

Internal Locus of Control and Academic Self-Efficacy Influence on Academic Adjustment among College Students

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Abstract

Academic adjustment is a critical experience for university students in an educational setting. Students' ability to adjust with academic pressures will determine their level of success in reaching educational goals and academic development. As a result, it is critical to comprehend the psychological aspects that can influence a student's academic adjustment. This study examined the influence of internal locus of control and academic self-efficacy on academic adjustment among students at the Faculty of Psychology Universitas Islam Negeri Raden Fatah Palembang, Indonesia. This study involved (n = 228) students selected using simple random sampling. The data was analyzed with IBM SPSS version 26 and Mplus version 7. Internal locus of control and academic self-efficacy significantly contribute to academic adjustment ($R^2 = .975$). The increase in one point on internal locus of control and academic self-efficacy will impact academic adjustment. To improve students' academic adjustment, universities, especially academic departments, should focus on student locus of control and academic self-efficacy. They can approach learning problems better equipped and achieve their academic goals if they improve their internal locus of control and academic self-efficacy.

INTRODUCTION

There is different learning climate between university and high school. Teachers are the primary focus of learning in schools, and pupils learn by listening to explanations from teachers and texts (Fitri & Kustanti, 2020). Meanwhile, in universities, students are active and independent participants in the learning process, beginning with source research, presentations, research, and interpretation (Park & Kang, 2022; Zhuhra et al., 2022). Therefore, lecturers are merely facilitators of learning (Park & Kang, 2022; Zhuhra et al., 2022). Students will encounter new things, starting from ways of thinking, learning, and even how to behave and face life in college, which may be challenging (Fruehwirth et al., 2023; Mutar et al., 2020; Park & Kang, 2022). The first year of college is the most important time for students because, during this time, they will face new challenges related to personal problems, such as being away from their parents, or academic challenges, such as a different academic system and series of demands in social relations such as communication obstacles, a lack of emotional support, and trouble developing friendships (Anbesaw et al., 2022; Bargmann & Kauffeld, 2023; Páramo et al., 2020). In addition, students from different regions, or even overseas, must familiarize themselves with the college environment because they tend to experience difficulties with the new surroundings, language, and weather in the new city they have just occupied (Faizah & Rifameutia, 2019; Malay et al., 2023; Valenti et al., 2022). The transition period from late adolescence to early adulthood also makes the first year of college an indicator of the success of first-year students in living college life because they are required to be mature physically, psychologically, and in social relations (Madson et al., 2022). Moreover, the COVID-19 pandemic has made the college experience difficult. With about two years of studying from their homes, students must face the challenge of online learning, which is fraught with discomfort that can cause symptoms of depression and anxiety (Kumar et al., 2021; Talarowska et al., 2023). Then when entering the post-COVID-19 era, students are faced with tasks to maximize the efficiency of their academic performance as before the pandemic (Talarowska et al., 2023).

The academic world gives students various pressures and obstacles that require overcoming ability. One of the effective ways for students to deal with this challenge is through the adjustment process (Philipose et al., 2023). Adjustment refers to psychological outcomes, physical well-being, and sociocultural adjustment, including personal satisfaction, health, and cultural identity in new environments (Li & Middlemiss, 2022). Adjustment refers to an individual's efforts on adapting and prospering new developments, and striking a balance between personal demands and fulfillment; then, home and educational institution play a role in this (Gavit & Suvera, 2020). In higher education institutions, there are four types of adjustment, namely academic adjustment, social adjustment, personal-emotional adjustment, and attachment to the university (Baker & Siryk, 1984).

According to Baker and Siryk (1984), academic adjustment includes students' psychosocial responses to various changes and potential stressors related to education and the academic system. Academic adjustment is associated with students' ability to manage social and psychological tasks related to their academic endeavors in higher education (Anderson et al., 2016). Academic adjustment is the psychological process that first-year students go through as they adjust to a new chapter in their lives in college (Zuhra et al., 2022). Here, academic adjustment refers to a student's capacity to meet a variety of educational demands in accordance with university expectations (Zhao et al., 2022). A good academic adjustment will create a dynamic relationship between students and enable them to cope with the demands of academic responsibilities and campus life (Abood et al., 2020).

