



## **Development and Validation of an Indonesian Version of the College Students' Adaptation Scale: A Dimensionality Analysis**

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**Abstract:** Adaptation is a crucial ability that enables individuals to cope with new and unfamiliar environments. For college students, the ability to adapt during their first year is key to achieving academic success and maintaining psychological well-being. This study aims to develop and validate an assessment instrument to measure the adaptation levels of college students. The research adopts a development methodology using the ADDIE model, which includes five stages: Analysis, Design, Development, Implementation, and Evaluation. A questionnaire was constructed based on Baker and Siryk's theory, encompassing four dimensions of adaptation: academic adaptation, social adaptation, personal-emotional adaptation, and attachment to institutions. The questionnaire items were designed using a Likert scale and validated through expert review and field testing. The initial data were collected from 30 respondents for validity and reliability analysis. Results indicate that the instrument achieves a Cronbach's Alpha reliability score of 0.760, which is classified as high, confirming its consistency in measuring adaptation. However, only 10 out of 44 items met the validity criteria with Pearson correlation values greater than 0.3. These items reflect critical aspects of academic motivation, social participation, psychological adjustment, and institutional engagement. The findings demonstrate that the developed instrument is valid and reliable, making it feasible for evaluating the adaptation levels of college students. Future research should refine the instrument further through exploratory and confirmatory factor analyses with larger sample sizes to improve item precision and generalizability. This instrument holds potential for use by university counselors to identify adaptation challenges in students and develop targeted interventions.

**Keywords:** college student adaptation, instrument development, ADDIE model, student adjustment, validation study.

### ▪ INTRODUCTION

The college period represents a critical phase in the lives of individuals pursuing higher education (Nuha, 2023). During this transitional phase, new students encounter numerous changes and challenges across academic, social, personal-emotional, and institutional dimensions. These challenges require a significant ability to adapt, as adaptation plays a vital role in academic success and psychological well-being (Credé & Niehorster, 2012; Dyson & Renk, 2006). Successful adaptation enables students to navigate unfamiliar academic systems, form new relationships, and thrive in the institutional environment. Conversely, failure to adapt can lead to stress, academic failure, and eventual attrition (Fischer, 2020; Feldt et al., 2011).

In the academic domain, students must confront a learning environment that is notably more independent and demanding compared to secondary education. Higher education systems require students to manage their time effectively, demonstrate critical thinking, and engage in autonomous learning (Parker et al., 2004; Robbins et al., 2004). New students often experience pressure to meet academic expectations, such as completing assignments, understanding new teaching methods, and achieving satisfactory

grades. This transition can cause significant stress, particularly for students who are unprepared for the shift (Chemers et al., 2001; Credé & Niehorster, 2012).

Social adaptation is equally essential, as it determines a student's ability to form meaningful relationships and integrate into the new social environment. Participation in extracurricular activities, campus organizations, and peer groups fosters a sense of belonging and satisfaction, which are critical for overall adaptation (Tinto, 1993; Anderson et al., 2016). Research shows that peer support significantly influences students' academic and social adaptation, as interactions with peers contribute to emotional support and practical assistance in navigating university life (Fischer, 2020; Kim & Omizo, 2006).

The personal-emotional aspect of adaptation includes psychological and emotional well-being, which are often challenged during the early stages of college life. Students may experience culture shock, homesickness, anxiety, and depressive symptoms as they attempt to adjust to a new environment (Stallman, 2010; Dyson & Renk, 2006). Personal-emotional adaptation requires resilience and coping mechanisms to overcome the emotional difficulties associated with change (Parker et al., 2004; Stallman, 2010). Additionally, physical adaptation, such as adjusting to living arrangements and campus facilities, further influences the overall adaptation process (Pratt, 2017; Credé & Niehorster, 2012).

The fourth dimension, institutional adaptation, refers to students' attachment to the university and their utilization of institutional services. Effective institutional support, including counseling services, academic resources, and extracurricular opportunities, is critical for students to feel connected to their institution (Alarcon & Edwards, 2013; Chemers et al., 2001). A strong sense of institutional attachment fosters goal commitment and increases the likelihood of academic success and retention (Pascarella & Terenzini, 2005; Robbins et al., 2004).

