók

Diszciplína: pszichológia

Abstract

Despite the widely recognized significance of student engagement in influencing positive learning outcomes in higher education, including academic success, motivation, and satisfaction, addressing the issue of students' disengagement has long posed a significant challenge for higher education institutions. Some scholars have posited that psychological empowerment could serve as an effective strategy for fostering student engagement, particularly within higher education settings. However, there is a lack of sufficient studies that validate this assumption, especially within the context of Eritrean higher education. Moreover, the potential mediating influence of psychological capital in this relationship remains largely unexplored. To address this research gap, we conducted a cross-sectional study to examine the extent to which learner empowerment impacts student engagement through psychological capital. The study participants were undergraduate students (N = 448) selected using a convenience sampling strategy. Standardized self-report questionnaires were utilized to assess learner empowerment, psychological capital, and student engagement among the participants. Initially, descriptive statistical techniques, including measures such as mean, standard deviation, and measures of distribution shapes, were computed to explore and summarize the data. Subsequently, Pearson product-moment correlation was employed to examine the interplay between the study variables. Finally, hierarchical multiple regression and the PROCESS macro for SPSS were utilized to determine the prediction and mediation effects, respectively. The regression results revealed that students with higher levels of

learner empowerment and psychological capital demonstrated better engagement in their academic activities. Furthermore, psychological capital was found to partially mediate the relationship between learner empowerment and engagement, suggesting that learner empowerment has both direct and indirect effects on student engagement. These findings may provide valuable insights for higher education institutions seeking to enhance student engagement by fostering learner empowerment and psychological capital. Moreover, the study may shed light on the dynamic interplay among learner empowerment, psychological capital, and student engagement, offering useful and practical guidance for educators and policymakers striving to improve educational outcomes of college students and beyond.

Keywords: learner empowerment, psychological capital, student engagement, college students

Discipline: psychology

Gebregergis, Werede T. and Csukonyi, Csilla (2024): Relating Learner Empowerment to Student Engagement Through Psychological Capital in College Students. *OxIPO – interdisziplináris tudományos folyóirat*, 2024/2. 21-41.

DOI <https://www.doi.org/10.35405/OXIPO.2024.2.21>

Student engagement is widely recognized as a pivotal factor influencing positive learning outcomes in higher education, including academic success, motivation, and satisfaction (Öz & Boyacı, 2021; Rajan et al., 2024; Trolan, 2024). This concept is multifaceted, subject to various interpretations that offer nuanced perspectives on its essence. For instance, Kuh (2003) defines student engagement as not merely attending classes but also investing time and energy in both academic and extra-curricular activities. This encompasses not only participating in coursework but also adhering to institutional regulations and guidelines to optimize the educational

experience. Similarly, Fredricks et al. (2004) conceptualize engagement as a meta-construct comprising behavioral, emotional, and cognitive dimensions. In their view, engagement goes beyond surface-level involvement; it involves deep emotional investment, cognitive processing, and behavioral investment in educational activities. Expanding on this, Coates (2007) further elaborates engagement as a comprehensive construct encompassing various academic and non-academic activities. This includes active participation in learning, tackling challenging tasks, engaging in meaningful interactions with faculty, participating in

enriching experiences beyond the classroom, and feeling a sense of support and belonging within the university community. Despite the variations in definitions, these perspectives converge on a common understanding that student engagement entails active involvement in educational pursuits, sustained motivation, resilience in the face of challenges, and a profound sense of belonging and affiliation with the educational institution. It goes beyond mere attendance or compliance to encompass a deep and meaningful interaction with the learning environment, ultimately leading to enhanced learning outcomes and personal development. Various theories offer different perspectives on engagement, with Fredricks et al. (2004)'s theory being widely referenced in academic literature. This theory defines academic engagement across three dimensions. Behavioral engagement involves students' active participation in academic and extracurricular activities, adherence to academic rules, and avoidance of disruptive behaviors. Emotional engagement encompasses the range of emotions students experience concerning their academic activities, peers, teachers, and the school environment, with emotionally engaged students valuing their academic success and feeling a sense of belonging. Cognitive engagement refers to the cognitive efforts and strategies students employ to tackle challenging tasks, demonstrating cognitive flexibility and self-regulation. Due to its clarity and

comprehensiveness, Fredricks et al. (2004)'s theory serves as the theoretical framework for this study.

In the realm of higher education, research has placed considerable emphasis on uncovering the elements that either foster or impede student engagement. In a recent meta-analysis conducted by Li and Xue (2023), a comprehensive examination of student engagement and its determinants revealed a spectrum of internal and external factors influencing this phenomenon. These factors can be broadly classified into those that promote engagement and those that hinder it. Among the factors found to enhance student engagement are positive emotions, proactive learning behaviors, supportive teacher-student relationships, students' cognitive abilities, access to learning resources, and individual characteristics. Conversely, obstacles such as a lack of environmental support, negative behaviors from both students and teachers, and deficiencies in teaching methodologies were identified as deterrents to engagement (Li & Xue, 2023). Additionally, the reputation of the university, the effectiveness of teachers in employing active learning techniques, and the quality of course materials have been recognized as significant contributors to promoting student engagement (Almarghani & Mijatovic, 2017; Lasekan et al., 2024). While these situational and environmental factors play a crucial role in engagement, it's essential to recognize the psychological

or learner-related factors that significantly affect engagement levels. One such factor is learner empowerment, with psychologically empowered students believed to demonstrate higher engagement levels than those who are not empowered.

