Sojourner Students' Adjustment: Do They Need to Lower Their Normative Achievement Goal Orientation to Remain Confident and Survive

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Sojourner Students’ Adjustment: Do They Need to Lower Their Normative Achievement Goal Orientation to Remain Confident and Survive?

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Abstract

Adjustment is very important for college students, especially for sojourner students. Even though sojourner students initially had high academic self-efficacy, it does not necessarily help them to survive their new academic learning environment. This study argues that normative achievement goal orientation moderates the relationship between academic self-efficacy and academic adjustment among sojourner students. To test the hypothesis, data was collected from 296 first-year sojourner students from 16 public universities in Indonesia and analyzed using Hayes moderator analysis. The results showed that normative achievement goal orientation negatively moderated the relationship between academic self-efficacy and academic adjustment (β = −0.09, SE = 0.04, p = 0.02). The results of the present study indicate that the role of normative achievement goal orientation is maladaptive. By using the big fish—little pond phenomena at the discussion, we make sense of the results with the aim of advancing current knowledge. We proposed collaborative learning as a method to lower first-year sojourner students’ normative achievement goal orientation, thus helping them to increase academic adjustment.

Penyesuaian Diri Mahasiswa Perantauan: Apakah Mereka Perlu Menurunkan Orientasi Tujuan Berprestasi Normatifnya untuk tetap Percaya Diri dan Bertahan?

Abstrak

Penyesuaian diri pada mahasiswa adalah hal yang sangat penting dalam perkuliahan di perguruan tinggi, terutama bagi mahasiswa perantauan. Sekalipun mahasiswa perantauan pada awalnya memiliki efikasi diri akademik yang tinggi, hal tersebut belum tentu membantunya untuk bertahan di lingkungan akademik yang baru. Penelitian ini berpendapat bahwa orientasi tujuan berprestasi normatif memoderasi hubungan antara efikasi diri akademik dan penyesuaian diri akademik pada mahasiswa perantauan. Untuk menguji hipotesis, data dikumpulkan dari 296 mahasiswa perantauan tahun pertama dari 16 universitas negeri di Indonesia untuk dianalisis menggunakan analisis moderator Hayes. Hasil penelitian menunjukkan bahwa orientasi tujuan pencapaian normatif secara negatif memoderasi hubungan efikasi diri akademik dan penyesuaian diri akademik (β = −0.09, SE = 0.04, p = 0.02). Hasil tersebut menunjukkan bahwa peran orientasi tujuan pencapaian normatif dalam penelitian ini adalah maladaptif. Dengan menggunakan fenomena ikan besar di kolam kecil di bagian diskusi, kami memahami hasil dengan tujuan pengembangan pengetahuan saat ini. Kami mengusulkan collaborative learning sebagai metode untuk menurunkan orientasi tujuan berprestasi normatif pada mahasiswa perantauan tahun pertama, sehingga membantu mereka untuk meningkatkan penyesuaian diri akademik.

Keywords: academic self-efficacy, goal orientation, sojourner students

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1. Introduction

Sojourner students, defined as students who move from their hometowns to study in other areas with different cultures until their studies are finished (Cox, 1988), generally have academic adjustment problems in the first year. (Mesidor & Sly, 2016; Anderson & Guan, 2018). These academic adjustment problems stem from
difficulties in interacting with local students, difficulties in using the local language, and homesickness (Pedersen, Neighbors, Larimer, & Lee, 2011). Students who experience homesickness tend to show academic procrastination, low academic self-efficacy, problems with language skills, culture shock, and academic stress (Lowinger, He, Lin, & Chang, 2014). If ignored, academic adjustment problems not only lead to a low Grade Point Average (GPA), but also more serious problems such as depression and suicidal ideation (Heffer & Willoughby, 2017; Marcotte, Diallo, & Paré, 2017). The number of first-year students who experience mental health problems such as depression at University clinics in Jakarta is high, namely 1,793 (12.4%) from 14,129 (Vidiawati, Iskandar, & Agustian, 2017). Meanwhile, Kemristekdikti (2017) reports that the student dropout rate is high, namely 195,176 or 2.8%. According to the Kompas daily (2008), at a top public university in Bandung, an average of 2% of the students drop out of their studies because of deteriorating academic achievement and psychological problems.