In the adjustment process, especially regarding academic adjustment, first-year students must be fully aware that they have control over their situation in order to adapt well (Valenti & Faraci, 2021). This awareness is known as the internal locus of control. Rotter (1966) defines locus of control as an individual's perception or belief about the extent to which events in their life are influenced by their actions or by external factors such as luck or the actions of others. Locus of control refers to the degree to which individuals believe they have control over events that affect their lives (Malarkodi & Magdalin, 2019). Locus of control is divided into two, namely, internal locus of control and external locus of control. Internal locus of control refers to an individual's belief that their abilities and efforts determine the outcome and the success or failure in their life (Yongmei & Chen, 2023). Internal locus of control comes from within the individual through a strong understanding that their abilities and efforts will affect their life (Hernandez et al., 2022). Individuals with an internal locus of control believe that every event, such as success or failure in their life, is determined by their abilities and efforts so that they can take control of every event in their life (Gawas, 2022).

Because the adaptation process can cause much pressure, in addition to the need for confidence to control the situation, it is also necessary to believe that the individual can carry out and complete various activities properly. For students to make good academic adjustments, they must have confidence in their abilities (Lee et al., 2021; Maddux & Lewis, 1995). The belief in one's ability to do and complete activities properly is defined as self-efficacy. Self-efficacy refers to an individual's belief in his ability to perform tasks competently and achieve the desired results (Bandura, 1977). Baron and Byrne (2004) divide self-efficacy into academic self-efficacy, social self-efficacy, and self-regulation efficacy. One of the personality factors that can affect the students' adaptation process in the higher education environment is academic self-efficacy (Basharpoor & Einy, 2023). Academic self-efficacy is specifically related to students' beliefs in their capacity to succeed in their educational endeavors and achieve their academic goals (Griffiths et al., 2021; Mudzkiyyah et al., 2022; Zajacova et al., 2005). Academic self-efficacy plays an important role in motivating individuals to continuously face challenges and take risks to succeed in their education (Kristensen et al., 2023).

Research discussing internal locus of control, academic self-efficacy, and academic adjustment is limited. Most research has concentrated on the association between internal locus of control and academic adjustment (Gavit & Suvera, 2020), as well as the relationship between academic self-efficacy and academic adjustment (Sabela et al., 2022). As a result, this study serves as a bridge to close the gap by conducting numerous linear studies to determine the effect of internal locus of control and academic self-efficacy on academic adjustment. Moreover, research conducted by Gawas (2022) shows that students with an internal locus of control tend to have higher academic self-efficacy because they consider themselves able to overcome challenges during the learning process. This belief gives them the power to identify the factors that underlie their success and failure, enabling them to adapt to new environments effectively (Gawas, 2022). This finding is strengthened by research conducted by Yongmei and Chen (2023) which shows that students with a high internal locus of control tend to have high academic self-efficacy. Therefore, they can overcome increased learning difficulties with stronger self-confidence and will. They can complete more difficult academic assignments with more difficulties, which enables them to survive and adapt well to increase their academic adjustment (Yongmei & Chen, 2023).

Academic adjustment is an important component of a student's educational experience (Sarid & Lipka, 2023). As a result, it is critical to comprehend the psychological aspects that can influence students' academic adjustment. This study is expected to provide valuable insights for educational institutions on making policies to develop psychological interventions that focus on strengthening aspects of internal locus of control and academic self-efficacy to improve academic adjustment. Educational institutions can help students to develop the attitudes, motivation, and abilities needed to achieve academic success and develop holistically in an educational setting by working to increase their internal locus of control and academic self-efficacy. Based on this explanation, the researcher is motivated to investigate the influence of internal locus of control and academic self-efficacy on the academic adjustment of students at the Faculty of Psychology, UIN Raden Fatah Palembang.