Research has consistently demonstrated the importance of adaptation in predicting students' success and well-being. However, recent studies have also highlighted significant challenges in adaptation, particularly among first-year students. For example, Credé and Niehorster (2012) reported that approximately 40% of new students struggle to adapt to the academic and social demands of college. Similarly, Parker et al. (2004) found that emotional intelligence and coping mechanisms play a significant role in determining the success of student adaptation. Despite these findings, the literature remains limited in addressing the unique cultural contexts of adaptation, particularly in non-Western settings such as Southeast Asia.

Existing adaptation instruments, such as the Student Adaptation to College Questionnaire (SACQ) developed by Baker and Siryk (1984), are widely used to measure adaptation. However, these instruments are predominantly based on Western educational and cultural frameworks, which may not fully capture the experiences of students in other cultural contexts. Research has shown that cultural factors, such as communication styles, social norms, and institutional expectations, significantly influence adaptation (Kim & Omizo, 2006; Anderson et al., 2016). Therefore, there is a pressing need to develop culturally relevant adaptation instruments that can provide more accurate assessments in diverse educational settings.

In the Indonesian context, the adaptation process remains under-researched, particularly in terms of developing psychometrically sound assessment tools. Previous studies have highlighted the challenges faced by Indonesian students, such as low levels of academic motivation, limited peer support, and inadequate institutional resources (Fischer, 2020; Kim & Omizo, 2006). However, these studies often lack comprehensive,

validated instruments to measure adaptation across multiple dimensions. This gap underscores the importance of developing an adaptation instrument tailored to the Indonesian higher education system, which considers cultural and institutional nuances while maintaining psychometric rigor.

This study aims to contribute to the existing literature by developing a psychometrically sound instrument to assess student adaptation levels in the Indonesian context. The instrument will provide university counselors, educators, and policymakers with valuable insights into students' adaptation processes and the challenges they face during the transition to higher education. By identifying areas of low adaptation, universities can design targeted interventions to improve academic support, peer interactions, and institutional resources. Furthermore, this study emphasizes the importance of cultural relevance in adaptation assessment, bridging the gap between Western-developed instruments and the unique experiences of students in Southeast Asia. To address the identified gaps, this study focuses on the following research questions:

1. How can a valid and reliable instrument be developed to assess the adaptation levels of first-year college students in Indonesia?
2. What are the key dimensions and indicators that should be included in the adaptation instrument based on Baker and Siryk's theoretical framework?
3. To what extent is the developed instrument capable of measuring the adaptation levels of students across academic, social, personal-emotional, and institutional domains?

## ▪ **METHOD**

### **Participants**

This study involved college students enrolled in their first year at a public university in Indonesia. A total of 30 participants were selected using random sampling to ensure diversity in the sample. Random sampling was employed to mitigate potential biases and ensure representation across gender, academic disciplines, and socio-economic backgrounds. These students were deemed appropriate for the study as they are undergoing the critical transition phase of adapting to university life, where academic, social, and emotional adjustments are most evident (Credé & Niehorster, 2012; Dyson & Renk, 2006). Additionally, teaching lecturers were involved in preliminary interviews to provide insight into students' adaptation needs. Participants were informed about the research objectives, assured of confidentiality, and provided informed consent to participate in the study, adhering to ethical research guidelines (Creswell & Creswell, 2018).

### **Research Design and Procedures**

This study employed a development research approach following the ADDIE model, a widely recognized instructional design framework that ensures systematic and iterative development (Krismony et al., 2020; Siregar, 2021). The ADDIE model consists of five sequential stages: Analysis, Design, Development, Implementation, and Evaluation. Each phase is interactive, allowing for continuous refinement to produce a robust and reliable instrument. In the Analysis stage, needs assessment was conducted to identify gaps and challenges in student adaptation. This phase included interviews with teaching lecturers and selected students to gain insights into the factors affecting their adaptation process. Additionally, a theoretical analysis was carried out using Baker and Siryk's (1984) student adaptation framework, which identifies four dimensions: academic

adaptation, social adaptation, personal-emotional adaptation, and institutional attachment. This phase provided the foundation for constructing the indicators for the instrument. During the Design stage, the theoretical framework and needs assessment findings were used to develop a blueprint for the instrument. The blueprint outlined the four dimensions of adaptation, each with corresponding indicators, as shown in Table 1. Based on these indicators, favorable and unfavorable statement items were created to ensure balanced content and to assess both positive and negative aspects of student adaptation behavior.