The concept of empowerment entails fostering responsibility and cultivating a sense of ownership among individuals for the tasks they undertake (Shulman & Luechauer, 1993). Empowerment, being applicable across various domains such as education, management, and politics, has been approached from different theoretical perspectives. Existing literature delineates two primary theoretical frameworks: Structural and psychological. The structural theory of empowerment emphasizes organizational or environmental factors (e.g., opportunities for growth, support systems, access to information and resources) as the primary drivers of empowerment among employees (Kanter, 1993). This theory posits that employees' behaviors and attitudes within organizations are influenced by structural conditions, thus asserting that empowerment stems from these conditions rather than from personal attributes or socialization effects. In contrast, Spreitzer (1995) psychological empowerment theory focuses on how individuals psychologically respond to empowering organizational conditions, emphasizing personal beliefs about their roles within the organization. Psychological empowerment is construed as

intrinsic task motivation, comprising cognitive resources such as meaning, competence, self-determination, and impact. Building upon the psychological empowerment theory, this study investigated the role of psychological empowerment in student engagement among college students. Like employees, students must exhibit internal motivation and responsibility to effectively engage in academic tasks. Frymier et al. (1996) expanded the application of psychological empowerment to the academic realm, broadening the traditional view of motivation to encompass the concept of learner empowerment. Learner empowerment denotes "students' perception of competence to perform a task that is meaningful and impactful within the academic setting" (Houser & Frymier, 2009, p. 35). This multidimensional construct comprises three essential components: Meaningfulness, competence, and impact (Frymier et al., 1996). Meaningfulness pertains to the perceived significance of learning or performing a specific academic task based on personal standards. Competence reflects a student's belief in their ability to accomplish academic tasks. Impact refers to the student's perception that their academic efforts will influence their learning outcomes.

Another potential psychological factor that might contribute to student engagement is psychological capital. Luthans and his colleagues pioneered the concept

of psychological capital, commonly referred to as PsyCap, which entails leveraging human resource strengths and psychological assets within the workplace to enhance organizational success and productivity (Luthans et al., 2007). This construct is depicted as a state-like and higher-order entity encompassing four key psychological resources: hope, efficacy (or self-efficacy), resilience, and optimism. Hope, the first element of PsyCap, is construed as individuals' psychological and motivational state guiding them to set achievable goals through self-directed action (agency or willpower) and adaptive approaches (path) amidst challenges (Snyder et al., 1991). Self-efficacy, the second PsyCap resource, reflects one's belief in their capability to organize and execute actions required to navigate future situations effectively (Bandura, 1997). It is also understood as an individual's consistent ability to function adeptly in various stressful contexts (Schwarzer, 1992). Resilience, the third component of PsyCap, denotes an individual's psychological capacity to manage adversity and effectively navigate their environment (Wagnil & Young, 1993). It is characterized by the ability to remain steadfast, display courage, and adapt in the face of challenges or setbacks (Connor & Davidson, 2003). Optimism, the final PsyCap resource, refers to an individual's tendency to hold positive expectations for their future outcomes (Carver et al., 2010). Optimistic individuals anticipate favorable

results, whereas pessimistic counterparts expect unfavorable outcomes.

While empirical studies regarding the relationship between learner empowerment and engagement among higher education students are scarce, a limited number of studies support a positive correlation between empowerment and engagement. For instance, in the study conducted by You (2016), it was found that when students feel empowered in their learning environments, they exhibit higher levels of academic engagement. This empowerment encompasses various factors, such as feeling a sense of autonomy, competence, and relatedness within their academic pursuits. When students perceive themselves as having control over their learning, possessing the necessary skills to succeed, and feeling connected to the content and learning community, they are more likely to actively engage in their studies. Besides, internal motivation, a core aspect of learner empowerment (Frymier et al., 1996), drives students to participate in academic activities enthusiastically and subsequently achieve better learning outcomes (Froiland & Worrell, 2016). Rather than simply completing tasks out of obligation, empowered students approach their studies with a deep-seated belief in the significance and relevance of their academic endeavors. They also see their education as a meaningful pathway to personal growth and development (Frymier et al., 1996). This internal motivation cultivated by

empowerment serves as a powerful catalyst for sustained academic engagement. Overall, it can be argued that students who feel psychologically empowered demonstrate higher levels of engagement in their academic studies.

Another potential psychological factor that might contribute to student engagement is The literature addressing the correlation between learning empowerment and psychological capital is scarce (You, 2016). However, a few studies explored the connection between PsyCap and learner empowerment, revealing a positive predictive relationship. Specifically, researchers such as Lee and Song (2010) and (You, 2016) found that PsyCap positively influences learner empowerment among students. This suggests that students who possess qualities such as hopefulness, optimism, self-efficacy, and resilience are more likely to feel psychologically empowered in their learning endeavors and consequently achieve better academic performance. Moreover, these studies indicated that learner empowerment acts as a mediator in the relationship of PsyCap with academic engagement (You, 2016) and academic performance (Lee & Song, 2010). Despite the conventional approach of setting psychological capital as an independent variable and learner empowerment as a dependent variable in these studies, it is plausible to argue that learner empowerment could also influence psychological capital. Therefore, while the existing research offers

valuable insights into the impact of PsyCap on learner empowerment, there is a need for further investigation into the bi-directional relationship between these constructs to gain a more comprehensive understanding of their dynamics in higher educational settings.