METHODS

Participants

The participants in this study were 226 students at the Faculty of Psychology at Universitas Islam Negeri (UIN) Raden Fatah Palembang. This study used a simple random sampling technique (Gravetter et al., 2020). In detail, the research participants include girls (n = 189, 84%) students and boys (n = 37, 16%) students, with ages ranging from 17 years (n = 6, 3%), 18 years totaling (n = 54, 24%), 19 years (n = 97, 43%), and 20 years (n = 69, 30%). Research participants came from various diverse regions, including Palembang (n = 127, 56%), Banyuasin (n = 18, 8%), Prabumulih (n = 13, 6%), Musi Banyuasin (n = 12,

5.3%), Ogan Komering Ulu (n = 11, 4.8%), Ogan Ilir (n = 10, 4.4%), Muara Enim (n = 8, 3.5%), Lubuklinggau (n = 7, 3.0%), Ogan Komering Ilir (n = 6, 2.6%), Banyuasin and Lahat (each of them n = 4, 1.8%), Abab Penukal Lematang Ilir (n = 3, 1.3%). Bengkulu, Medan and Pagar Alam (each of them n = 2, .9%), while Rejang Lebong, Musi Rawas, Tangerang, Riau and Lampung (each of them n = 1, .4%). In addition, the educational background of the participants is quite varied. There are from SMA/SMAN (High School) (n = 127, 56%). MA/MAN (Madrasah Aliyah/ Islamic High School) (n = 65, 25%), Islamic boarding schools (n = 25, 11%) and from SMK/SMKN (Vocational High School) (n = 18, 8%).

Research design

This study used a quantitative research approach (Gravetter et al., 2020) with non-experimental methods or surveys through questionnaires. The survey method is designed to collect data related to the variables to be studied and uses a questionnaire to collect the data from participants (Cozby & Bates, 2015). This approach allows researchers to systematically collect and analyze data statistically to answer predefined research questions.

Procedures

This study collected data using sharing questionnaires through Google Forms. Before distributing the questionnaires, the researcher asked for consent from the participants to participate in the study. Before starting data collection, the researcher introduced himself and explained the purpose and procedure for filling in the research measurement tool. Afterwards, participants were asked to complete the informed consent and the requested measurement scale. During the data collection process, researchers ensure the data confidentiality of the participants. Participants involved in this study were volunteers without coercion.

Instruments

Internal locus of control in students was measured using the Internal Locus of Control Scale compiled by Sari and Fakhruddiana (2019) based on the internal locus of control characteristics of Crider (1983), which consisted of 26 items with a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree). The validity test for this scale uses Confirmatory Factor Analysis (CFA) and is considered valid with a t-value = 3.574 – 14.400 and reliable with a Cronbach's Alpha coefficient of .900.

The measuring instrument used to measure student academic self-efficacy is The Academic Self-Efficacy Scale (TASES) which was developed by Sagone dan Caroli (2014) and has been adapted into Indonesian by Darmayanti et al. (2021). This scale has 25 items with a 4-point Likert (1 = strongly disagree, 4 = strongly agree). The validity test of this scale uses CFA, and the results are considered valid with t-value = 3.067 – 13.584 and reliable with Cronbach's Alpha coefficient of .902.

Academic adjustment in students was measured using the Academic Adjustment dimension of the Student Adaptation to College Questionnaire (SACQ) measuring tool owned by Baker and Siryk (1984) and has been adapted into Indonesian by Rahayu and Arianti (2020). This scale consists of 19 items with a 4-point Likert (1 = strongly disagree, 4 = strongly agree). The CFA test results show that this scale is valid with a t-value = 3.540 – 13.937 and has a Cronbach's Alpha coefficient of .887, which means it is reliable and feasible to use in this study.