Academic adjustment is the ability of students to carry out their assessment tasks and obtain satisfaction with their success in completing those assignments (Schneider, 1955). The evidence of academic adjustment of sojourner students are student satisfaction with academic life, academic achievement, and academic motivation (Anderson, Guan, & Koc, 2016), and shown by academic achievement or GPA scores (Heffer & Willoughby, 2017). In line with the previous research, O'Donnell, Shirley, Park, Nolen, Gibbons, and Rosén (2018) identify student academic adjustment based on student satisfaction with academic functions, such as classroom performance and learning achievement, through self-reporting. Challenges faced by sojourner students in adjusting to the university academic system are more pronounced than those for non-sojourner students (Mesidor & Sly, 2016). Sojourner students are easily recognized as different students because of their different cultures and languages. Lectures in languages that sojourner students have not yet mastered, different evaluation methods, and unrealistic goal setting are sources of academic adjustment problems for sojourner students. If at the first lecture the students encounter positive situations, then they will feel more confident and will be more optimistic as they undergo the transition to their new environment (Mesidor & Sly, 2016).

Previous studies show some important factors that lead to a lack of academic adjustment for students: internal factors, such as low academic self-efficacy (Liran & Miller, 2017); low self-esteem (Aspelmeier, Love, McGill, Elliott, and Pierce, 2012); an avoidance type coping style, maladaptive perfectionism, extrinsic motivation (Montgomery, Gregg, & Somers, Pernice-Duca, & Hoffman, 2017); avoidance type behavior vis-à-vis student goal orientation (Pahljina-Remič & Kukić, 2015); low internal locus of control (Aspelmeier et al., 2012); certain personality traits such as neuroticism (Credé & Niehorster, 2012); and external factors, such as lack of support (Hall, McNallie, Custers, Timmermans, Wilson, & den Bulck, 2017; Rodriguez, Tinajero, & Páramo 2017); and, helicopter parenting styles (Darlow, Norvilitis, & Schuette, 2017).

Among academic adjustment factors, academic self-efficacy is the most important factor since, besides being the most relevant, it also among the strongest predictors of academic adjustment (Credé & Niehorster, 2012). Self-efficacy is self-confidence in the ability to organize and implement actions to achieve expected goals and performance (Bandura, 2006). If associated with college students, the term used is academic self-efficacy (Owen & Froman, 1988). Academic self-efficacy is one’s belief in their ability to succeed in achieving their academic goals (Sharma & Nasa, 2014). Academic self-efficacy is important in academic adjustment. People who have high self-efficacy, are more persistent when facing difficulties, and generally make a serious effort until they are successful (Bandura & Cervone, 1983). A student’s GPA is one of measure of the success of academic adjustment (Schneider, 1955; Heffer & Willoughby, 2017).

There are inconsistencies in the results of academic self-efficacy studies associated with academic adjustment. Some studies showed a weak relationship between academic self-efficacy and academic adjustment (Chemers, Hu, & Garcia, 2001; Thomas, Love, Roan-Belle, Tyler, & Carrie, 2009). For example, a study by Chemers et al. (2001) on 373 first-year students found that academic self-efficacy had a significant but weak relationship with student adjustment, namely \( r = 0.18 \). Some other studies found that academic self-efficacy is moderate to strongly related to academic adjustment (Gong & Fan, 2006; Credé & Niehorster, 2012; Liran & Miller, 2017). For example, a survey conducted by Gong and Fan (2006) on 165 first-year sojourner students in the United States of America found that academic self-efficacy had a strong relationship with academic adjustment \( (r = 0.61) \). Research by Rooij, Jansen, and van de Grift (2017), on 243 first-year students in the Netherlands, even found that academic self-efficacy was not related to academic adjustment.

The inconsistency of the results found by studies on the role of academic self-efficacy on student adjustment indicates the presence of moderator variables that can change the direction or strength of academic self-efficacy role on dependent variables (Baron & Kenny, 1986). The variables expected to be moderators are student-adjustment factors, namely: self-esteem (Aspelmeier et al, 2012); types of coping style strategies (Credé & Niehorster, 2012); task and performance goal orientation (Pahljina-Remič, & Kukić, 2015); perceptions of social
support (Credé & Niehorster, 2012; Rodríguez, Tinajero, & Páramo 2017); and, perceptions of parenting practices (Jorgensen, Nelson, & Juan, 2017) which were found in these studies to play a strong role in increasing student adjustment (Credé & Niehorster, 2012).

Among the predictors of student adjustment, we excluded self-esteem as a potential moderator since self-efficacy is a component of self-esteem, and there are indications that they overlap (Mruk, 2013). The perception of social support, even though it is a strong predictor, was also not considered since according to the discussion of Credé & Niehorster (2012), social support is a variable that correlates strongly with social adjustment, so it is likely to be redundant. Coping styles were also not included, because, according to Credé & Niehorster (2012), they are strongly correlated with personal adjustment, and there is the possibility that they overlap.

The variable that we expect to be a moderator is the application of other components of self-esteem (Mruk, 2013), one of which is normative achievement goal orientation (also known as other-approach and performance-approach goal orientation) (Elliot et al., 2011). Students who have a normative achievement goal orientation for normative achievement are students who aim to perform better than other students (Elliot et al., 2011).

