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IS THE STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE APPROPRIATE TO MEASURE STUDENTS' COLLEGE ADJUSTMENT?

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Abstract

College adjustment (CA), or adaptation to college life, has been proven to predict college student achievement and persistence during their college study. Therefore, measuring students' college adjustment from the first year of study would be fundamental. Indonesia needs a valid and reliable instrument to measure college adjustment accurately. This study investigates the validity and reliability of SACQ (Student Adaptation to College Questionnaire), an adapted version to Bahasa Indonesia. SACQ is a widely used measurement tool for college adjustment developed by Baker and Siryk (1984). This study uses a Confirmatory Factor Analysis to measure the validity and reliability of SACQ as a GPA predictor. The result shows that the Indonesian adaptation version of SACQ is valid and reliable in measuring college students' adjustment, χ^2 (1, N = 1033) = 1.01, p = .315; RMSEA = .003. The impact of this study is that Indonesia can widely use this instrument to measure the level of college adjustment.

Keywords: college adjustment; college students; SACQ

INTRODUCTION

Higher education in Indonesia is a level of education aiming to develop students' intellectual and personal potential (Republic Indonesia, 2012, Higher Education Law No.12). Higher education aims to provide human resources that meet national interests to increase the nation's competitiveness. This purpose aligns with the nation's progress standard as represented by the Human Development Index. Therefore, the efforts to improve the quality of higher education are significant in Indonesia, targeting increased participation in higher education (Rogeleonick, 2014).

The results of a systematic review study by Lisnyj et al. (2023) stated that out of 14 studies, there are two primary indicators of higher education's success. The two factors are performance and persistence. Performance includes student achievement in the study, usually measured by the GPA (Grade Point Average). Persistence or retention includes the length of time or duration of the study, from admission to completion of education.

Resilience in passing higher education is tough. The Organization for Economic Co-operation and Development (OECD, 2023) stated that in OECD countries, dropout rates of higher education students for both general and vocational studies mostly exceed 10%. The Statistics Report issued by the Pusdatin Ministry of Research, Technology and Higher Education (Pusdatin Kemenristekdikti, 2019) shows that the dropout rate in Indonesian universities or colleges reaches eight percent. This percentage differs in each region. The highest dropout rate is 25%, which ensued in North Sulawesi. In DKI Jakarta, the nation's capital, the dropout rate is also higher than the national average, reaching 13%. This data shows the importance of addressing dropout issues in higher education.

Indonesia has no specific data on the percentage of people who have completed higher education. However, the ASEAN Secretariat (2013) reports that in 2011, the participation rate for higher education in Indonesia was 27.1%, but the percentage of people who completed higher education was up to 7.8%. The result indicates the

probability of many people dropping out of college in Indonesia.

One factor causing college dropout is adjustment difficulties (Koo et al., 2021; Lipka et al., 2020; Mcghie, 2017; Rischall et al., 2017). For new students, adjustment to campus life is challenging. There are many alterations in entering the university world, such as the learning system, environment, social relations, and daily life because the students have already moved from their parent's house (Moilanen et al., 2021; Hausler et al., 2014; Mesidor & Sly, 2016). Difficulty and inability to adapt to many changes influence students' decision to continue or drop their studies. Previous studies also show that college adjustment (CA) can predict student resilience or persistence to complete their education (Crede & Niehorster, 2012; Fennie et al., 2020; Gray et al., 2013; Haktanir et al., 2021; Ramon-Sanchez & Nichols, 2007).

In addition, CA is also predicted to be one factor influencing student achievement during college (Crede & Niehorster, 2012; Haktanir et al., 2021; Rienties et al., 2012). The role of CA on student academic performance can occur indirectly. A negative CA value tends to cause behavior that disadvantages students, which has an impact on their achievement (Kenney et al., 2015; López et al., 2023)

Although still limited in Indonesia, some studies have also proven the relationship between CA and several psychological aspects of students. Several studies (Fuad, 2013; Christyanti et al., 2010) show that adjustment has a negative relationship with the stress level of first-year students. CA is also said to have a positive relationship with school well-being (Siregar, 2011) and student self-efficacy in Indonesia (Irfan & Suprapti, 2014).