Data Analysis

Data analysis was conducted using multiple linear regression analysis to examine the effect of internal locus of control and academic self-efficacy on student academic adjustment. The researcher demonstrates the results of the descriptive analysis and the correlation between the internal variables of locus of control, academic self-efficacy and academic adjustment. In the early stages before carrying out multiple regression analysis, the researcher tested the validity and reliability of the measuring instrument using the psychometric property test, which included the CFA test (t-value > 1.96) (Raykov & Marcoulides, 2011) and Cronbach Alpha ($\alpha > .60$) (Nunnally & Bernstein, 1994). The model is said to be fit if it has a coefficient of Comparative Fit Index (CFI) > .95, the Root Mean Square Error of Approximation (RMSEA) < .06, and the Standardized Root Mean Square Residual (SRMR) < .08 (Hu & Bentler, 1999). After the normality test was carried out, it continued conducting a descriptive analysis, and then the researchers carried out a correlation analysis between variables (Gravetter et al., 2020). All analyses in this study used the IBM Statistical Package for the Social Science (SPSS) version 26.0 and Mplus version 7 (Muthén & Muthén, 2017).

RESULTS AND DISCUSSIONS

Results

The results section consists of several sub-discussions which summarize the findings from the statistical data analysis results. The first part contains the results of the normality test and descriptive analysis. The second part contains the results of the correlation test between the variables. Further, the researcher describes the results of structural equation modelling (SEM) on internal locus of control, academic self-efficacy and academic adjustment with the CFA approach. Lastly are the findings from multiple regression analysis to determine how much influence internal locus of control and academic self-efficacy have on academic adjustment.

Descriptive analysis results

The normality test using skewness and kurtosis on the internal variable locus of control is within the range of ± 2 (Field, 2013) (skewness = -.620, kurtosis = 1.130). In addition, the normality test using the Kolmogorov-Smirnov one-sample (Currel, 2015) shows that academic self-efficacy variables are generally distributed with $D = .200$ ($p > .05$) and academic adjustment has $D = .200$ ($p > .05$).

Table 1. Descriptive Analysis and Correlational Variables

Variables	M	SD	1	2	3
Internal locus of control	47.3	3.38	-		
Academic self-efficacy	47.2	3.51	.982**	-	
Academic adjustment	47.1	3.56	.982**	.984**	-

** $p < .01$

As can be seen in Table 1, the descriptive analysis shows the internal locus of control ($M = 47.3$, $SD = 3.38$), academic self-efficacy ($M = 47.2$, $SD = 3.51$), and academic adjustment ($M = 47.1$, $SD = 3.56$). Furthermore, this study also showed a positive and significant correlation between internal locus of control and academic adjustment ($r = .982$, $p < .01$), and there was a positive and significant relationship between academic self-efficacy and academic adjustment ($r = .984$, $p < .01$).

Results of Structural Equation Modeling

On the Internal Locus of Control Scale, the CFA results show $\chi^2 (247) = 948.397$, $p = .000$, $RMSEA = .112$ (90% CI .105 – .120), $CFI = .639$, $SRMR = .106$, $t = 3.574 - 14.400$. These results indicate that the model is unfit, but the 26 items are valid. It can be seen in Figure 1 that the Second-Order Confirmatory Factor Analysis Model is used to determine the results of the analysis of each factor in the Internal Locus of Control Scale.

In Figure 2, the CFA test was carried out on The Academic Self-Efficacy Scale, and the results were $\chi^2 (271) = 970.450$, $p = .000$, $RMSEA = .107$ (90% CI .100 – .114), $CFI = .633$, $SRMR = .109$, $t = 3.067 - 13.584$. It means that the 25 items were valid, but the model was not fit.

The results of the CFA test on the Student Adaptation to College Questionnaire showed $\chi^2 (248) = 947.814$, $p = .000$, $RMSEA = .112$ (90% CI .104 – .119), $CFI = .633$, $SRMR = .109$, $t = 3.540 - 13.937$. These results indicate that the model is unfit, but 19 items are declared as valid. In Figure 3, the Second-Order Confirmatory Factor Analysis Model shows the relationship between each factor in the Student Adaptation to College Questionnaire.