Likewise, prior researches suggest a potential positive association between PsyCap and student engagement, although empirical studies in this area are limited (Jafri, 2018). For example, Datu and Valdez (2016) found that PsyCap significantly predicted various aspects of academic engagement, well-being, and positive emotions of high school students. However, given the focus on high school students, the generalizability of these findings to college students may be constrained. In a separate study involving undergraduate students in Hong Kong, it was reported that psychological capital was positively linked to engagement, with intrinsic motivation acting as a mediator between PsyCap and student engagement (Siu et al., 2014). This suggests that PsyCap may exert both direct and indirect effects on academic engagement. Similarly, Gong et al. (2018) observed a positive predictive relationship between PsyCap and academic engagement, with positive emotions serving as a mediator. Additionally, a systematic review conducted by Li et al. (2023) highlighted that PsyCap significantly influences academic outcomes, including performance, engagement, burn-out, adjustment, stress, and intrinsic

motivation. In summary, while the evidence is promising, additional research is needed to further elucidate the relationship between PsyCap and student engagement (Li et al., 2023), especially within college student populations in the context of Eritrea.

While existing literature provides some support for a positive correlation between learner empowerment and engagement, it is important to recognize that the relationship between these two factors may not be straightforward. Therefore, we extended our study to explore psychological capital as a potential mediator in this relationship. Several studies have investigated how psychological capital can significantly mediate the links between various internal and external variables and educational outcomes. For instance, Slåtten et al. (2021) found that psychological capital mediated the relationship between a supportive study climate and the academic performance of undergraduate students. Other studies have also shown that psychological capital plays a mediating role in the connections between academic pressure (Fati et al., 2019) and self-care (Gomez-Borges et al., 2023) with student engagement. From the broader literature, it can be argued that psychologically empowered students are more likely to possess traits such as confidence, hope, optimism, and resilience due to their sense of purpose, motivation, and perceived competence in academic pursuits. Consequently, they may exhibit higher levels of

academic engagement compared to those who lack empowerment. However, no specific studies have directly investigated the mediating role of psychological capital in the relationship between learner empowerment and engagement. With this gap in mind, our study also sought to examine the mediating effect of psychological capital on the connection between learner empowerment and engagement. The study's findings could offer valuable insights into the intricate relationship among learner empowerment, psychological capital, and engagement.

Hypotheses of the study

Drawing from the presented literature, the present study developed the following guiding hypotheses.

Hypothesis 1. There is a positive relationship between learner empowerment and student engagement.

Hypothesis 2. Learning empowerment is positively associated with psychological capital.

Hypothesis 3. Psychological capital is positively related to student engagement.

Hypothesis 4. Psychological capital mediates the relationship between learning empowerment and student engagement.

Methods

Sample of the Study

This study involved undergraduate students selected from various Eritrean colleges (N = 448). These participants

were seniors studying various disciplines such as Science, Engineering, and Education. We utilized convenience sampling to select participants from the target population. On average, participants were 22 years old ($SD = 2.30$). Gender distribution was balanced, with 224 (49.10%) males and 228 (50.90%) females. Moreover, the majority of participants, 429 (95.80%), were unmarried, while 19 (4.20%) were married. In terms of college representation, a significant portion of participants hailed from the College of Science ($n = 235$; 52.50%) and the College of Education ($n = 125$; 27.90%), while a smaller proportion came from the College of Engineering and Technology ($n = 88$; 19.60%).

Measures

Student Engagement: The University Student Engagement Inventory (USEI), developed by Maroco et al. (2016), was utilized to assess student engagement. The USEI comprises three dimensions – emotional, behavioral, and cognitive – designed to comprehensively assess student engagement. This 15-item self-report instrument employs a Likert-type scale, ranging from 1 (never) to 5 (always). Student engagement, conceptualized as a second-order construct in the USEI, is derived from calculated item values, resulting in a total score between 15 and 75. Higher scores indicate greater levels of student engagement. Maroco et al. (2016)

demonstrated satisfactory reliability, factorial, convergent, and discriminant validities of the USEI among a sample of college students in Portugal. More recently, Assunção et al. (2020) reaffirmed the validity and reliability of the USEI as a tool for measuring student engagement among university students across different countries. In the current study, the reliability coefficient was ($\alpha = 0.58$), which exceeds the acceptable value of 0.50 (Fisher et al., 2016).

Learner empowerment: Learner empowerment was evaluated using the 18-item Learner Empowerment Scale (LES), originally developed by Frymier et al. (1996) and adapted by Weber et al. (2005) to measure students' empowerment within their learning endeavors. This scale comprises three subscales: Meaningfulness (6 items), Competence (6 items), and Impact (6 items). Responses on the LES are recorded on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Total scores on the scale range from 18 to 90, with higher scores indicating greater learner empowerment. The internal consistency of the scale was deemed high, with an alpha coefficient of 0.91. Furthermore, the subscales of meaningfulness, competence, and impact exhibited reliability coefficients of 0.87, 0.91, and 0.91, respectively (Weber et al., 2005). In this study, the overall reliability coefficient of the scale was high ($\alpha = 0.79$), surpassing the benchmark value of 0.50 (Fisher et al., 2016).