Adjustment is a psychosocial process that deals with daily life demands through self-modification and environmental modification. Adjustment related to how individuals meet the college or campus demands is called college adjustment (CA) (Crede & Niehorster, 2012). There are several definitions and methods to measure CA. The widely used instrument in various studies is CA, proposed and constructed by Baker and Siryk (1984; 1989).

Baker and Siryk construct CA as a multidimensional construct and define it into four broad categories (Baker & Siryk, 1984; Baker & Siryk in Feldt et al., 2011; Baker & Siryk in Crede & Niehorster, 2012), namely: academic adjustment (AA), social adjustment (SA), personal-emotional adjustment (PEA), and institutional attachment (IA). AA reflects how students have adjusted to the university's academic demands. This can be seen from their attitude towards the course, task, involvement in the course material, and academic and learning efforts' adequacy. SA reflects how students have integrated into the university community social structure, engaged in campus activities, met new people, and made friends. The contrary to social adaptation is the social adjustment difficulties caused by feeling lonely or missing family. PEA reflects the extent to which students experience stress, anxiety, and physical problems, such as sleeplessness, because of completing the lecture task. Finally, IA reflects the degree of student's self-identification and the extent to which they are emotionally attached to the campus community.

Baker and Siryk developed the SACQ (Students Adaptation to College Questionnaire) to measure CA. The SACQ was developed in 1984 and published in 1989. This instrument is still applied and developed today (Shirley et al., 2018). The meta-analysis results of Crede and Niehoster (2012) state that the SACQ is the most widely used instrument in the world to measure multidimensional college adjustment (CA).

The SACQ consists of four aspects of college adjustment, 67 self-report items using a 1-9 Likert scale. The AA comprises 24 items measuring sub-aspects of motivation, application, performance, and academic

environment. SA is represented by 20 items, with sub-aspects of general social, relationships with others, nostalgia, and the social environment. The PEA measures two sub-aspects, psychological and physical, comprised of 15 items. The IA measures two sub-aspects, general and specific, composed of 15 items. Several items on AA also measure aspects of SA, PEA, and IA. Besides, 2 (two) items measure CA in general without being included in these four aspects (Soledad et al., 2012). Details of these aspects can be seen in Appendix 1.

SACQ has good psychometric attributes. Baker and Siryk (1986) found a positive correlation between SACQ, GPA scores, and student participation in social activities. A significant negative correlation between the SACQ score, the need for psychological counseling, and the dropout rate proves the validity of the SACQ criterion. The Cronbach alpha coefficient of the four subscales ranges from 0.81 to 0.91. The validity and reliability of this SACQ have also been proven in various studies in several cultural contexts (Alsaffar & Bernauer, 2017; Glass, 2014; Han, 2017; Norvitilis et al., 2010; Soledad et al., 2012; Watson, 2016).

This study wants to determine whether SACQ is appropriate for measuring CA in Indonesia. Therefore, measuring the validity and reliability of CA in Indonesia is essential. If SACQ is proven useful, it will undoubtedly positively impact higher education in Indonesia because it can assess students' conditions in their educational institutions.

A measuring instrument is considered appropriate for measuring a construct with good validity and reliability. Several studies define validity (Urbina, 2014; Cohen & Swerdlik, 2018) as the test's ability to measure what should be measured. A joint committee of the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME) in 1999 states that validity is determined based on evidence that is the basis for concluding a test score (Urbina, 2014).

Kaplan and Saccuzzo (2013) state that three types of evidence can be used to determine the validity of a measuring instrument. The three types of validity are related to content, criteria, and construct. Content validity indicates that the instruments' content adequately represents the measuring conceptual domain. Criteria validity shows that the instrument can measure the specific criterion correctly. Construct validity demonstrates that the instrument can precisely measure a psychological trait or construct. Construct validity can be measured by testing the internal consistency and factor analysis (Urbina, 2014).