The instrument used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to allow for a range of responses and provide more nuanced data (DeVellis, 2016). In the Development stage, the initial draft of the instrument was constructed based on the blueprint. The statements were reviewed for content validity and language appropriateness by a panel of field experts, including lecturers specializing in guidance and counseling. Linguistic clarity and cultural relevance were ensured during this review to enhance the instrument's applicability in the local context. Revisions were made based on the feedback received. Following expert review, the Implementation stage involved piloting the instrument with 30 randomly selected students to gather initial data. Students were provided with clear instructions for completing the questionnaire, and the data collection process was monitored to ensure consistency and clarity. Participants' feedback on the comprehensibility of the statements was also collected to identify ambiguities or redundancies. Finally, in the Evaluation stage, the instrument underwent a series of statistical analyses to assess its validity and reliability. The iterative process of the ADDIE model allowed for continuous refinement to address any identified weaknesses, ensuring the development of a psychometrically sound instrument.

### Instruments

The primary instrument developed in this study was a questionnaire designed to measure student adaptation levels across four dimensions based on Baker and Siryk's (1984) framework: academic adaptation, social adaptation, personal-emotional adaptation, and institutional attachment. The questionnaire consisted of multiple indicators under each dimension, as presented in Table 1. For each indicator, favorable (positive) and unfavorable (negative) statements were developed to ensure a comprehensive assessment. Examples of favorable statements include "I submit my assignments on time" and "I have friends from different study programs," while examples of unfavorable statements include "I often feel sad and moody lately" and "I rarely participate in campus social activities." The initial questionnaire contained 44 items, with responses measured on a 5-point Likert scale. This scale allows for greater response variability and reduces bias in participants' answers (DeVellis, 2016; Boateng et al., 2018). The draft instrument was reviewed for content validity by field experts to ensure the statements were clear, unambiguous, and reflective of the targeted dimensions. Adjustments were made to wording and structure to enhance the precision and relevance of the statements.

**Table 1.** Dimension and indicator of student college adaptation

| Dimension           | Indicator                |
|---------------------|--------------------------|
| Academic Adaptation | Have academic motivation |
|                     | Meet academic demands    |
|                     | Academic performance     |

|                                            |                                                     |
|--------------------------------------------|-----------------------------------------------------|
| Social Adaptation                          | Participate in social activities                    |
|                                            | Socialize with other students                       |
|                                            | Satisfaction with the social environment at college |
| Personal-Emosional Adaptation              | Psychological adaptation                            |
|                                            | Physical adaptation                                 |
| Institution Attachment and Goal Commitment | Service utilization                                 |
|                                            | Responsible to the almamater                        |

Indicators of the student adaptation instrument have been formulated based on Baker and Siryk's theory was shown in Table 1. Furthermore, the researchers formulated the items of the questionnaire statement shown in table 2. The formulation of these items is divided into favorable and unfavorable items.