Psychological Capital: The study assessed participants' Psychological Capital using the 24-item Psychological Capital Questionnaire (PCQ), initially developed by Luthans et al. (2007). This questionnaire was subsequently adapted by Liran and Miller (2017) to better suit the academic context, particularly for university students. The adapted PCQ utilizes a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Scores on the PCQ can range from 24 to 240, with higher scores indicating a stronger Positive Psychological Capital. The PCQ comprises four dimensions: hope, optimism, self-efficacy, and resilience. The overall Cronbach's alpha for both the original and adapted versions of the PCQ was found to be .93 and .89, respectively (Liran & Miller, 2017). Similarly, in our sample, the Cronbach's alpha of the PCQ was high ($\alpha = 0.82$).

Data collection procedure and ethical consideration

Following approval from Asmara College of Education, self-reported questionnaires were distributed to student participants in their respective classrooms. As the participants possessed sufficient proficiency in English, the questionnaires were administered in English. Ethical considerations were meticulously addressed throughout the process. Each questionnaire was accompanied by a letter of informed consent detailing the study's objectives. Participants were explicitly

informed that their involvement was voluntary and anonymous. Moreover, they were assured that all data collected would be handled confidentially and utilized solely for the specified study, with no other purpose.

Statistical Analyses

Data analysis was conducted using SPSS version 26. Descriptive statistical techniques, such as calculating measures like mean, standard deviation, and distribution shapes, were employed to explore and summarize the data. The Pearson product-moment correlation was utilized to examine the relationships between study variables. Furthermore, multiple hierarchical regression analyses were conducted to investigate the potential mediation effect of psychological capital on the relationship between learner empowerment and student engagement.

Results

Descriptive statistics and bivariate relationship of the study. The correlation coefficients, measures of shape, mean, and standard deviation are summarized in Table 1. The correlation results indicated a positive relationship between learning empowerment and both psychological capital ($r = .52, p < .001$) and Student Engagement ($r = .33, p < .001$). Similarly, psychological capital exhibited a significant positive association with student engagement ($r = .32, p < .001$). The calculated Cronbach's alpha values revealed that all the scales

Table 1. Summary of descriptive statistics and correlation coefficients of the study variables

Variables	<i>r</i>	<i>M</i>	<i>SD</i>	items	α	<i>Sk</i>	<i>Ku</i>
Learner empowerment		61.20	9.18	18	.79	-.48	.34
Student engagement	.33*	57.25	5.12	15	.58	-.15	-.03
Psychological capital	.52* .32*	82.09	11.05	24	.82	-.48	1.17

* $p < 0.001$

demonstrated internal consistency higher than the threshold value of 0.70. Skewness and kurtosis were utilized to assess the normality of the data, with the values falling within the acceptable range of +2 and -2. These results suggest that none of the datasets in the present study violated the assumption of normality.

Hierarchical Multiple Regression Analyses

The regression of student engagement on learner empowerment and psychological capital: Hierarchical regression analysis was conducted to assess the predictive influence of learner empowerment and psychological capital on student engagement while controlling for demographic variables. Initially, demographic factors such as gender, age, and marital status were entered into the first block of the model. Subsequently, learner empowerment was introduced as a predictor in the second block. Finally, psychological capital was included in the third block. As depicted in Table 2, the regression results revealed that demographic variables accounted for 3% of the variance in the out-

come variable, indicating a significant model ($R^2 = .02$, $F(3, 444) = 3.20$, $p < .05$). Upon adding learner empowerment in the second block, the overall model explained 13% of the variance in student engagement ($R^2 = .02$, $F(4, 443) = 15.77$, $p < .05$). Following the removal of demographic effects, learner empowerment demonstrated a unique contribution, explaining 10% of the variance in the dependent variable, with the model remaining statistically significant (R^2 change = .10, $F(1, 443) = 49.13$, $p < .001$). The inclusion of psychological capital in the third block further enhanced the model's predictive ability, accounting for an additional 15% of the variance in engagement ($R^2 = .02$, $F(5, 442) = 13.13$, $p < .05$). After controlling for variables in blocks one and two, psychological capital exhibited a statistically significant unique contribution to the regression model (R^2 change = .03, $F(1, 442) = 15.52$, $p < .001$). The findings demonstrated that college students with high levels of learner empowerment ($\beta = .32$, $p < .001$) and psychological capital ($\beta = .20$, $p < .001$) tend to exhibit greater engagement in their academic pursuits.