According to Cohen and Swerdlik (2018), a reliability test is an attribute referring to measurement consistency. The test's reliability determines whether the measured score differences are caused by individual characteristics or other factors (chance of error) (Urbina, 2014; Cohen & Swerdlik, 2018). Kaplan and Saccuzzo (2013) state that a reliable test is one that is free of measurement errors. Several procedures can measure reliability, including those requiring twice or one administration test (Kaplan & Saccuzzo, 2013; Urbina, 2014; Cohen & Swerdlik, 2018). Procedures requiring only one test administration are the split-half procedure, the procedure for calculating item covariance or consistency between items (inter-item), which has two formulas: Kuder-Richardson and Alpha Coefficient, and inter-rater procedures.

This study will measure the construct validity through internal consistency or correlation between the item and item-total scores (Cohen & Swerdlik, 2018). This study will also test the validity of the criteria by correlating the SACQ score with student academic achievement (GPA). The research results of Rienties et al. (2012) and Crede and Niehorster (2012) prove that CA is related to

student academic achievement. The reliability estimation of SACQ is measured by calculating the consistency between items using factor analysis with the Confirmatory Factor Analysis (CFA) method.

Based on the explanation above, this study aims to prove three hypotheses:

1. SACQ is reliable for measuring the student's adaptation instrument in Indonesia. The items and constructs are highly convergent.
2. The SACQ is valid for measuring the student adaptation instrument in Indonesia. The construct of the student's adaptation instrument has high extract variance.
3. SACQ is a predictive measuring tool for student achievement (GPA).

METHOD

Research participants

The participants are students in the first and second semesters of college from 14 majors at six universities in Jakarta, Bogor, Depok, Tangerang, and Bekasi. This study uses a non-random incidental sampling technique because it facilitates participant access.

The first step of the SACQ validity and reliability test involves 1200 students, but only 1033 data are ready to be analyzed. The second step involved 140 participants to obtain the validity criteria. To ease the data collection process, 140 students were all from the psychology major program at the University of Indonesia in Depok. Only 126 data can be analyzed from 140 participants.

Research instruments

The main instrument is the adapted SACQ to Indonesian. Based on the results of the pilot study (as outlined in the research procedure below), of the 67 original items in SACQ, only 63 items are tested in this study. Besides, instead of a 1 - 9 Likert scale, this study uses only a 1 - 7 Likert scale. A Likert scale ranging from 1 - 9 is not easy to use.

Research procedures

First stage is the translation of 67 items of SACQ from English to Indonesian. Researchers and the team translated the SACQ into Indonesian. The team should understand CA constructs and be proficient in English. The translated items are linguistically correct and follow the Indonesian context. Psychologists are concerned about the CA construct and have English proficiency review and complete the back translation. The matched items are involved in the readability test and tryout.

The second stage is the readability test and trial of SACQ items. Seventy-two participants, students from the Faculty of Psychology at a private university in Jakarta, were involved in this study. The participants were asked to complete the SACQ and comment on each item about the ease of understanding and precision of the student's life context. The results show that not all items have a good correlation between items ($r_{ci\text{-}t}$ is in the range < 0.1 to 0.628), both on the item homogeneity test and aspect. By considering the results of this test, researchers eliminated 4 (four) items and revised ten items. Besides, researchers changed the range of the response section from 1 - 9 to 1 - 7.

After readability test, first SACQ trial is executed. One thousand two hundred participants from 14 study programs at six universities in Jakarta, Bogor, Depok, Tangerang, and Bekasi (Two state universities and four private universities) were involved in this study. This study uses Factor analysis of the Confirmatory Factor Analysis (CFA).

