

NURSING STUDENTS WITH PSYCHOLOGICAL CAPITAL: THE ROLE OF SELF-REGULATED LEARNING IN ACADEMIC ADJUSTMENT

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ABSTRACT

The COVID-19 pandemic has impacted the field of education due to changes in the learning system from online to offline. The shift in the learning system has resulted in nursing students needing to readjust academically because they face academic, health, social, and internal challenges. This research aims to determine the role of self-regulated learning in academic adjustment with psychological capital as a moderator among nursing students during the COVID-19 endemic period. The participants in this study were 171 individuals aged 18-29 years, both male and female, enrolled as nursing students. This research employed a quantitative research method using The Modified Motivated Strategies for Learning Questionnaire (MSLQ) to measure self-regulated learning, the Academic Adjustment Questionnaire (AAQ) to measure academic adjustment, and the academic version of the Psychological Capital Questionnaire (PCQ) to measure psychological capital. Data analysis was conducted using Moderated Regression Analysis, showing that psychological capital did not moderate the relationship between self-regulated learning and academic adjustment. Self-regulated learning contributed to nursing students' academic adjustment during the COVID-19 endemic period by 5.9%. Based on the results, the dimensions of self-regulated learning that contributed to academic adjustment were self-orientation and feedback-seeking, while critical thinking and self-regulation did not play a significant role. Additionally, another finding of this research is that psychological capital was not a moderator in the relationship between self-regulated learning and academic adjustment.

Keywords: self-regulated learning, academic adjustment, psychological capital, nursing students

1. PREFACE

The transition of the pandemic into an endemic phase in the field of education has resulted in changes in the learning system, shifting from online or distance learning to face-to-face meetings. According to the Ministry of Education and Culture survey in 2021, 63.9% of higher education institutions were ready to conduct limited Face-to-Face Meetings (FTM) using hybrid learning methods, and 82% were prepared to hold Face-to-Face Meetings (FTM) (Barus, 2021). Pei and Wu (2019) stated that the effectiveness of online learning led to several obstacles such as social interaction, academic skills, learning motivation, time and learning support, as well as technical issues with internet connectivity. The impact of changes in the learning system necessitates students to readjust academically, especially those from the 2020 and 2021 cohorts who began their first year under crisis conditions due to COVID-19 (Fitrianti & Cahyono, 2021). This is supported by interview results with one of the nursing lecturers, Mrs. Sari, on June 3, 2022.

"After two years of online learning, then the change from online to offline learning system makes them feel confused when they are on campus. They have to learn to adapt again to the new situation. Moreover, they say that their biggest fear is when they have to interact directly with patients in the hospital. Because for the past two years, they have been studying theory online and have not developed good skills when they are directly involved to meet patients in the hospital. So, our task, especially for lecturers, is to help students so that they can go through this change process well" (Personal Communication, June 03, 2022).

The statement above is in line with the research conducted by Hasan et al. (2021), which states that first-year students will experience difficulties in academic adjustment, including nursing students. Nursing students undergo challenging academic adjustment processes in various aspects such as academic, economic, health, social, and personal challenges originating from within themselves or their surroundings, including challenges during clinical practices (Eden et al., 2021). Students need to adapt to differences in academic environments, academic atmospheres, and increased academic demands (Nathania et al., 2018). According to Alrumaidhi (2021), academic adjustment is considered a measure to demonstrate how a student can adapt to the academic environment. In fact, 30% of students face difficulties in academic adjustment, leading to a significant number of students performing poorly academically and most of them opting to drop out (Lowe & Cook, 2003; Van Rooij et al., 2017). Based on research conducted by Yuniar (2014), 5% to 10% of first-year students experience difficulties in academic adjustment annually. Students facing difficulties in academic adjustment may hesitate to graduate on time, easily become discouraged, and find it challenging to achieve learning goals, which could be one of the factors contributing to low self-regulated learning among students..

When the learning process shifted from offline to online due to the COVID-19 pandemic, students experienced poor academic adjustment. This is supported by research conducted by Rozali and Yashirly (2020), which found that as many as 49% of students had poor academic adjustment due to difficulties in adapting to online lectures. Students facing difficulties in academic adjustment may hesitate to graduate on time, easily become discouraged, and find it challenging to achieve learning goals, which could be one of the factors contributing to low self-regulated learning among students. Self-regulated learning is a learning process that stems from students' thoughts and behaviors, occurring systematically and directed towards achieving learning goals (Schunk & Zimmerman, 2013). An individual who can efficiently plan learning strategies, monitor learning progress, and adjust behavior in learning situations tends to have a high level of academic adjustment (Cazan & Anitei, 2010). Conversely, individuals lacking self-regulation skills may encounter adjustment problems in higher education. This is supported by research findings indicating that students with inadequate learning skills may be at risk of experiencing problems in academic adjustment (Abott-Chapman, 1992; Van Rooij et al., 2017). In a study conducted by Sava et al. (2020), social and personal variables were identified as supportive factors for students' self-regulated learning. Social impact refers to faculty support for students such as assistance, guidance, and feedback, while personal impact refers to students' psychological needs associated with students' psychological capital.