Table 2. Multiple hierarchical regression analyses for predictors of student engagement

Predictors	B	SEB	β	Model				
				R	R ²	ΔR^2	F	df
<i>Block 1</i>				.17	.03		3.20*	3, 444
Gender	-1.10	.49	-.11*					
Age	.30	.13	.14*					
Marital status	.67	1.40	.03					
<i>Block 2</i>				0.35	0.13	0.10	15.77*	4, 443
Gender	-.91	.47	-.09					
Age	.22	.12	.10					
Marital status	.40	1.33	.02					
Learner empowerment	.18	.03	.32**					
<i>Block 3</i>				.39	.15	.03	16.13**	5, 442
Gender	-.95	.46	-.09*					
Age	.22	.12	.10					
Marital status	.66	1.31	.03					
Learner empowerment	.12	.03	.21**					
Psychological capital	.09	.02	.20**					

* $p < 0,05$ ** $p < 0,001$

The regression of psychological capital on learner empowerment

We utilized multiple hierarchical regression analysis to explore the relationship between learner empowerment and psychological capital. The first block incorporated demographic variables such as gender, age, and marital status, while learner empowerment was introduced in the second block. The results (refer to Table 3) indicated that demographic variables failed to yield statistically significant variations in psychological capital. However, upon the inclusion of learner

empowerment in the second block, the model exhibited a noteworthy explanation of 27% variance in psychological capital ($R^2 = .27$, $F(3, 444) = 41.86$, $p < .05$). Notably, learner empowerment contributed independently to 27% of the regression model, as the variables in the first block failed to account for any variance in psychological capital (R^2 change = .03, $F(1, 443) = 165.92$, $p < .001$). Our findings revealed that college students with higher levels of learner empowerment demonstrated elevated psychological capital ($\beta = .53$, $p < .001$).

Table 3. Multiple hierarchical regression analyses for predictors of psychological capital

Predictors	B	SEB	β	Model				
				R	R ²	ΔR^2	F	df
<i>Block 1</i>				.05	.00		.37	3, 444
Gender	-.27	1.07	-.01					
Age	.28	.27	.06					
Marital status	-1.82	3.05	-.03					
<i>Block 2</i>				0.52	0.27	0.27	41.86*	4, 443
Gender	.41	.92	.02					
Age	-.03	.24	-.01					
Marital status	-2.76	2.61	-.05					
Learner empowerment	.63	.05	.53					

*p<0,05

Mediation Analyses

We investigated the mediating role of psychological capital on the link between learner empowerment and student engagement using simple linear regression analyses with the PROCESS macro for SPSS. In this analysis, learner empowerment was considered as an independent variable, student engagement was the outcome variable, and psychological capital was the mediating variable (see Figure 1). The regression analysis, as depicted in Table 4 and Figure 1, uncovered notable linear regression paths. Specifically, there were statistically significant relationships found: learner empowerment \rightarrow psychological capital ($b =$

0.63, $t = 12.89$, $p < .001$), learner empowerment \rightarrow student engagement ($b = 0.18$, $t = 7.42$, $p < .001$), and psychological capital \rightarrow student engagement ($b = 0.09$, $t = 3.78$, $p < .001$). To establish the statistical significance of the indirect impact of academic stress on student burnout via social support, we utilized a bias-corrected bootstrap method with a sample size of 5000. The findings revealed a significant effect, as the 95% confidence interval (CI) did not include zero ($b = 0.06$, 95% CI = 0.04, 0.18). However, it is noteworthy that the direct effect of learner empowerment on student engagement remained significant ($b = 0.13$, $t = 0.13$, $p < .001$), indicating a partial mediation effect.

Table 4. Direct and indirect effects of learner empowerment on engagement through PsyCap

Type of effect	Path	B	SE	95% CI		p
				Lower	Upper	
Indirect	LE \Rightarrow PsyCap \Rightarrow SE	0.06	0.01	0.02	0.10	
Component	LE \Rightarrow PsyCap	0.63	0.04	0.53	0.72	< .001
	PsyCap \Rightarrow SE	0.09	0.06	0.04	0.14	< .001
Direct	LE \Rightarrow SE	0.13	0.05	0.07	0.18	< .001
Total	LE \Rightarrow SE	0.18	0.05	0.14	0.23	< .001

Note: LE = Learner Empowerment; PsyCap = Psychological Capital; SE = Student Engagement

Figure 1. Illustration of the simple mediation effect of learner empowerment on student engagement through psychological capital. Unstandardized coefficients for the regression paths (paths a, b, and c) between the independent, mediator, and dependent variables are reported. *** $p < .001$. The indirect effect is $(0.63)(0.09) = 0.06$.

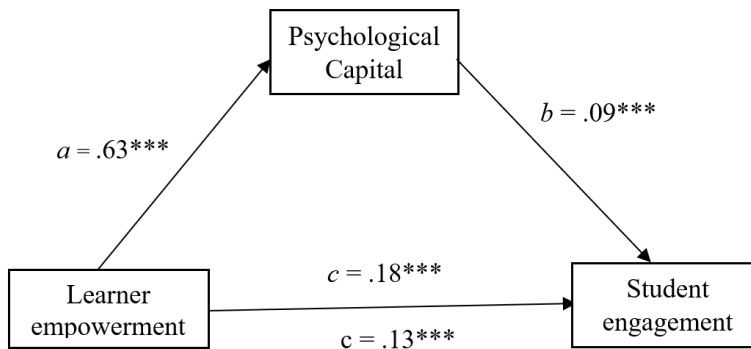


Figure 1 illustrates the simple mediation effect of learner empowerment on student engagement through psychological capital. Unstandardized coefficients for the regression paths (paths a, b, and c) between the independent, mediator, and dependent variables are reported. *** $p < .001$. The indirect effect is $(0.63)(0.09) = 0.06$.