Normative achievement goal orientation is considered as a moderator since prior researches have not shown consistent results on the relationship between normative achievement goal orientation and student adjustment: neither adaptive nor maladaptive (Huang, 2016; Hullemann, Schrag, Bodmann, & Harackiewicz, 2010; Van Yperen, Blaga, Postmes, 2014). Normative achievement goal orientation can be adaptive when students succeed in achieving their goals (Schunk, Pintrich, & Meece, 2012), which then increases their confidence (Artino, 2012). It seems that students’ confidence will facilitate students’ transition into the next semester, making them more optimistic in learning, and regaining learning satisfaction, which itself is a form of successful academic adjustment. Thus, normative achievement goal orientation is adaptive by increasing academic self-efficacy, increasing persistence, reducing worries about examinations, and increasing GPA (Elliot, et al., 2011, Ning, 2018). Both Elliot et al. (2011) and Ning (2018), showed that normative achievement goal orientation was the only type of goal orientation that predicted GPA.

On the other hand, normative achievement goal orientation can be maladaptive when students fail to achieve their goals (Schunk et al., 2014). Students with normative achievement goal orientation tend to see failure as a result of their lack of abilities, which they assume to be unchangeable (Dweck & Legget, 1988). According to van der Bijl dan Shortridge-Baggett (2001), the more students believe that the cause of their performance cannot be controlled, the more academic self-efficacy will diminish. For students who are still in the early stages of adjustment and are experiencing cultural shock, negative experiences in their first lecture can reduce their confidence (Mesidor & Sly, 2016; Artino, 2012). Diminished academic self-efficacy will make a person less resilient, less likely to make an effort, and more likely to give up when facing difficulties (Bandura & Cervone, 1983). The lack of resilience that follows diminished academic self-efficacy, leads to a poor GPA (Feldman & Kubota, 2016). Poor GPA can cause stress and is the most common indicator of academic adjustment difficulties that lead to a decision to drop out (Heffer & Willoughby, 2017).

The inconsistency of previous studies regarding normative achievement goal orientation led researchers to investigate whether the goal orientation of normative achievement was adaptive or maladaptive in moderating the role of academic self-efficacy on academic adjustment. In this study, the achievement goal orientation that was selected focused on the type of approach (achievement goal orientation for performing better than other students) as avoidant normative achievement goal orientation (goal orientation to avoid performing worse than other students), was not related to academic adjustment (Chen, Li, Wang, Li, & Gao, 2018). In addition, Elliot et al. (2015) suggested further research to investigate normative achievement goal orientation since it has been rarely studied. Elliot et al. (2015) also suggested examining one or two types of goal orientation to avoid multicollinearity and to make the research more parsimonious.

To our knowledge, there are no studies that examine normative achievement goal orientation as a moderator on the relationship between academic self-efficacy and adjustment, especially conducted on first-year sojourner students. In fact, research examining the relationship between normative achievement and academic adjustment is still limited. A correlational study conducted in Croatia by Pahljina-Reinić and Kukić (2015), became one of the limited studies that found a significant relationship between normative achievement goal orientation and academic adjustment. Likewise, the research conducted by Chen and his colleagues (2018) on high school students in China, found that normative achievement goal orientation improved academic adjustment. However, a study using a mediator technique by Gong and Fan (2006) in American students, found that normative achievement goal orientation was not related to academic self-efficacy and student adjustment.

The analysis of academic adjustment predictors, the inconsistency of previous studies regarding goal orientation, and the limited amount of research that
examines normative achievement goal orientation and academic adjustment led us to investigate whether normative achievement goal orientation moderates the relationship between academic self-efficacy and academic adjustment. Based on the study by Pahljina-Reinić and Kukić (2015) that found a positive correlation between normative achievement goal orientation and adjustment, we predict that normative achievement goal orientation significantly improves academic adjustment. However, we predict that normative achievement goal orientation will negatively moderate the relationship between academic self-efficacy and academic adjustment since the participants were freshmen sojourner students whose academic success through GPA has not been proven yet. Thus, we hypothesize that:

H1. Normative achievement goal orientation negatively moderates the relationship between academic self-efficacy and academic adjustment, and therefore high normative achievement goal orientation will weaken the relationship between academic self-efficacy and academic adjustment.

Based on this hypothesis, we have drawn a research model, which is shown in Figure 1.

The novelty of this research is its investigation into whether normative achievement goal orientation, which has been ignored by researchers as a potential moderator, moderates the relationship between academic self-efficacy and the academic adjustment among first-year sojourner students.