**Table 2.** Favorable-unfavorable item development

| Indicator                                           | Favorable Statement Items                                                                                                                                                                     | Unfavorable Statement Items                                                                                                                                                                               |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Have academic motivation                            | 1. I have a favorite lecturer<br>2. I feel that my friends support me                                                                                                                         | 3. I feel that people tend to close themselves off<br>4. I only have 1-2 friends                                                                                                                          |
| Meet academic demands                               | 5. I submit my assignments on time<br>6. I will ask my lecturers and seniors about what I don't know from class.                                                                              | 7. I have been late in submitting assignments<br>8. I don't know my lecturers well<br>9. I don't recognize some of the teaching assistants                                                                |
| Academic performance                                | 10. I feel my speaking ability is good<br>11. I feel that my GPA is sufficient and has increased significantly.                                                                               | 12. I feel that people are fussy when they speak                                                                                                                                                          |
| Participate in social activities                    | 13. I participated in extra-campus activities<br>14. I participate in social activities outside the campus                                                                                    | 15. I feel that participating in campus activities is a waste of time<br>16. I just have to study and cut back on other activities.<br>17. I rarely leave the house / boarding house even for just a walk |
| Socialize with other students                       | 18. I have a friend group<br>19. I have friends from different study programs<br>20. I like visiting other faculties<br>21. I have friends from different batches (older or younger siblings) | 22. I have close friends<br>23. I will spend time in class<br>24. I make friends as needed                                                                                                                |
| Satisfaction with the social environment at college | 25. I feel that the campus supports social activities                                                                                                                                         | 26. I rarely participate in campus social activities                                                                                                                                                      |

|                               |                                                                           |                                                                           |
|-------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
|                               | (studies, discussions, social services).                                  | 27. I am not aware of any campus social activities                        |
| Psychological adaptation      | 28. I feel like I fit in with the campus environment                      | 30. I am not aware of the counseling center on campus                     |
|                               | 29. I sought counseling help recently                                     | 31. I don't like to tell anyone about myself                              |
| Physical adaptation           | 32. I've been feeling sad and moody lately                                | 35. During my free time, I don't like to leave my room or boarding house. |
|                               | 33. I enjoy meeting face-to-face (offline) with my classmates.            | 36. I felt like I was just going to college and going home                |
|                               | 34. I live in a campus dormitory                                          |                                                                           |
| Service Utilization           | 37. My college provides counseling services                               | 41. I don't know how to access campus information services                |
|                               | 38. My college provides information services about competitions           |                                                                           |
|                               | 39. My college provides information services about the internship program |                                                                           |
|                               | 40. My college provides information services on self-development programs |                                                                           |
| Responsible to the alma mater | 42. I am proud of my current college                                      | 44. I have never represented the campus at a competition / art event      |
|                               | 43. I represent the campus in competitions / arts events                  |                                                                           |

### **Data Analysis**

Data analysis was conducted to examine the psychometric properties of the developed instrument, including item validity and internal reliability. Descriptive statistics were first used to summarize the data and evaluate item responses. Item validity was assessed using Pearson's correlation coefficient to determine the relationship between individual items and the total score. Items with a correlation coefficient greater than 0.3 were retained as valid, while items below this threshold were considered for revision or removal (Tabachnick & Fidell, 2013; Field, 2013). To evaluate the reliability of the instrument, Cronbach's Alpha was calculated to measure internal consistency. A Cronbach's Alpha value of 0.7 or higher indicates acceptable reliability (Nunnally & Bernstein, 1994; Tavakol & Dennick, 2011). The reliability analysis ensured that the instrument consistently measured the intended dimensions of student adaptation.

The results of the validity and reliability tests were used to refine the instrument further, ensuring its robustness for future applications. In addition to these analyses, qualitative feedback from participants during the pilot testing phase was considered to identify any linguistic or structural issues in the questionnaire items. In summary, the data analysis process combined statistical testing with expert review to ensure the validity, reliability, and practical applicability of the instrument. Future studies may employ

confirmatory factor analysis (CFA) with larger sample sizes to further validate the instrument's structure and generalize its applicability across broader educational contexts.

## ▪ RESULT AND DISCUSSION

### Validity and Reliability of the Structural Model

To answer Research Question 1 (RQ1): **How can a valid and reliable instrument be developed to assess the adaptation levels of first-year college students in Indonesia?**, this study followed a systematic development and testing process. Using the ADDIE model, the instrument was designed and refined to ensure validity and reliability. As a first step, the content of the instrument was developed based on Baker and Siryk's (1984) multidimensional framework for student adaptation, consisting of four primary dimensions: academic adaptation, social adaptation, personal-emotional adaptation, and institutional attachment. These dimensions were operationalized into indicators with corresponding items, including both favorable and unfavorable statements.