Figure 1. Second-Order Confirmatory Factor Analysis Model for Internal Locus of Control Scale

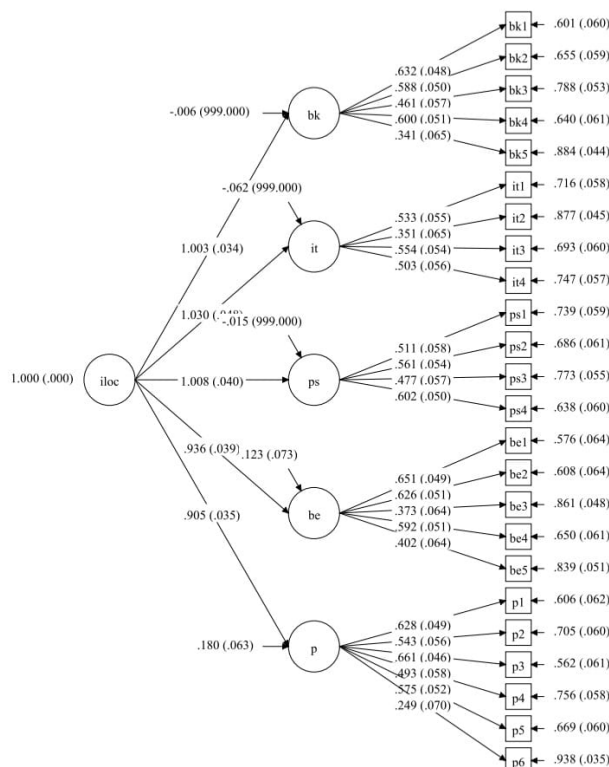


Figure 2. Second-Order Confirmatory Factor Analysis Model for The Academic Self-Efficacy Scale

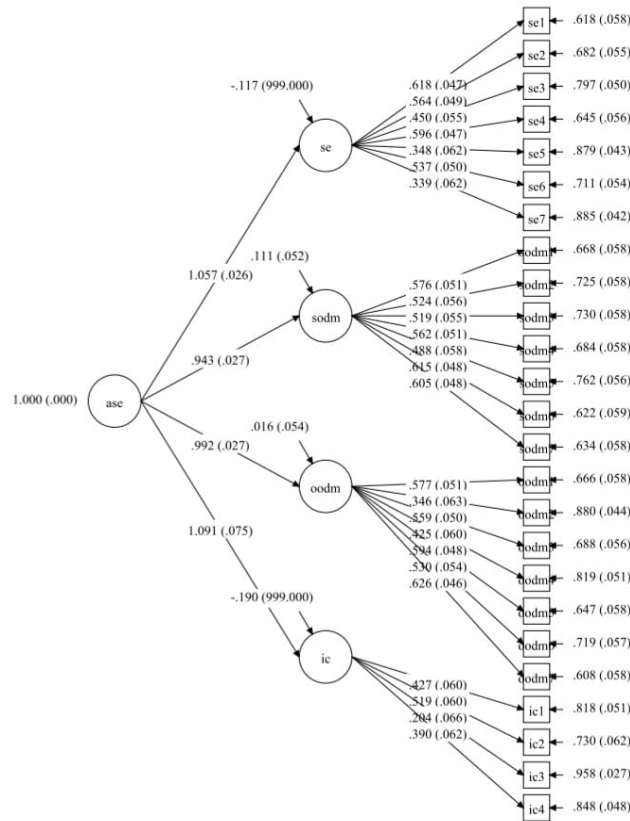


Figure 3. Second-Order Confirmatory Factor Analysis Model for Student Adaptation to College Questionnaire