To measure the effect of SACQ and GPA, second SACQ trial is run. The researchers questioned 140 Students in a lecture class about their willingness to participate in this measurement. Participation means being ready to deliver critical information about student identification numbers and GPA. The students are willing to provide confidential data, fill out the form, and write down their student identification numbers. Of 140

students, 126 students are ready to participate. At the end of the Final Semester Exam, the researcher inquired about the participant's GPA and the campus/faculty.

Data processing techniques

The data processing technique for testing the SACQ test is the Confirmatory Factor Analysis (CFA) method through several stages of testing. The first stage tested the SACQ measuring instrument, while the second tested the SACQ as a predictor of GPA.

The first stage, namely testing the SACQ measuring instrument, begins with testing the validity of items and items significantly contributing to the SACQ test construct. The outputs are valid items built on the SACQ dimensions and high-contributing items based on standardized factor loading $\geq$ 0.50. Next, the construct validity test was carried out on the SACQ test, and the construct contributed highly to the SACQ test. The validity test results are valid constructs built on the SACQ test and have a high contribution based on standardized factor loading $\geq$ 0.50. The first stage ends with the calculation of construct validity based on the variance extracted and the calculation of construct reliability.

The second stage tests the SACQ test as a predictor of GPA. This second stage begins by testing the predictions of the SACQ test and continues with testing the dimensions of the SACQ test as a predictor of GPA.

The data analysis uses the LISREL 8.80 program to calculate the CFA and composite score and IBM SPSS Statistic 22 to measure the prediction test with regression analysis.

This study compared valid items and valid constructs based on the contribution to the SACQ construct or test for initial data processing, using a standardized factor loading decision $\geq$ .50. Hair et al. (2014) stated that the estimated standardized loading should be $\geq$ .50, with an ideal of $\geq$ .70. Based on the standardized factor loading of $\geq$ .50 with χ^2 (1, N = 1033) = 1.01, p = .315, and RMSEA = .003, the fit model produced four constructs/dimensions: AA, SA, IA, and PEA.

RESULTS AND DISCUSSION

Stage 1: The SACQ validity test

Description of the participants

Most of the participants in this study are females (64.0%). Although all participants are at the first tertiary education level, their ages vary from 15 to 24 years (M = 18.43, SD = 7.65). Most participants are 18 years old (70.4%) and study in state universities (77.4%). The participants' major of study differs from a wide range of subject areas, ranging from health sciences (nursing, dentistry, pharmacy, public health), science and technology (engineering, natural sciences, mathematics, and computer science), to social sciences and humanities (psychology, law, economics, literature and culture, communication science, and administration).

Item validity test and item's contribution toward SACQ's construct.

Following the measurement model in SEM (Structural Equation Modeling), achieving a fit model with $p > .05$ is necessary. This result means that the empirical data is under the model being conceptualized. An item is valid if the item's loading factor is positive, with a t-value of > 1.96 at a 95% confidence level (Hazra, 2017). This study decides to use a standardized loading estimate of $\geq$ .50.

The AA construct validity test results with χ^2 (72, N=1033) = 91.94, p = .057; RMSEA = .016, prove the fit model and produce nine valid items. SA construct with χ^2 (69, N=1033) = 86.93, p = .071; RMSEA = .016, proves the fit model with 11 valid items. PEA construct with χ^2 (66, N=1033) = 85.5, p = .054; RMSEA .017, proves that the model fits with 11 valid items. IA, with χ^2 (25, N = 1033) = 34.6. p = .957); RMSEA = .019, proves the fit model with seven valid items. These valid

items are then tested to examine the construct validity of the SACQ test.

Testing construct validity and construct contribution to the SACQ test

Based on each dimension's confirmed items, a composite score is obtained by reducing the dimension using the Maximum Likelihood, the rotation method with Varimax, the extraction factor of one, and the maximum iteration of 25. Thus, each dimension is represented by one composite score of the valid items.

According to the previous explanation in the introduction, 2 (two) items measure CA in general, in this case, item 30 and item 50. These items do not need to be tested together with the composite score. Thus, for testing the SACQ test, there are four composite scores from the dimensions AA, SA, PEA, and IA with result presented in Table 1.