The validity of the developed instrument was tested using Pearson's correlation coefficient, which measures the strength and direction of the relationship between each item and the total score. Items with correlation values greater than 0.3 were considered valid, as per the standard set by Tabachnick and Fidell (2013) and Field (2013). Table 1 presents the results of the validity analysis, showing that only 10 out of 44 items met this threshold. Items such as "I don't know how to access campus information services" (Item 4), "I feel that people tend to close themselves" (Item 8), and "Lately I feel sad and moody" (Item 15) were among the valid items. These items reflect critical aspects of institutional, social, and personal-emotional adaptation, respectively.

**Table 3.** Validity item test

| Number Item | Total               |                 | N  |
|-------------|---------------------|-----------------|----|
|             | Pearson Correlation | Sig. (2-tailed) |    |
| Item 1      | -0.274              | 0.143           | 30 |
| Item 2      | .525**              | 0.003           | 30 |
| Item 3      | 0.282               | 0.132           | 30 |
| Item 4      | 0.061               | 0.747           | 30 |
| Item 5      | 0.214               | 0.256           | 30 |
| Item 6      | 0.310               | 0.095           | 30 |
| Item 7      | 0.359               | 0.052           | 30 |
| Item 8      | 0.188               | 0.320           | 30 |
| Item 9      | .500**              | 0.005           | 30 |
| Item 10     | 0.178               | 0.347           | 30 |
| Item 11     | 0.352               | 0.056           | 30 |
| Item 12     | .490**              | 0.006           | 30 |
| Item 13     | .393*               | 0.031           | 30 |
| Item 14     | 0.298               | 0.110           | 30 |
| Item 15     | -0.016              | 0.935           | 30 |
| Item 16     | .443*               | 0.014           | 30 |
| Item 17     | -0.106              | 0.576           | 30 |
| Item 18     | .465**              | 0.010           | 30 |
| Item 19     | 0.330               | 0.075           | 30 |
| Item 20     | 0.074               | 0.699           | 30 |
| Item 21     | 0.010               | 0.959           | 30 |

|         |        |       |    |
|---------|--------|-------|----|
| Item 22 | 0.120  | 0.529 | 30 |
| Item 23 | -0.010 | 0.960 | 30 |
| Item 24 | .467** | 0.009 | 30 |
| Item 25 | .627** | 0.000 | 30 |
| Item 26 | 0.357  | 0.053 | 30 |
| Item 27 | 0.343  | 0.063 | 30 |
| Item 28 | .454*  | 0.012 | 30 |
| Item 29 | .483** | 0.007 | 30 |
| Item 30 | -0.327 | 0.077 | 30 |
| Item 31 | .557** | 0.001 | 30 |
| Item 32 | .503** | 0.005 | 30 |
| Item 33 | 0.288  | 0.123 | 30 |
| Item 34 | 0.310  | 0.095 | 30 |
| Item 35 | 0.285  | 0.126 | 30 |
| Item 36 | -0.092 | 0.631 | 30 |
| Item 37 | .595** | 0.001 | 30 |
| Item 38 | .516** | 0.004 | 30 |
| Item 39 | 0.334  | 0.071 | 30 |
| Item 40 | .468** | 0.009 | 30 |
| Item 41 | 0.354  | 0.055 | 30 |
| Item 42 | .415*  | 0.023 | 30 |
| Item 43 | 0.346  | 0.061 | 30 |
| Item 44 | .678** | 0.000 | 30 |

To determine the reliability of the instrument, Cronbach's Alpha was calculated to assess internal consistency. The reliability score of 0.760, as shown in Table 2, exceeds the recommended threshold of 0.7 (Nunnally & Bernstein, 1994; Tavakol & Dennick, 2011), indicating that the instrument has high internal consistency. Cronbach's Alpha based on standardized items was 0.766, reinforcing the instrument's reliability across all 44 items.