Psychological capital in the field of education contributes to assisting the learning process by enhancing learning strategies and encouraging students to control their learning processes (Cleary & Zimmerman, 2004; Sava et al., 2020). According to Luthans et al. (2007), psychological capital is considered a positive assessment of an individual's capacity-building attributes such as (a) self-efficacy, confidence in tackling challenging tasks, (b) optimism, positive attributions about current or future success, (c) hope, planning and directing goals for success, (d) resilience, the ability to bounce back when faced with problems and difficulties in achieving success. Based on research findings by Hazan-Liran and Miller (2019), psychological capital contributes to 74% of students' academic adjustment, indicating that psychological capital serves as a foundation for enhancing students' academic adjustment across four different domains. Psychological capital plays a crucial role in student learning motivation or empowerment, and it is linked to self-regulated learning in educational settings (You, 2016; Sava et al., 2020). Limitations of the findings from Sava et al. (2020) suggest selecting participants engaged in practical work education. This study will further explore the role of self-regulated

learning in academic adjustment with psychological capital as a moderator among nursing students during the COVID-19 endemic period.

2. RESEARCH METHOD

The research approach used in this study is a quantitative research method utilizing The Modified Motivated Strategies for Learning Questionnaire (MSLQ) to measure self-regulated learning, the Academic Adjustment Questionnaire (AAQ) to gauge academic adjustment, and the academic version of the Psychological Capital Questionnaire (PCQ) to assess psychological capital. Data analysis is conducted using Moderated Regression Analysis.

Participant

The participant selection technique used in this study is purposive sampling. Purposive sampling refers to the method of selecting participants because they have specific characteristics that allow for in-depth exploration of the phenomenon under study since the primary focus of this research is on providing detailed descriptions of the situations experienced by individuals. The characteristics of participants to be included in this study are: (a) Both males and females; (b) aged between 18 and 29 years old; (c) Nursing students enrolled in undergraduate (S1) programs in their second, third, and fourth years of study as well as professional program (Nursing) students; and (d) not restricted by ethnicity, religion, or economic status.

Procedures

The research will be conducted from August to November 2022. The researcher will distribute questionnaires to nursing students in four different provinces: Riau Islands, Riau, West Java, DKI Jakarta, and Central Java. Participants will be selected based on predetermined characteristics, and data collection will be carried out online by disseminating questionnaires through Google Forms. The questionnaires in this study will be distributed via chat messenger applications such as WhatsApp and social media platforms including Instagram, TikTok, and Twitter. Before data collection, the researcher conducted translation and expert judgment on the three measurement tools used, namely the Academic Adjustment Questionnaire (AAQ), Motivated Strategies for Learning Questionnaire (MLSQ), and Psychological Capital Questionnaire (PCQ). Subsequently, the researcher obtained permission for data collection, and after obtaining permission through ethical review, the researcher conducted a try-out of the measurement tools used. Afterward, the researcher began data collection from participants who met the criteria. Upon completion of data collection in the field, the researcher will proceed to analyze the data and obtain the results of the study.

Processing & Data Analysis

In this type of research, non-experimental quantitative methodology is employed, which identifies relationships between variables. Quantitative data in the form of numerical values are collected for analytical purposes. The study involves three variables: academic adjustment as the dependent variable, self-regulated learning as the independent variable, and psychological capital as the moderating variable. Multiple Regression Analysis (MRA) is utilized in this research to ascertain the roles among the variables under investigation. All collected data are then processed using the Statistical Program for Social Science (SPSS) application.

3. RESULTS AND DISCUSSION

Based on the descriptive statistical analysis, the overall score of the self-regulated learning variable for all participants is considered high ($M=5.34$, $SD=0.67$) because the mean value is above the midpoint. The self-orientation value, which is a dimension of self-regulated learning

used in this study, is also considered high ($M=5.47$, $SD=0.76$) because the mean value is above the midpoint. The second dimension, feedback seeking, has a high score ($M=5.27$, $SD=0.85$) because the mean value is above the midpoint. The third dimension, critical thinking, also has a high score ($M=5.27$, $SD=0.80$) because the mean value is above the midpoint. In the last dimension, self-regulation, the score is also high ($M=5.33$, $SD=0.68$) because the mean value is above the midpoint. This indicates that participants in this study exhibit high levels of self-regulated learning with self-orientation, feedback seeking, critical thinking, and self-regulation in learning, showing independence in learning and good self-regulation in the learning process.