2. Methods

Research Design and Participants. Data were obtained from 296 first-year sojourner students from 16 well-known public universities in Indonesia with a strict selection system, implying that students who pass the college entrance exam are the smartest in their place of origin. Nevertheless, after entering into those reputable universities, those students who were initially the smartest in their hometown, then found that their peers are brilliant students. The majority of data was collected offline (63%), while the remaining 38% was collected online. The participants consisted of 116 males (39%), and 180 females (61%). Based on types of residences, there were 167 students (56%) living in the dormitories, 70 students living in boarding houses (24%), 57 students living in the Islamic boarding houses (19%), and 2 students living in relatives' houses (2%). The sampling technique was convenience sampling, in which the process of selecting participants is by using a “take-them-where-you-find-them” method (Cozby & Bates, 2015). Sojourner participants were recruited by asking their demographic and their sojourner status before filling the questionnaires. Only participants who come from towns or provinces with cultures and languages that differ from the current areas (and for no more than 1 year), were included for analysis. Out of 595 distributed questionnaires, 299 were excluded in this study since they meet the exclusion criteria: non-first year undergraduate students; students who migrate later than 1 year or less than 1 week; students who are coming from the same province; students who live with parents; and, students with identical answers for all items. Fulfilling the research ethics code, written informed consent was given by all participants. This study was also approved by the University of Indonesia ethics committee.

Measurements. All variables in this study were measured using self-reporting (Cozby & Bates, 2015). This study used adaptations of existing measurement instruments, based on the adaptation techniques of Beaton, Bombardier, Guillemin, and Ferraz (2000), consisting of (1) initial translation; (2) synthesis of the translations; (3) back-translation; (4) expert committee; and, (5) test of the pre-final version.

Academic Self-Efficacy. Academic self-efficacy was measured using an adaptation of academic self-efficacy subscale by Midgley et al. (2000), consisting of a 5-item Likert rating scale (1 = very unsure, 5 = sure). The academic self-efficacy scale from Midgley (2000) is also used by other researchers and is a valid and reliable scale (Dever & Kim, 2016). An example of an item on this scale is, “I'm certain I can figure out how to do the most difficult class work.” Since the items on this scale focus more on the strength dimension, we added four items that measure generality and magnitude dimensions by Bandura (2006). In this study, the internal consistency of the academic self-efficacy scale with nine items was $\alpha = 0.87$. The present study also showed that the academic self-efficacy scale produced a goodness of fit: $\chi^2 (33) = 27, p < 0.001$, CFI = 0.987, TLI = 0.976, RMSEA = 0.035, SRMR = 0.039. This means that this 9-item scale has construct validity according to the standards of Hu and Bentler (1999) CFI > 0.95, RMSEA < 0.06, and SRMR < 0.08.

| No. | Month | Year |
|-----|-------|------|
| 1   | July  | 2019 |
Normative Achievement Goal Orientation. To measure normative achievement goal orientation, the present study uses an adapted subscale of the Achievement Goal Orientation-Other Approach from Elliot et al. (2011), consisting of three items using a 1–5 Likert rating scale (1 = very inaccurate, 5 = accurate). An example of an item on this scale is, “To outperform other students on the exams in this class.” The scale was tested again by researchers in Hong Kong and was found to be a valid and reliable scale (Ning, 2018). The internal consistency of the normative achievement goal orientation scale in this study was α = 0.90. Based on a goodness of fit test (χ² (27) = 24, p = 0.295, CFI = 0.997, RMSEA = 0.028, SRMR= 0.024), the normative achievement goal orientation scale in the present study was valid and reliable. Elliot et al., (2015), do not recommend measuring the six types of achievement goal orientations as they will extend the questionnaire, which may increase multicollinearity. Selection of one or two types of goal orientation will shorten the questionnaire and will encourage participants to answer the questionnaire attentively, and be more parsimonious (Elliot, 2015).

Academic Adjustment. To measure academic adjustment, this research uses a subscale from The College Adjustment Questionnaire (O’Donnell et al., 2018), which consists of five items using a 1–5 Likert rating scale (1 = very inaccurate, 5 = accurate). An example of an item is, “I am happy with the grades I am earning in my classes.” In the present research, the internal consistency of the sub-academic adjustment scale was α = 0.74. Based on the goodness of fit, it was found that the academic adjustment subscale was the most valid among the other adjustment dimensions (χ² (11.6) = 5, p = 0.041, CFI = 0.975, RMSEA = 0.07, SRMR = 0.036).

Demographic Variable. In the preliminary analysis, we examined the potential relationship between demographic variables and academic adjustment to control systematic bias in results due to demographic variables. If a correlation between demographic variables and academic adjustment was found, the demographic variables were controlled in moderator analysis as covariate variables.

However, if no correlation was found between the two, demographic variables were not included as covariates in the moderator analysis. Those variables were age (range = 17–21), gender (1 = male, 2 = female), and types of residences (1 = dormitories, 2 = Islamic boarding houses, 3 = regular boarding houses, 4 = relatives’ houses).