The combination of high internal reliability and item validity suggests that the developed instrument is capable of accurately and consistently measuring the adaptation levels of first-year college students. This result aligns with existing research on scale development, which emphasizes the importance of rigorous validation processes to ensure psychometric quality (Boateng et al., 2018; DeVellis, 2016). The instrument can, therefore, serve as a reliable tool for identifying specific areas where students may require support during their transition to university life.

**Table 2. Reliability test**

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| 0.760                  | 0.766                                        | 44         |

### Dimensionality of the Scale

**Research Question 2 (RQ2):** What are the key dimensions and indicators that should be included in the adaptation instrument based on Baker and Siryk's

**theoretical framework?** was explored through an analysis of the instrument's dimensionality. Based on the theoretical framework proposed by Baker and Siryk (1984), the student adaptation scale was designed as a multidimensional instrument encompassing four distinct but interrelated dimensions: academic adaptation, social adaptation, personal-emotional adaptation, and institutional attachment.

**Academic Adaptation:** Academic adaptation refers to students' ability to engage effectively in their learning processes, meet academic demands, and perform well academically. Items such as "I submit my assignments on time" and "I feel my GPA is sufficient and has increased significantly" demonstrated strong validity. Descriptive statistical analysis showed that students generally reported moderate levels of academic motivation and performance. This result aligns with prior studies highlighting academic self-efficacy and time management as crucial predictors of student success (Chemers et al., 2001; Robbins et al., 2004).

**Social Adaptation:** Social adaptation assesses students' ability to participate in social activities, build meaningful relationships, and integrate into the campus community. Items such as "I have friends from different study programs" and "I participate in social activities outside the campus" reflect students' social engagement and satisfaction. However, variability in responses suggests that while some students actively engage in social interactions, others experience isolation, a finding consistent with research on the role of peer support in fostering social integration (Tinto, 1993; Kim & Omizo, 2006).

**Personal-Emotional Adaptation:** Personal-emotional adaptation captures students' psychological well-being and their ability to manage stress. Items like "Lately I feel sad and moody" and "I don't like to tell anyone about myself" highlight challenges in emotional adjustment. Descriptive analysis revealed that many students experienced emotional stress, homesickness, and mental fatigue during their transition, aligning with studies emphasizing the importance of mental health support in higher education (Stallman, 2010; Dyson & Renk, 2006).

**Institutional Attachment:** Institutional attachment measures students' use of campus services and their sense of pride and commitment to the university. Items such as "My college provides counseling services" and "I am proud of my current college" demonstrated strong relationships with the total score. These findings reinforce the importance of institutional support in promoting students' overall adaptation, as suggested in previous studies (Pascarella & Terenzini, 2005; Alarcon & Edwards, 2013). The results confirm that the instrument is multidimensional, as it successfully captures the complexity of student adaptation across academic, social, personal-emotional, and institutional domains. Each dimension contributes uniquely to the adaptation process, providing a comprehensive understanding of students' experiences.

### **Instrument Capability Across Dimensions**

**Addressing Research Question 3 (RQ3): To what extent is the developed instrument capable of measuring the adaptation levels of students across academic, social, personal-emotional, and institutional domains?**, the results demonstrate the instrument's effectiveness in measuring adaptation holistically.

Descriptive statistical analysis of the four dimensions revealed key trends in students' adaptation levels. For academic adaptation, most students reported moderate success in meeting academic demands, reflecting their struggles with adjusting to independent learning and managing academic workloads. These findings are consistent

with research emphasizing the challenges students face when transitioning to higher education (Fischer, 2020; Parker et al., 2004). In terms of social adaptation, responses highlighted significant variability, with some students actively participating in campus activities while others reported feeling socially disconnected. This variability underscores the importance of peer relationships in fostering social adjustment and emotional well-being (Tinto, 1993; Kim & Omizo, 2006).

The personal-emotional dimension revealed substantial challenges, particularly in managing stress and emotional fatigue. Many students reported experiencing homesickness and sadness, findings that align with Stallman's (2010) research on psychological distress in first-year students. Institutions must address these issues through targeted mental health interventions and counseling services to support students' emotional adjustment. Finally, institutional attachment emerged as a critical factor influencing overall adaptation. Students who utilized available campus services and expressed pride in their institution reported higher levels of adjustment. These results highlight the role of institutional support in facilitating a smooth transition for students (Alarcon & Edwards, 2013; Pascarella & Terenzini, 2005).