Table 1

Self-regulated learning in participants.

Variable	Minimum	Maximum	Mean	SD	Description
Self-Regulated Learning	3.79	7.00	5.34	0.67	High ($M>4$)
Self-Orientation	3.56	7.00	5.47	0.76	High ($M>4$)
Feedback Seeking	2.67	7.00	5.27	0.85	High ($M>4$)
Critical Thinking	3.43	7.00	5.27	0.80	High ($M>4$)
Self-Regulation	3.73	7.00	5.33	0.68	High ($M>4$)

The overall score of the academic adjustment variable for all participants is considered low ($M=4.56$, $SD=1.13$) because the mean value is below the midpoint. However, the score for academic achievement, which is a dimension of academic adjustment used in this study, is considered high ($M=5.62$, $SD=1.87$) because the mean value is above the midpoint. The second dimension, social adjustment, has a low score ($M=3.79$, $SD=1.49$) because the mean value is below the midpoint. The third dimension, personal-emotional, has a high score ($M=5.60$, $SD=1.89$) because the mean value is above the midpoint. In the last dimension, institutional, the score is low ($M=3.85$, $SD=1.51$) because the mean value is below the midpoint. This implies that participants in this study have high academic achievement and personal-emotional aspects in learning. However, they exhibit low levels of academic adjustment, social adjustment, and institutional aspects in learning.

Table 2

Academic achievement in participants.

Variable	Mean	SD	Description
Academic Adjustment	4.56	1.13	Low ($M<5$)
Academic Achievement	5.62	1.87	High ($M>5$)
Social Adjustment	3.79	1.49	Low ($M<5$)
Personal-Emotional	5.60	1.89	High ($M>5$)
Institutional	3.85	1.51	Low ($M<5$)

The overall score of the psychological capital variable for all participants is considered high ($M=3.75$, $SD=0.58$) because the mean value is above the midpoint. Similarly, the score for self-efficacy, a dimension of psychological capital used in this study, is considered high ($M=3.72$, $SD=0.66$) because the mean value is above the midpoint. The second dimension, hope, used in this study, is also considered high ($M=3.82$, $SD=0.62$) because the mean value is above the midpoint. Similarly, the third dimension, optimism, used in this study, is considered high ($M=3.89$, $SD=0.64$) because the mean value is above the midpoint. In the last dimension, resilience, used in this study, is also considered high ($M=3.59$, $SD=0.70$) because the mean value is above the midpoint. This implies that participants in this study exhibit high psychological capital in learning.

Table 3

Psychological capital in participants

Variable	Mean	SD	Description
Psychological Capital	3.75	3.75	High (M>3)
Self-Efficacy	3.72	3.72	High (M>3)
Hope	3.82	3.82	High (M>3)
Optimism	3.89	3.89	High (M>3)
Resilience	3.59	3.59	High (M>3)

In this study, first of hypothesis is the role on self-regulated learning in academic adjustment among nursing students during the COVID-19 endemic period. Therefore, the researcher tests this hypothesis using simple regression analysis. Based on the data analysis results, an R2 value of 0.059 and significance level of $p = 0.002 < 0.01$ were obtained. From these results, it can be concluded that self-regulated learning significantly influences academic adjustment by 5.9%, while the remaining 94.1% is explained by other variables or factors. Based on the regression analysis results for each dimension of the self-regulated learning variable with academic adjustment, the following results were obtained: (a) For the self-orientation dimension, an R2 value of 0.06 and significance level of $p = 0.00 < 0.01$ were obtained. From these results, it can be concluded that the self-orientation dimension significantly influences the academic adjustment variable by 6.3%; (b) Second dimension, feedback-seeking, an R2 value of 0.13 and significance level of $p = 0.00 < 0.01$ were obtained. From these results, it can be concluded that the feedback-seeking dimension significantly influences the academic adjustment variable by 13.3%; (c) Third dimension, critical thinking, an R2 value of 0.02 and significance level of $p = 0.07 > 0.01$ were obtained. Based on these results, it can be concluded that the critical thinking dimension does not play a role in academic adjustment; (d) Last dimension, self-regulation, an R2 value of 0.02 and significance level of $p = 0.07 > 0.01$ were obtained. Based on these results, it can be concluded that the self-regulation dimension does not play a role in academic adjustment.