Data Analysis. We used bivariate correlation using the Pearson Product Moment for preliminary data analysis before conducting hypotheses testing. To test the hypotheses, regression model 1 from Hayes using PROCESS by SPSS 23 was conducted for moderator analysis. To examine when the normative achievement goal orientation changed the relationship between academic self-efficacy and adjustment, we used the Johnson-Neyman method for low normative achievement goal orientation (1 SD below mean), and high (1 SD above mean) on the moderator variable.

3. Results

Based on Table 1, it can be seen that the average sojourner students in the present study were 18 years old, female, and lived in dormitories or Islamic boarding houses. Table 1 also shows that sojourner students had high academic self-efficacy, moderate normative achievement goal orientation, and moderate academic adjustment. Analysis of academic self-efficacy itself was carried out by a linear transformation given the abnormal distribution. Based on the bivariate correlation, the demographic variables were not significantly associated with academic adjustment as the outcome variable. Hence, the demographic variables were not included in further analysis. As for the main predictors, academic self-efficacy to academic adjustment was stronger (r = 0.42, p = 0.01) than the relationship of normative achievement goal orientation to academic adjustment (r = 0.26, p = 0.01). This finding suggests a need for further analysis of normative achievement goal orientation as a variable that moderates the relationship of academic self-efficacy and academic adjustment. Covariates were excluded in our moderator analysis since none of the demographic variables associated with academic adjustment.

Table 2 indicates that academic self-efficacy contributed significantly on academic adjustment (β = 0.26, SE = 0.04, p = 0.00). Table 2 also shows that the role of normative achievement goal orientation on academic adjustment was significant (β = 0.11, SE = 0.03, p = 0.00).

Based on total R² from Table 2, academic self-efficacy and normative achievement goal orientation contributed to academic adjustment by 22%. Based on R² change, it also revealed that contribution change of the interaction of academic self-efficacy and normative achievement goal orientation toward academic adjustment was significant, with a value of 0.02%, or 2%. In light of this, we concluded that normative achievement goal orientation had a low contribution to the academic self-efficacy's role in academic adjustment.

Based on p value ≤ 0.05 and the lower-upper limit of the confidence interval that does not exceed 0 as shown in Table 2, we concluded that normative achievement goal orientation moderates the relationship between academic self-efficacy and academic adjustment. Based on the negative interaction coefficient (β = −0.09, SE = −0.04, p = 0.02) and the conditional effect, we also concluded that normative achievement goal orientation weakens the relationship between academic self-efficacy and academic adjustment (Hence, hypothesis 1 was supported).
Table 1. Descriptive Statistics

| Variable                          | Mean | SD  | 1     | 2     | 3     | 4     | 5     |
|-----------------------------------|------|-----|-------|-------|-------|-------|-------|
| 1. Age                            | 18.20| 0.63| -     | -     | -     | -     | -     |
| 2. Gender                         | 1.61 | 0.49| -0.08 | -     | -     | -     | -     |
| 3. Types of Residence             | 1.70 | 0.86| -0.10 | 0.20**| -     | -     | -     |
| 4. Academic self-efficacy         | 4.10 | 0.63| 0.06  | 0.05  | 0.03  | -     | -     |
| 5. Normative achievement goal orientation | 3.45 | 1.02| -0.04 | 0.05  | -0.14*| 0.25**| -     |
| 6. Academic adjustment            | 3.40 | 0.66| -0.00 | -0.04 | -0.01 | 0.42**| 0.26**|

*p < 0.05  **p < 0.01

Table 2. The Moderating Role of Normative Achievement Goal Orientation on the Relationship between Academic Self-Efficacy and Academic Adjustment

| Variable                                      | β    | SE  | p    | 95% CI      |
|-----------------------------------------------|------|-----|------|-------------|
| Academic self-efficacy                        | 0.26*| 0.04| 0.00*| 0.19        |
| Normative achievement goal orientation        | 0.11*| 0.03| 0.00*| 0.05        |
| Academic self-efficacy X Normative achievement goal orientation | -0.09*| 0.04| 0.02*| -0.16       |
| $R^2$ total                                   | 0.22 |
| $R^2$ change                                  | 0.02 |

*p < 0.05

Figure 2. Moderator Graph
Makara is consistent with mediation research conducted by than normative achievement goal orientation. This current research contributes to the literature in at

adjustment between academic self-orientation negatively moderates the relationship between academic self

orientation and academic adjustment. In other words, it means that academic self-efficacy plays a major role in improving sojourner students’ academic adjustment. This happened as people who have high self-efficacy, are more persistent when facing difficulties, and generally make serious efforts until they are academically successful (Bandura & Cervone, 1983). Academic success, as well as the satisfaction with matters related to academics, is indicators of academic adjustment (Schneider, 1955; Heffer & Willoughby, 2017; O’Donnell et al., 2018).