SACQ's construct validity test results are χ^2 (1, N = 1033) = 1.01, p = .315; RMSEA = .003. It is proved to be a fit model of SACQ containing four valid constructs: AA, SA, PEA, and IA.

Table 1.
Processing Results of The SACQ Dimensions

Dimensions/ Item	Loading Factor	*t*	*SE*	R^2 (%)	Test	Decision
AA/9 item	.85	18.38	.05	73	Construct Valid	Applied
SA/11 item	.29	8.59	.03	8	Construct Valid	Applied
PEA/11 item	.76	17.37	.04	58	Construct Valid	Applied
IA/7 item	.29	0.29	.03	9	Construct Valid	Applied
SACQ	χ^2 (1, N = 1033) = 1.01, p = .315; RMSEA = .003					

Note. AA = Academic Adjustment, SA = Social Adjustment, PEA = Personal-Emotional Adjustment, IA = Institutional Attachment.

This study delivers four valid constructs for SACQ, with all dimensions contributing to it. The AA dimension contributes the most to SACQ, followed by PEA, IA, and SA. Although this study used a loading factor > .5, the researcher still used SA and IA. The reason is to maintain the factor structure that has been built. Thus, each dimension is part of the SACQ test. The results of the SACQ test regarding the dimensions, number of items, and item numbers are presented in Table 2.

Table 2.
SACQ Instrument Breakdown

Dimension	Number of Items	Item's number
AA	9	10, 21, 23, 26, 29, 35, 37, 48, 54
SA	11	1, 4, 9, 16, 18, 27, 33, 38, 42, 59, 61
PEA	11	2, 7, 11, 12, 20, 25, 28, 34, 36, 41, 60
IA	7	15, 16, 32, 43, 55, 56, 57

Note. AA = Academic Adjustment, SA = Social Adjustment, PEA = Personal-Emotional Adjustment, IA = Institutional Attachment.

The construct validity based on extracted variance and reliability

According to Hair et al. (2014), construct validity is the extent to which an instrument can measure the construct it wants to measure. Construct validity provides evidence that the sample's items represent the population's actual scores. Construct validity can be explained based on convergent validity by calculating the extracted variance to what extent the variation in each item explains the latent factor. An adequate extracted variance value is expected to be $\geq$ .05. The SACQ's construct validity results use the variance extracted of .907. Therefore, the SACQ with 38 items very adequately reflects the dimensions of AA, SA, PEA, and IA.

Reliability is a measure of consistency or convergence. The difference in the construct reliability coefficient indicates a conjunction in the SEM model. Hair et al. (2014) state that the value of construct reliability is expected to be $\geq$ .70, which indicates adequate convergence. The reliability value of the reliability coefficient of the SACQ test is .970. Thus, the SACQ has a four unite convergent dimension (AA, SA, PEA, IA) in measurement and has a minimal error.

Stage 2: Testing SACQ as GPA's Predictor

Description of the participants

The participants in the second phase of the validity test are in the same semester, the first semester of the major psychology. Most of the participants are female (81%). The participants ranged from 17 to 21 years old, and the majority were 18 (65.9%).

Results of the SACQ and GPA regression analysis

The researcher reviews the data description using a GPA scatterplot with standardized predictive value regression. The GPA data ranges from 3.00 to 4.00. Meanwhile, the GPA of active students ranges from 2.00 to 4.00. A data gap exists between the GPA value range of 2.00 to 3.00.

Regression analysis function for prediction. The research question is whether the SACQ can predict the GPA. If the SACQ test score is high, the GPA is predicted to be high. This study uses linear regression with the ENTER method. The dependent variable is the GPA, and the independent variables are the SACQ test score and the SACQ dimensions, namely the AA, SA, PEA, and IA dimensions. The SACQ score is the sum of AA, SA, PEA, and IA, and item 50.