In the second hypothesis, psychological capital is hypothesized to moderate the relationship between self-regulated learning and academic adjustment. Moderation analysis is conducted using Moderated Regression Analysis (MRA). The results of the regression analysis with academic adjustment as the dependent variable, self-regulated learning as the independent variable, and psychological capital as the moderator (interaction) variable are as follows: The analysis indicates the presence of a moderating variable in the regression equation with interaction. Based on the R2 values, there is an increase in the regression model one (hypothesis 1) of 0.059 or equivalent to 5.9%. Furthermore, in the second regression (hypothesis 2), it shows an increase of 0.078 or equivalent to 7.8%. Additionally, the F value is found to be 4.62 with a significance level of 0.04. Hence, it can be concluded that self-regulated learning and psychological capital together have a significant influence on academic adjustment. The regression analysis results for the interaction moderation variable yield a t value of 1.06 with $p = 0.28$ (not significant). For the self-regulated learning variable, a t value of -1.45 with $p = 0.149$ (not significant) is obtained. The psychological capital variable has a t value of -1.29 with $p = 0.19$ (not significant). Based on the above explanation, it can be concluded that H0 is accepted, and H1 is rejected, meaning that psychological capital is not a moderator in the relationship between self-regulated learning and academic adjustment.

Discussions

This research yields two findings: (a) self-regulated learning plays a role in academic adjustment, and; (b) psychological capital does not act as a moderator between self-regulated

learning and academic adjustment. Further explanations regarding the research results are provided below. Firstly, this study finds that self-regulated learning significantly influences academic adjustment. When individuals possess good self-regulated learning, it means they can plan learning strategies efficiently, monitor their learning progress, and adapt their behavior to learning situations. This is consistent with the statement by Cazan and Anitei (2010) that individuals with good self-regulated learning have high levels of academic adjustment. Additionally, this research finds that self-regulated learning negatively correlates with academic adjustment. This means that the higher the self-regulated learning of nursing students, the lower their academic adjustment. This may be due to the influence of environmental factors, such as the transition from online to offline learning at universities (Rachmawati et al., 2020; Vionita & Rahmah, 2021). This finding is also consistent with the results of Rozali and Yashirly (2020), indicating that changes in the academic field can lead to problems in students' academic adjustment. Changes can create new demands for students to adapt to their current academic life (Safriani & Muhid, 2022).

Based on the research results, why psychological capital cannot act as a moderator between self-regulated learning and academic adjustment may be because nursing students tend to already have moderate to high psychological capital (83.3%). This means that when students have good psychological capital, it can affect students' engagement in independent learning processes (You, 2016). This research result is also consistent with the research conducted by Sinring et al. (2022), indicating that students with good self-regulation skills also have good psychological capital in the academic realm, especially in the learning process during the pandemic. Furthermore, additional findings in this study revealed that psychological capital plays a role in academic adjustment by 4.8%. These research results are supported by previous studies conducted by Safriani and Muhid (2022), indicating that psychological capital has a positive and significant effect on academic adjustment and academic buoyancy by 46.3%. When students are confronted with new situations or demands, they can adapt academically and experience psychological relaxation and emotional calmness regarding various academic aspects, enabling them to provide appropriate responses (Yohanna, 2019). This is because adjustment is considered a psychological process to adapt, confront, and manage problems, challenges, and demands. With these abilities, students can cope when faced with new situations (Bibi et al., 2018 & Aini, 2020; Safriani & Muhid, 2022).

Based on the correlation test results in this research, it was found that psychological capital correlates negatively with academic adjustment, meaning that the higher the psychological capital of nursing students, the lower their academic adjustment. Based on the findings in this study, it was found that the academic adjustment of nursing students is low ($M < 5$). This is suspected to occur due to a significant transition to offline learning after 2 years of online learning, resulting in less conducive learning conditions and academic achievement (Besser et al., 2020). In this research it was found that there is a difference in academic adjustment among GPA categories. It can be concluded that students with a GPA < 3.0 have better academic adjustment. This study is consistent with Credé and Niehorster (2012), who stated that GPA in higher education (Universities) is closely related to students' academic adjustment. Additionally, this study also found that there is a difference between self-regulated learning and gender, with the result that females are better at using self-regulated learning strategies compared to males. This study aligns with Zimmerman (Fatimah, 2019) who suggested that female students generally tend to use self-regulated learning strategies more than male students. However, in this study, the number of male and female participants is unbalanced as it is dominated by female

participants, so it cannot be generalized that males have lower self-regulated learning than females

4. CONCLUSIONS AND RECOMMENDATIONS

This research was conducted to investigate the role of self-regulated learning in academic adjustment with psychological capital as a moderator among nursing students during the COVID-19 pandemic. Based on the data analysis results, this study concludes that psychological capital does not act as a moderator between self-regulated learning and academic adjustment. Additionally, this research also found that self-regulated learning plays a role in the academic adjustment of nursing students during the COVID-19 pandemic.

The limitation of this research are : (a) The researchers encountered difficulties in distributing questionnaires to more nursing student participants due to time constraints; and (b) The study collected participant data from various domiciles, study programs, and genders without having proportionate representation.

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