However, although this study found that academic self-efficacy positively correlated with normative achievement goal orientation, Gong and Fan (2006) found a different result indicating that sojourner students will experience the diminishment of social efficacy when adopting normative achievement goal orientation. Hence, future research should use not only academic self-efficacy but also emotional, as well as cultural efficacy in order to capture more detail roles of normative achievement goal orientation on each type of efficacy.

Secondly, the current research demonstrates the negative impact of normative achievement goal orientation as the moderator on the relationship between academic self-efficacy and academic adjustment. This result suggests that normative achievement goal orientation plays a potentially negative role in the adjustment of sojourner students. This result is in line with Dweck & Legget (1988), that explained normative achievement goal orientation as maladaptive because of its negative effect i.e., that which accompanies failure. Students with normative achievement goal orientation tend to see failure as a result of their lack of abilities, which they assume to be unchangeable (Dweck & Legget, 1988). According to van der Bijl and Shortridge-Baggett (2001), the more students believe that the cause of their performance cannot be controlled, the more academic self-efficacy will diminish.

Normative achievement goal orientation may have a negative impact on adaptive learning when adopted on samples with high competence (Schunk et al., 2014). Participants in this study (as explained in the method section), were first-year sojourner students from well-known public universities consisting of top performing students in Indonesia. Thus, sojourner students may experience cultural shock at “the big fish—little pond” competitive environment. According to the findings of Marsh and Hau (2003), meeting performance comparison with peers who have similar or higher performances, lowers the sense of academic self-concept and competence. Hence, “in big fish—little pond” setting, students with normative achievement goal orientation will feel like a failure in achieving their goals to

Using the Johnson-Neyman method as further analysis, the relationship starts decreasing when the student’s average normative achievement goal orientation score was 1 standard deviation above the average.

In line with the prediction, normative achievement goal orientation based on the graph in Figure 2, shows a significant negative moderation on the relationship between academic self-efficacy and academic adjustment. The presence of line interactions on sojourner students with low, moderate, and high achievement goal orientation indicates that normative achievement goal orientation moderates the relationship between academic self-efficacy and academic adjustment among sojourner students. The line trend in Figure 2 shows that although having the same high academic self-efficacy, the improvement of academic adjustment among sojourner students with high normative achievement goal orientation was not as drastic as the improvement of academic adjustment for students with low normative achievement goal orientation.

**4. Discussion**

This study aims to examine the potential role of normative achievement goal orientation, on the relationship between academic self-efficacy and academic adjustment among sojourner students. The present study found that normative achievement goal orientation negatively moderates the relationship between academic self-efficacy and academic adjustment of sojourner students.

This current research contributes to the literature in at least two areas. Firstly, it shows that although both academic self-efficacy and normative achievement goal orientation significantly contribute to academic adjustment, academic self-efficacy has a stronger role than normative achievement goal orientation. This result is consistent with mediation research conducted by Gong and Fan (2006), which found a stronger significant relationship between academic self-efficacy and academic adjustment, than the relationship between normative achievement goal orientation and academic adjustment. In other words, it means that academic self-efficacy plays a major role in improving sojourner students’ academic adjustment. This happened as people who have high self-efficacy, are more persistent when facing difficulties, and generally make serious efforts until they are academically successful (Bandura & Cervone, 1983). Academic success, as well as the satisfaction with matters related to academics, is indicators of academic adjustment (Schneider, 1955; Heffer & Willoughby, 2017; O’Donnell et al., 2018).

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**Figure 3. The Moderation Model of Normative Achievement Goal Orientation on the Relationship between Academic Self-efficacy and Academic Adjustment**

| Normative achievement goal orientation | Academic self-efficacy | Academic adjustment |
|----------------------------------------|------------------------|---------------------|
|                                       | -0.09*                 | 0.26*               |

In line with the prediction, normative achievement goal orientation based on the graph in Figure 2, shows a significant negative moderation on the relationship between academic self-efficacy and academic adjustment. The presence of line interactions on sojourner students with low, moderate, and high achievement goal orientation indicates that normative achievement goal orientation moderates the relationship between academic self-efficacy and academic adjustment among sojourner students. The line trend in Figure 2 shows that although having the same high academic self-efficacy, the improvement of academic adjustment among sojourner students with high normative achievement goal orientation was not as drastic as the improvement of academic adjustment for students with low normative achievement goal orientation.

4. Discussion

This study aims to examine the potential role of normative achievement goal orientation, on the relationship between academic self-efficacy and academic adjustment among sojourner students. The present study found that normative achievement goal orientation negatively moderates the relationship between academic self-efficacy and academic adjustment of sojourner students.