Findings from the regression test results show that the SACQ test score predict the GPA with a coefficient of determination (R^2) of .048 or 4.8% with a significance level of .014. This result means that the SACQ test can predict GPA, and the SACQ test score can explain only 4.8% of the GPA variation. The test results based on the dimensions of AA, SA, PEA, IA, and item 50 have a coefficient determination (R^2) of 2.9%; .2%; 3,4%; .5%, and 3.7% with a significance level of .031; .255; .021; .207; .18, respectively. This result means that besides college adjustment, many other factors can still influence a student's GPA level. Also, the test results show that the AA and PEA dimensions significantly predict GPA.

The ANOVA or F test found that $F(1, 124) = 6.210$, $p = .014$ ($p = < .05$), meaning the regression model can be used to predict GPA. The regression equation is Y = 3.060 + 0.002 X where Y is GPA and X is SACQ score. This result means that if there is no increase or decrease in the SACQ test score, a constant coefficient of 3.060 must be considered. If the score increases by 1 point, the GPA score will increase by 0.002 times.

The assumptions in ANOVA are the normally distributed population, same population variance, and no relation between the samples. Because of the low determination value (4.8%), examining the dimensions of AA, SA, PEA, and IA is necessary. Based on the ANOVA, it shows that only the AA and PEA

dimensions are significant, meaning that the dimensions can predict GPA. The SA and IA dimensions are not significant, meaning that the dimensions cannot predict the GPA. Therefore, not all of the SACQ's dimensions can predict GPA.

Kaplan and Saccuzzo (2013) stated that there is currently no universally accepted standard for the level of validity coefficients, while Urbina (2014) argues that the validity coefficient should be high enough to achieve a statistically significant result. However, the validity coefficient's standard level should be determined because the validity coefficient's interpretation must consider various factors. According to Kaplan and Saccuzzo (2013), ensuring reliability is critical in defining a test's validity. Kaplan and Saccuzzo (2013) state that the reliability coefficient level depends on the test's application. Reliability ranges between .70 and .80 are good for most purposes in basic research. Urbina (2014) states that the desirable reliability value is .80 to .90. This study uses Confirmatory Factor Analysis, so validity items must be analyzed besides the construct validity. Therefore, this research finds the construct validity and reliability.

According to Hair et al. (2014), construct validity can be explained based on convergent validity by calculating the variance extracted to see the extent to which the variation in each item explains latent factors. An adequate expected extracted variance value is $\geq$ .05. The difference in the construct reliability coefficient indicates a conjunction in the SEM model. Hair et al. (2014) state that the expected value of construct reliability is $\geq$ .07, which indicates adequate convergence. This study finds that the adapted SACQ in Indonesia is valid and reliable to measure students' college adjustment in Indonesia.

The results of this study follow Baker and Siryk's (1986) statements and are also found in several previous studies (Norvitilis et al., 2010; Crede & Niehoster, 2012; Glass, 2014; Watson et al., 2016; Alsaffar & Bernauer, 2017). Before this study was conducted, a legibility test was conducted on a sample of students with the same characteristics as the main study. That legibility test supports the success of this study.

Morgado et al. (2017) and Cohen and Swerdlik (2018) state that the minimum number of samples needed to produce a stable item analysis is five to ten times the number of items. This study gains up to 1033 students and meets the minimum sample size standard. Besides, the higher the sample size, the more precise the research result. So, the results of SACQ's validity and reliability are precise.

However, the researcher considers several factors in the study's results. The first factor is related to the validity of the criteria. This study concludes that GPA is an appropriate comparative instrument for measuring students' abilities. This consideration is based on previous research results, which state that higher education adjustment is related to student achievement (Crede & Niehorster, 2012). However, the relationship between these two measurements is not very strong. This result aligns with the meta-analysis study by Crede and Niehorster (2012). Their study found that, based on 50 previous studies, the mean correlation between college adjustments and GPA was 0.25. The strongest correlation is between GPA and academic self-adjustment (AA), while the weakest is between GPA and social adjustment (SA). This study has similar results. Although the CA scores can predict the student's GPA, only two dimensions of SACQ can predict GPA: academic adjustment (AA) and personal and emotional adjustment (PEA). These results show that other variables have a strong relationship/correlation with CA, which can be used as criteria in the SACQ predictive test.