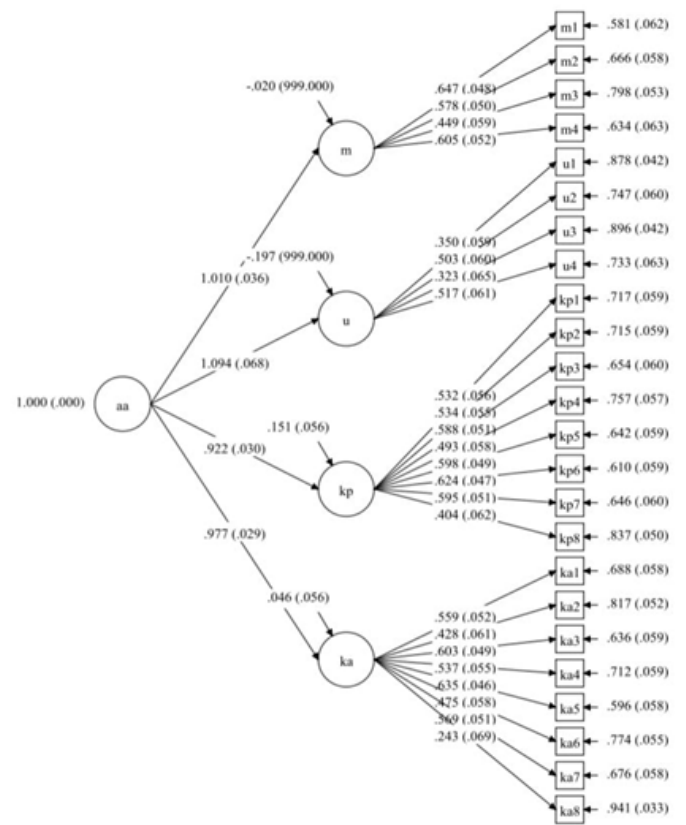
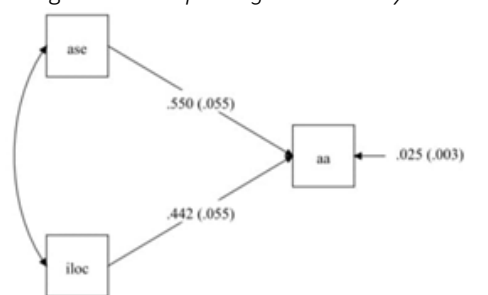


Figure 4. Multiple Regression Analysis



Note: ILOC = Internal Locus of Control; ASE = Academic Self-Efficacy; AA = Academic Adjustment

The analysis results indicated that the model fit with $\chi^2(0) = .000$, $p = .000$, RMSEA = .000 (90% CI .000 - .000), CFI = 1.000, SRMR = .000. In addition, the internal locus of control significantly positively affects academic adjustment ($B = .442$, $p < .05$). This shows that students with a strong internal locus of control can improve their academic adjustment. Then academic self-efficacy also has a positive and significant effect on academic adjustment ($B = .550$, $p < .05$) (see Figure 4). This condition means students with high academic self-efficacy tend to have good academic adjustments. Finally, the contribution of internal locus of control and academic self-efficacy to academic adjustment is ($R^2 = .975$) 97.5%.

Discussions

The study results show a positive and significant influence between internal locus of control and academic self-efficacy on student academic adjustment. By having a high internal locus of control, students feel confident that the adaptation process results depend on how they act. Moreover, with good academic self-efficacy, students will easily determine how to complete and deal with existing academic demands, including the adaptation process. Those can happen because academic self-efficacy makes them feel confident and believe they will successfully achieve their academic goals.