This current research contributes to the literature in at least two areas. Firstly, it shows that although both academic self-efficacy and normative achievement goal orientation significantly contribute to academic adjustment, academic self-efficacy has a stronger role than normative achievement goal orientation. This result is consistent with mediation research conducted by Gong and Fan (2006), which found a stronger significant relationship between academic self-efficacy and academic adjustment, than the relationship between normative achievement goal orientation and academic adjustment. In other words, it means that academic self-efficacy plays a major role in improving sojourner students’ academic adjustment. This happened as people who have high self-efficacy, are more persistent when facing difficulties, and generally make serious efforts until they are academically successful (Bandura & Cervone, 1983). Academic success, as well as the satisfaction with matters related to academics, is indicators of academic adjustment (Schneider, 1955; Heffer & Willoughby, 2017; O’Donnell et al., 2018).

However, although this study found that academic self-efficacy positively correlated with normative achievement goal orientation, Gong and Fan (2006) found a different result indicating that sojourner students will experience the diminishment of social efficacy when adopting normative achievement goal orientation. Hence, future research should use not only academic self-efficacy but also emotional, as well as cultural efficacy in order to capture more detail roles of normative achievement goal orientation on each type of efficacy.

Secondly, the current research demonstrates the negative impact of normative achievement goal orientation as the moderator on the relationship between academic self-efficacy and academic adjustment. This result suggests that normative achievement goal orientation plays a potentially negative role in the adjustment of sojourner students. This result is in line with Dweck & Legget (1988), that explained normative achievement goal orientation as maladaptive because of its negative effect i.e., that which accompanies failure. Students with normative achievement goal orientation tend to see failure as a result of their lack of abilities, which they assume to be unchangeable (Dweck & Legget, 1988). According to van der Bijl and Shortridge-Baggett (2001), the more students believe that the cause of their performance cannot be controlled, the more academic self-efficacy will diminish.

Normative achievement goal orientation may have a negative impact on adaptive learning when adopted on samples with high competence (Schunk et al., 2014). Participants in this study (as explained in the method section), were first-year sojourner students from well-known public universities consisting of top performing students in Indonesia. Thus, sojourner students may experience cultural shock at “the big fish—little pond” competitive environment. According to the findings of Marsh and Hau (2003), meeting performance comparison with peers who have similar or higher performances, lowers the sense of academic self-concept and competence. Hence, “in big fish—little pond” setting, students with normative achievement goal orientation will feel like a failure in achieving their goals to
outperform other students. Such negative experiences, especially in their first lecture, will diminish their self-efficacy (Mesidor & Sly, 2016; Artino, 2012). Diminished self-efficacy will make a person less resilient, less likely to make an effort, and more likely to give up when facing difficulties (Bandura & Cervone, 1983). The lack of resilience that follows the diminishing of academic self-efficacy, leads to a poor GPA (Feldman & Kubota, 2016). In turn, a poor GPA may cause frustration, stress, and anxiety (Dweck & Legget, 1988), and are the most common indicators of academic adjustment difficulties (Heffer & Willoughby, 2017). In other words, the current research suggests that normative achievement goal orientation results in maladaptive academic adjustment.

The finding that normative achievement goal orientation lowers the significance of the relationship between academic self-efficacy and academic adjustment, answered inconsistency or non-significant direct relationship between academic self-efficacy and student adjustment from previous researches (Chemers, et al., 2001; Thomas, et al., 2009; Gong & Fan, 2006; Liran & Miller, 2017; Rooij, et al., 2017). The findings of this study also indicate that sojourner students in reputable public universities need to lower their goal orientation to outperform other students such that their academic adjustment increased drastically. This finding is important since theoretically, students with higher education are more likely to use normative achievement as their goal orientation (Schunk et al., 2014).

In relation to practical implications, the learning methods applied in collaborative learning are worthy of trial by lecturers to lower sojourner students’ goal to outperform their classmates. Snyder, Sloane, Dunk, and Wiles (2016) found that peer collaboration in learning alone was able to fill the performance gap on college students and decrease the course failure rates from 40% to 15%. In addition, Bruno, Dulaiova, Gillis-Davis, and Carte (2017) found that peer collaboration combined with active learning where the high paired with the low achiever on a group assessment is a powerful tool to close the achievement gap between the high and the low performing students in college. The tool was also proven to reduce anxiety (Kapitanoff & Pandey, 2018), and improve the learning outcomes for both high and low performing college students (Kapitanoff & Pandey, 2018; Bruno et al. 2018). Thus, with collaborative learning methods, first-year sojourner students are more likely to focus on cooperation in doing the tasks rather than comparing everyone else’s scores.