Several studies have emphasized the relationship between adjustment to the student's persistence or resistance in completing their education (Crede & Niehorster, 2012; Boyraz et al., 2013; Gray et al., 2013) and the stress level (Fuad, 2013; Mcdonald et al., 2018; Lee & Cho, 2020). Therefore, the SACQ can be compared to

students' level of stress to get the best measurement of criteria validity. The study for criteria validity can also compare the SACQ scores between successfully graduated college students and those who need a longer time to study or discontinue their studies.

It is important to select the study participants for further study and development of SACQ. This study uses an accidental sampling technique for easy participant access (Kumar, 2019). Consequently, not all students in the Jabodetabek area, or even Indonesia, have the same opportunity to participate in this study. Proportionate stratified random sampling is better for getting a representative sample of the target population (Kumar, 2019).

To enhance confidence in the SACQ instrument's application, several recommendations are proposed: firstly, future studies should explore SACQ test scores' correlation with other factors related to college adjustment (CA), such as stress or student well-being. Secondly, employing a two-group comparison method can ascertain the SACQ's criterion validity by comparing scores between successfully graduated students (or students in their final semester) and those experiencing academic difficulties (require longer or failed to finish study), thereby distinguishing between well-adjusted and unadjusted students. Lastly, to broaden the SACQ's applicability, future research should include participants from various academic levels and institutions, utilizing random sampling techniques to bolster external validity and encompassing students with different GPAs for a comprehensive evaluation.

CONCLUSION

The adapted SACQ to Indonesian has good reliability, meaning the instrument has high convergence. The items are consistent in measuring the same construct. Therefore, SACQ is a valid instrument for measuring Indonesia's college adjustment because it has a good homogeneity of items and constructs. Also, the validity of the SACQ measuring instrument is supported by evidence of its validity criteria. SACQ is a significant and sufficient predictor for GPA. However, the correlation between SACQ and GPA is only shown in the overall SACQ test scores and the AA and PEA dimensions.

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APPENDIX 1

Overview of aspects, sub-aspects, and distribution of original and adapted versions of SACQ items (which was for pilot study)

Dimensions/Aspects	Number of items		Sample items
	Original	Adaptation	
Academic Adjustment	24	23* (1 item also include GCIA aspect)	
a) Motivation			a) I really haven't had much motivation for studying really (item no. 29)
b) Application			b) I feel that I have enough social skills to get along well in the college setting. (item no. 37)
c) Performance			c) Getting a college degree is very important for me. (item no. 23)
d) Academic Environment			d) Lately I have been giving a lot of thought to transferring to another college (item no. 59)
Social Adjustment	20	17* (7 items also include GCIA aspects)	
a) General			a) I feel that I fit in well as part of the college environment (item no. 1)
b) Other People			b) I have had informal, personal contacts with college professors (item no. 14)
c) Nostalgia			c) I am having difficulty feeling at ease with other people at college (item no. 42)
d) Social Environment			d) I am satisfied with the extracurricular activities available at college (item no. 30)
Personal-Emotional Adjustment	15	15	
a) Psychological			a) I have been feeling tense or nervous lately (item no. 2)
b) Physical			b) I have been having a lot of headaches lately (item no.28)
Goal-Commitment/ Institutional Attachment	15	14*	
a) General			a) I am pleased now about my decision to go to college (item no. 15)
b) This College			b) I am pleased now about my decision to attend this college in particular (item no. 16)
General AA	+2	+2	I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college (item no. 67)
TOTAL	67	63	

Note. * = Items that are not included in the Indonesian version of SACQ are items that cannot be generally applied in the Indonesian context, such as "I can interact well with my roommates in campus dormitories.