Discussion

The present study sought to investigate the interplay between learner empower-

ment, psychological capital, and student engagement among college students. The hypotheses posited a series of relationships between these constructs, offering insight into the mechanisms underlying student engagement within the college context. In the first hypothesis, we proposed a positive relationship between learner empowerment and student engagement. The findings supported this hypothesis, indicating that when students perceive themselves as empowered learners (i.e., pos-

sessing control over their educational journey), they are more likely to engage actively in academic activities. This aligns with previous research emphasizing the importance of learner empowerment in fostering student engagement and positive learning outcomes through involvement in activities, fostering psychological ownership, and improving satisfaction and learning outcomes (e.g., Shukla & Arora, 2023; Sun & Yang, 2023; You, 2016). Empowered learners may feel a greater sense of ownership over their education, leading to increased motivation and involvement in learning activities. In addition, self-determination theory suggests that autonomy is a fundamental psychological need that, when fulfilled, leads to higher levels of motivation and engagement (Chiu, 2022; Reeve, 2012). Moreover, research indicates that learner empowerment fosters greater student engagement in college which can be achieved by cultivating confidence, competence, and self-esteem, ultimately leading to enhanced problem-solving abilities and skill development (Etikariena & Widyasari, 2020; Sewagegn & Diale, 2019). Therefore, empowered students are more likely to seek out learning opportunities, actively participate in class discussions, and persist through challenges. They are driven by a genuine desire to excel and achieve their academic goals, fueled by their sense of empowerment.

In the second hypothesis, we expected that learner empowerment would be

positively associated with psychological capital. This hypothesis was corroborated by the results, indicating that students who feel empowered in their learning process are more likely to exhibit higher levels of psychological capital. This finding underscores the significance of empowering educational environments in nurturing students' psychological resources, such as self-efficacy, resilience, optimism, and hope (Luthans et al., 2007). Empowered learners may develop a more positive outlook and adaptive mindset, which, in turn, can contribute to their overall well-being and academic success. As students exercise control and autonomy in their learning process, they may experience a sense of mastery and competence, contributing to the development of self-efficacy beliefs. Moreover, the freedom to make choices and take initiative in learning activities can foster a sense of optimism and hopefulness about the future. Some prior studies also documented a similar finding that empowerment is associated with psychological capital (e.g., Jung & Jeong, 2020; Mahmoodalilou et al., 2023; You, 2016). The third proposed a positive relationship between psychological capital and student engagement. Consistent with this hypothesis, our results revealed a significant association between these constructs, suggesting that students with higher levels of psychological capital are more engaged in their academic pursuits. This finding is in line with research highlighting the role of psychological

resources in promoting positive learning outcomes such as student engagement, academic adjustment, and performance (Crisostomus & Saraswati, 2023; Liran & Miller, 2017). Psychological capital equips students with the cognitive and emotional resources necessary to overcome challenges, persevere in the face of obstacles, and maintain a proactive approach to learning (Luthans et al., 2012; Luthans et al., 2016). Furthermore, when students maintain a sense of hope and confidence (efficacy) in their academic pursuits, it leads to greater cognitive, behavioral, and emotional engagement in learning (Tomás et al., 2019).

In the final Hypothesis, we expected that psychological capital would mediate the relationship between learner empowerment and student engagement. The mediation analysis provided support for this hypothesis, indicating that psychological capital partially explains the relationship between learner empowerment and student engagement. In other words, learner empowerment influences student engagement by shaping students' psychological resources. Empowered learners may develop greater psychological capital as a result of their autonomy, self-directedness, and control over their learning process. These psychological resources, in turn, contribute to their engagement in academic activities. Even though there remains a gap in studies regarding the mediated effect of learner empowerment on engagement through

psychological capital, several similar investigations have documented that psychological capital significantly mediates various relationships related to student engagement and academic outcomes. For example, self-care was found to directly and indirectly positively influence students' learning outcomes through psychological capital partially mediating this effect (Gomez-Borges et al., 2023). Likewise, Wu et al. (2023) underscored the mediating role of psychological capital in the connection between teacher-student relationships and academic engagement. These collective findings underscore the critical mediating role of psychological capital in bolstering student engagement through various educational variables.

The study explores the complex interplay among learner empowerment, psychological capital, and student engagement, offering potential contributions to the fields of educational psychology and sciences. Further, by investigating the mediating role of psychological capital, the research unlocks the mechanisms through which learner empowerment influences student engagement. In addition to its theoretical implications, the study might provide practical guidance for higher education communities to enhance learning empowerment and psychological resources of hope, efficacy, resilience, and optimism, thus promoting their academic engagement. However, it is important to acknowledge several limitations. Firstly, the use of non-random sampling may limit

the generalizability of the findings. Secondly, the reliance on correlational evidence restricts the ability to establish causal relationships among the variables. Lastly, the cross-sectional research design, while informative, may not capture the dynamic nature of these variables over time. Future research should address these limitations to provide a more comprehensive understanding of the topic.

Conclusion

Given the pivotal role of student engagement in shaping positive learning outcomes within higher education, such as academic success, motivation, and satisfaction, investigating the psychological underpinnings of engagement is crucial. Thus, this study aimed to examine how learner empowerment influences student engagement through the mediating factor of psychological capital. The findings underscore the significance of psychological factors in comprehending and nurturing student engagement, revealing that higher levels of learner empowerment and psychological capital are associated with increased learning engagement. Moreover, psychological capital emerges as a significant mediator in the relationship between empowerment and engagement. These insights underline the importance of considering psychological factors in understanding and bolstering student engagement in tertiary education.