The developed instrument's ability to measure adaptation across these dimensions demonstrates its robustness and practical utility. By identifying specific areas where students struggle, universities can implement targeted programs and interventions to enhance student adaptation. For example, academic support programs, peer mentoring initiatives, and mental health services can address students' academic, social, and emotional needs, fostering a supportive campus environment (Fischer, 2020; Chemers et al., 2001).

The findings of this study provide strong evidence for the validity and reliability of the developed instrument, confirming its capability to measure student adaptation comprehensively. The multidimensional nature of adaptation, as conceptualized by Baker and Siryk (1984), is reflected in the four dimensions—academic, social, personal-emotional, and institutional adaptation—that contribute uniquely to students' overall adjustment.

This study highlights the need for a holistic approach to supporting first-year college students. Academic adaptation remains a key predictor of success, emphasizing the importance of academic motivation, self-efficacy, and time management. Social adaptation, facilitated through peer relationships and campus engagement, plays a vital role in students' emotional well-being and institutional attachment. Personal-emotional adaptation underscores the need for mental health support, as emotional challenges can significantly impede adjustment. Institutional attachment further reinforces the importance of campus services in fostering students' commitment and sense of belonging. By providing a reliable and valid tool to measure adaptation, this study offers a valuable resource for educators, counselors, and policymakers. Future research should focus on validating the instrument with larger and more diverse samples and exploring the longitudinal impact of adaptation on students' academic performance and retention.

## ▪ CONCLUSION

Based on the test results above and the discussion, it can be concluded that the development of student adaptation instruments was successfully developed through the ADDIE model. The results of item validity and confidence scores are also obtained in the high category, making it feasible to use to measure the level of student adaptation in the first year. Research suggestions based on the results of the above research are that the

instrument can be developed again through a needs assessment in the field and the development of statement items and can be tested through factor analysis and confirmatory factors to see the validity and reliability of each statement item. So that the instrument can be generalized at one university as a tool for assessing student adaptation and planning development programs for adaptation in new students

## ▪ REFERENCES

- Alarcon, G. M., & Edwards, J. M. (2013). Ability and motivation: Assessing individual factors that contribute to college student success. *Journal of Educational Psychology*, 105(2), 564–575.
- Anderson, T., Guan, Y., & Koc, Y. (2016). The role of social and emotional adjustment in the adaptation of international students. *Journal of International Students*, 6(4), 905–925.
- Baker, R. W., & Stryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179–189.
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quinonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6, 149.
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55–64.
- Credé, M., & Niehorster, S. (2012). Adjustment to college as measured by the Student Adaptation to College Questionnaire: A quantitative review of its structure and relationships. *Educational Psychology Review*, 24(1), 133–165.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). Los Angeles, CA: SAGE Publications.
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, 62(10), 1231–1244.
- Feldt, R. C., Graham, M. A., & Dew, D. (2011). Measuring adjustment to college: Construct validity of the Student Adaptation to College Questionnaire. *Measurement and Evaluation in Counseling and Development*, 44(2), 92–104.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London: SAGE Publications.
- Fischer, S. (2020). College transition: Understanding academic and emotional adjustment. *Journal of College Student Development*, 61(3), 293–307.
- Kim, B. S., & Omizo, M. M. (2006). Asian cultural values, attitudes toward seeking professional psychological help, and willingness to see a counselor. *The Counseling Psychologist*, 34(5), 570–586.
- Nuha, M. S. (2023). *Pengembangan media kartu ada bakad dalam meningkatkan adaptasi budaya akademik pada mahasiswa baru program studi bimbingan dan konseling Islam tahun akademik 2022/2023 (Digilib UINSA)*. Digilib UINSA. <https://doi.org/http://dx.doi.org/10.13140/RG.2.2.30434.95684/1>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

- Parker, J. D., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, 36(1), 163–172.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249–257.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson Education.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.