Those can happen because academic self-efficacy makes them feel confident and believe they will successfully achieve their academic goals. A high internal locus of control in students makes them believe they can adapt to college through their abilities and efforts (Yongmei & Chen, 2023). They believe that the success of adaptation depends on what course of action they choose. It is because the locus of control, both internal and external, greatly influences how individuals think, act, and lead (Thakare, 2022). Individuals with an internal locus of control believe that every circumstance they experience is the consequence of their actions or behavior (Santokhie & Lipps, 2020). Those with a high internal locus of control show the ability and effort to achieve excellence and appear dominant (Villa & Sebastian, 2021). Internal locus of control allows them to deal with stress, active in interpersonal relationships, give responsible answers, work hard, and have high self-efficacy, not afraid of failure, and socially active, thrive in the academic field (Can & Durukan, 2019; Ratnawati et al., 2022). When individuals can control their conditions, they are more likely to form a positive self-concept, value themselves, and be more efficient academically. Individuals with an internal locus of control tend to accept their problems and seek ways to adapt and overcome these losses. These increases their control over life rather than being trapped in feelings of worry or denial (Jondani, 2021).

Students who believe in their abilities will be able to determine how to complete the academic tasks they face better. Individuals with high academic self-efficacy can choose the right activities and want to try new things to achieve their goals (Campos et al., 2022; Yulikhah et al., 2019). Besides, they tend to be actively involved in academic activities, try their best, have high motivation, and believe they can achieve the best results (Mana et al., 2022; Uzun & Karataş, 2020). Students with high self-efficacy tend to believe they can overcome difficulties with a low-stress level. Therefore, it is easier for them to adapt to their surroundings, including the college environment (Valenti & Faraci, 2021). They think they can solve problems and are willing to work hard to achieve their goals (Bukhori et al., 2022). In contrast, individuals with low self-efficacy tend to avoid challenging tasks and may require more planning to achieve the desired goals. Students with low academic self-efficacy tend to avoid assignments or challenges, which leads to less-than-optimal academic achievement (Wang et al., 2022). That is why they give up quickly and struggle to adapt properly (Liran & Miller, 2019).

Fitri and Kustanti (2020) said that the different teaching styles in universities and high schools have made most first-year students struggle to understand lessons and to concentrate. It is in line with research conducted by Sabela et al. (2022) from UIN Sunan Ampel Surabaya, which stated that a large number of first-year students felt shocked and distressed when trying to complete assignments given by their lecturers; some even cried or gave up because felt that they had made the wrong choice in choosing a major. In addition, first-year students who are used to the high school academic curriculum find it difficult to adapt because they are still trying to adjust to the academic culture, facilities, and infrastructure used between high schools and universities (Fitri & Kustanti, 2020).

Students can adapt well if they can work efficiently and effectively and overcome various academic conflicts and challenges without being hindered by existing limitations (Mutar et al., 2020). Besides that, academic adjustment for students will greatly affect their performance and indicate their success in completing their studies (Chen et al., 2023; Sarid & Lipka, 2023;

van Rooij et al., 2018). The success of academic adjustment in students can be seen in academic achievements such as GPA and accuracy in completing the study period (Heffer & Willoughby, 2017). On the other hand, students who experience academic adjustment problems are dissatisfied with their lifestyle, have no discrepancy between academic achievement expectations and what is achieved, and have very low achievement motivation (Anderson et al., 2016). In addition, the desire to quit or leave universities is a form of failed adjustment experienced by students (Páramo et al., 2020).

CONCLUSION

The study results show a positive and significant influence between internal locus of control and academic self-efficacy on academic adjustment. The contribution of internal locus of control and academic self-efficacy to academic adjustment is 97.5%, while the rest is from other variants. The research results have implications for the university, especially in the academic and entrepreneurship fields. The Psychological intervention modules that focus on internal locus of control and academic self-efficacy need to be emphasized to students of the Faculty of Psychology, UIN Raden Fatah to improve their academic adjustment. Students can improve their academic adjustment by evaluating and improving their mindset, performance, and confidence in their abilities in the academic field. Performance-oriented students and goals will be able to improve academic adjustment. On the other hand, students who are confident in their abilities can complete academic demands well and avoid the psychological pressure they may experience during their college years.

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AUTHOR CONTRIBUTION STATEMENT

All authors conceptualize and write this manuscript.

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