References

- Almarghani, E., & Mijatovic, I. (2017). Factors affecting student engagement in HEIs - it is all about good teaching. *Teaching in Higher Education*, 22(5). DOI: <https://doi.org/10.1080/13562517.2017.1319808>
- Assunção, H., Lin, S.-W., Sit, P.-S., Cheung, K.-C., Harju-Luukkainen, H., Smith, T., Maloa, B., Campose, J.A.D.B., Illic, I.S., Esposito, G., Francesca, F.M., & Marôco, J. (2020). University Student Engagement Inventory (USEI): Transcultural validity evidence across four continents. *Frontiers in Psychology*, 10, Article 2796. DOI: <https://doi.org/10.3389/fpsyg.2019.02796>
- Chiu, T. K. F. (2022). Applying the self-determination theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54(sup1), S14-S30. DOI: <https://doi.org/10.1080/15391523.2021.1891998>
- Coates, H. (2007). A model of online and general campus-based student engagement. *assessment and evaluation in higher education*, 32(2), 121-114. DOI: <https://doi.org/10.1080/02602930600801878>
- Crisostomus, Y., & Saraswati, K. (2023). Pengaruh modal psikologis terhadap academic engagement (Studi Pada Mahasiswa Universitas X). *Provita: Jurnal Psikologi Pendidikan*, 16(62), 47-54. DOI : <https://doi.org/10.24912/provita.v16i2.26702>

- Datu, J. A. D., & Valdez, J. P. M. (2016). Psychological capital predicts academic engagement and well-being in Filipino high school students. *Asia-Pacific Edu Res*, 25(3), 399–405. DOI: <https://doi.org/10.1007/s40299-015-0254-1>
- Etikariena, A., & Widyasari, P. (2020). Quality education to succeed the SDGs among college students through the role of learner empowerment and creative self-efficacy to develop innovative work behavior. *E3S Web of Conferences*, 211(1), 48-59. DoOI <https://doi.org/10.1051/e3sconf/202021101018>
- Fati, M., Ahmed, U., Umrani, W., & Zaman, F. (2019). Academic press and student engagement: can academic psychological capital intervene? Test of a Mediated Model on Business Graduates. *International Journal of Higher Education*, 8(3), 134-147. DOI: <https://doi.org/10.5430/ijhe.v8n3p134>
- Fisher, G. G., Matthews, R. A., & Gibbons, A. M. (2016). Developing and investigating the use of single-item measures in organizational research. *J Occup Health Psychol*, 21(1), 3-23. DOI: <https://doi.org/10.1037/a0039139>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109. DOI: <https://doi.org/10.3102/00346543074001059>
- Froiland, J. M., & Worrell, F. C. (2016). Intrinsic motivation, learning goals, engagement, and achievement in a diverse high school. *Psychology in the Schools*, 53(3), 321-336. DOI: <https://doi.org/10.1002/pits.21901>
- Frymier, A., Shulman, G., & Houser, M. (1996). The development of a learner empowerment measure. *Communication Education - COMMUN EDUC*, 45(3), 181-199. DOI: <https://doi.org/10.1080/03634529609379048>
- Gomez-Borges, A., Peñalver González, J., Salanova, M., & Martínez, I. (2023). Engagement académico en estudiantes universitarios. El rol mediador del Capital Psicológico como recurso personal. *Educación XX1*, 26(2), 51-70. DOI: <https://doi.org/10.5944/educxx1.35847>
- Houser, M., & Frymier, A. (2009). The Role of student characteristics and teacher behaviors in students' learner empowerment. *Communication Education*, 58(1). DOI: <https://doi.org/10.1080/03634520802237383>
- Jafri, H. (2018). Understanding influence of psychological capital on student engagement and academic motivation. *Pacific Business Review International*, 10(6), 16-23.
- Jung, M. R., & Jeong, E. (2020). Effects of empowerment and academic resilience on positive psychological capital of nursing students. *Journal of Digital Convergence*, 18(6), 345–352. DOI : <https://doi.org/10.14400/JDC.2020.18.6.345>
- Kanter, R. M. (1993). *Men and women of the corporation* New York, Basic Books.
- Kuh, G. D. (2003). What we're learning about student engagement from

- NSSE: Benchmarks for effective educational practices. *Change: The Magazine of Higher Learning*, 35(2), 24-32. DOI: <https://doi.org/10.1080/00091380309604090>
- Lasekan, O. A., Pachava, V., Godoy Pena, M. T., Golla, S. K., & Rajee, M. S. (2024). Investigating factors influencing students' engagement in sustainable online education. *16*(2), 689. <https://www.mdpi.com/2071-1050/16/2/689>
- Lee, K.-Y., & Song, J.-S. (2010). The effect of psychological capital on empowerment and learning performance. *Journal of the Korea Society Management and Science*, 12(4).
- Li, J., & Xue, E. (2023). Dynamic interaction between student learning behavior and learning environment: Meta-analysis of student engagement and its influencing factors. *Behav Sci (Basel)*, 13(1). DOI: <https://doi.org/10.3390/bs13010059>
- Li, R., Che Hassan, N., & Saharuddin, N. (2023). Psychological capital related to academic outcomes among university students: A systematic literature review. *Psychol Res Behav Manag*, 16, 3739-3763. DOI: <https://doi.org/10.2147/prbm.S421549>
- Liran, B., & Miller, P. (2017). The role of psychological capital in academic adjustment among university students. *Journal of Happiness Studies*. DOI: <https://doi.org/10.1007/s10902-017-9933-3>
- Luthans, B. C., Luthans, K. W., & Jensen, S. M. (2012). The impact of business school students' psychological capital on academic performance. *Journal of Education for Business*, 87(5), 253-259. DOI: <https://doi.org/10.1080/08832323.2011.609844>
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: measurement and relationship with performance and satisfaction. *Leadership Institute Faculty Publications*, 60(2007), 541-572.
- Luthans, K. W., Luthans, B. C., & Palmer, N. (2016). A positive approach to management education: The relationship between academic PsyCap and student engagement. *Journal of Management Development*, 35(9), 1098-1118. DOI: <https://doi.org/10.1108/JMD-06-2015-0091>
- Mahmoodalilou, P., Talebi, B., & Khadivi, A. (2023). Improving students' psychological capital through learning empowerment (experiences of school principals). *Journal of Research in Educational Systems*, 17(61), 33-45. DOI: <https://doi.org/10.22034/jiera.2023.394582.2960>
- Maroco, J., Maroco, A. L., Campos, J. A. D. B., & Fredricks, J. A. (2016). University student's engagement: Development of the University Student Engagement Inventory (USEI). *Psicologia: Reflexão e Crítica*, 29(1), 21. DOI: <https://doi.org/10.1186/s41155-016-0042-8>
- Öz, Y., & Boyacı, A. (2021). The role of student engagement in student outcomes in higher education: Implications from a developing

- country. *International Journal of Educational Research*, 110, 101880. DOI: <https://doi.org/10.1016/j.ijer.2021.101880>
- Rajan, H. M., Herbert, C., & Polly, P. (2024). Disrupted student engagement and motivation: observations from online and face-to-face university learning environments [Mini Review]. 8. DOI: <https://doi.org/10.3389/feduc.2023.1320822>
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In (pp. 149-172). DOI: https://doi.org/10.1007/978-1-4614-2018-7_7
- Sewagegn, A. A., & Diale, B. M. J. A. L.-B. t. F. (2019). Empowering learners using active learning in higher education institutions.
- Shukla, A., & Arora, V. (2023). A holistic approach to student empowerment and assessment of its impact on educational outcomes through psychological ownership. *Studies in Higher Education*, 48(8), 1315-1332. DOI: <https://doi.org/10.1080/03075079.2023.2197005>
- Shulman, G., & Luechauer, D. (1993). The empowering educator: A CQI approach to classroom leadership. In D. Hubbard (Ed.), *Continuous quality improvement: Making the transition to education* (pp. 424-453). Prescott Publishing.
- Siu, O. L., Bakker, A. B., & Jiang, X. (2014). Psychological capital among university students: relationships with study engagement and intrinsic motivation. *Journal of Happiness Studies*, 15(4), 979-994. DOI: <https://doi.org/10.1007/s10902-013-9459-2>
- Slåtten, T., Lien, G., Evenstad, S. B., & Onshus, T. (2021). Supportive study climate and academic performance among university students: The role of psychological capital, positive emotions and study engagement. *International Journal of Quality and Service Sciences*, 13(4), 585-600. DOI: <https://doi.org/10.1108/IJQSS-03-2020-0045>
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academic of Management Journal*, 38(5), 1442-1465.
- Sun, Z., & Yang, Y. (2023). The mediating role of learner empowerment in the relationship between the community of inquiry and online learning outcomes. *The Internet and Higher Education*, 58, 100911. DOI: <https://doi.org/10.1016/j.iheduc.2023.100911>
- Tomás, J., Gutiérrez, M., Georgieva, S., & Hernández, M. (2019). The effects of self-efficacy, hope, and engagement on the academic achievement of secondary education in the Dominican Republic. *Psychology in the Schools*, 57(3). DOI: <https://doi.org/10.1002/pits.22321>
- Trolian, T. L. (2024). Student engagement in higher education: Conceptualizations, measurement, and research. In L. W. Perna (Ed.), *Higher Education: Handbook of theory and research: volume 39* (pp. 265-324). Springer Nature Switzerland. DOI:

- https://doi.org/10.1007/978-3-031-38077-8_6
- Weber, K., Martin, M. M., & Cayanus, J. L. (2005). Student interest: A two-study re-examination of the concept. *Communication Quarterly*, 53(1), 71-86. DOI: <https://doi.org/10.1080/01463370500055996>
- Wu, Y., Kang, X., & Li, L. (2023). Teacher-student relationship quality, school psychological capital, and academic engagement in Chinese EFL learning context: a mediation analysis. *Interactive Learning Environments*, 1-14. DOI: <https://doi.org/10.1080/10494820.2023.2195444>
- You, J. W. (2016). The relationship among college students' psychological capital, learning empowerment, and engagement. *Learning and Individual Differences*, 49, 17-24. DOI: <https://doi.org/10.1016/j.lindif.2016.05.001>