However, even though this study has several important implications, it may suffer from common method bias, where the biases in cross-sectional self-reporting techniques may have influenced the results, or that common method variance may inflate the results (CMV; Spector, 2006). However, the low to moderate correlations here, as well as significant interaction, disprove the effects of CMV that tend to inflate bivariate correlations and result in underestimation of a moderator effect (Spector, 2006). Demographic variables that had no correlation with any dependent variable also argue against the effects of CMV (Spector, 2006). Cozby and Bates (2015) also stated that, as long as the researchers openly and honestly communicate the purpose and use of the study, as well as providing confidentiality (all of which were fulfilled in this study), then the bias from self-reporting could be minimized. Besides, we also use different instructions on each scale in order to minimize the bias from cross-sectional self-report studies (Podsakoff, MacKenzie, & Podsakoff, 2012).

We encourage future researchers who want to examine similar topics to use observer, peer, or supervisor ratings as controls of possible bias from self-reports (Spector, 2006). The next suggestion is to add more independent variables that may positively moderate the relationship between academic self-efficacy and student adjustment. Resilience, as well as personality types such as agreeableness and openness to experience, are some of the strong predictors of student adjustment (Credé & Niehorster, 2012). Future researches may need to examine emotional adjustment as well as social adjustment in order to gain a comprehensive picture of normative achievement goal orientation moderator roles on each type of adjustment.

5. Conclusion

The results of the present study found that normative achievement goal orientation negatively moderates the relationship between academic self-efficacy and academic adjustment among sojourner students. Big-fish-little-pond phenomena in reputable public university environment may cause the maladaptive role of normative achievement goal orientation on the relationship between academic self-efficacy and academic adjustment. Students who initially had high academic self-efficacy and normative achievement goal orientation, when migrating, may experience culture shock at “the-big-fish-little-pond” academic environment. Those students may feel like a failure in achieving their goal to outperform other students. This feeling of failure decreases their confidence and leads to decreasing effort and enthusiasm to carry out academic tasks. The combination of low confidence and low effort toward completing academic tasks will lead to a poor GPA that causes stress and frustration, which are general indicators of academic adjustment difficulties. Collaborative learning methods encouraged by lecturers may lower first-year sojourner students’ normative achievement goal orientation as they are more likely to focus on cooperation rather than comparison, and, finally, improve their academic adjustment.
References

Anderson, J. R., Guan, Y., & Koc, Y. (2016). The academic adjustment scale: Measuring the adjustment of permanent resident or sojourner students. *International Journal of Intercultural Relations, 54*, 68-76. doi: 10.1016/j.ijintrel.2016.07.006.

Anderson, J. R., & Guan, Y. (2018). Implicit acculturation and the academic adjustment of Chinese student sojourners in Australia. *Australian Psychologist, 53*(5), 444-453. doi: 10.1111/ap.12332.

Artino, A. R. (2012). Academic self-efficacy: From educational theory to instructional practice. *Perspectives on Medical Education, 1*(2), 76-85. doi: 10.1007/s40037-012-0012-5.

Aspelmeyer, Love, M., McGill, L., A., Elliott, A., N., & Pierce, T., W. (2012). Locus of control, college adjustment, and GPA among first and continuing-generation students: A moderator model of generational status. *Research in Higher Education, 53*, 755-781. doi: 10.1007/s11162-011-9252-1.

Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy Beliefs of Adolescents* (Vol. 5, pp. 307-337). Greenwich, CT: Information Age Publishing.

Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology, 45*(5), 1017. doi: 10.1037/0022-3514.45.5.1017.

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine, 25*(24), 3186-3191.

Bruno, B. C., Engels, J., Ito, G., Gillis-Davis, J., Dulai, H., Carter, G., ... & Böttjer-Wilson, D. (2017). Two-stage exams: A powerful tool for reducing the achievement gap in undergraduate oceanography and geology classes. *Oceanography, 30*(2), 198-208. doi: 10.5670/oceanog.2017.241.

Chemers, M. M., Hu, L. T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55. doi: 10.1037/0022-0663.93.1.55.

Chen, Y., Li, L., Wang, X., Li, Y., & Gao, F. (2018). Shyness and learning adjustment in senior high school students: Mediating roles of goal orientation and academic help seeking. *Frontiers in Psychology, 9*, 1757. doi: 10.3389/fpsyg.2018.01757.

Cozby, P., C., & Bates, S., C. (2015). *Methods in behavioral research, (12th ed)*. NY: McGraw-Hill.

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 with correlates and consequences. *Educational Psychology Review, 24*(1), 133-165. Retrieved from http://remote-lib.ui.ac.id:2059/stable/43546783.

Cox, L. J. (1988). The overseas student: Expatriate, sojourner or settler? *Acta Psychiatrica Scandanavica, 78*, 179-184.

Darlow, V., Norvilitis, J. M., & Schuetze, P. (2017). The relationship between helicopter parenting and adjustment to college. *Journal of Child and Family Studies, 26*(8), 2291-2298. doi: 10.1007/s10826-017-0751-3.

Dever, B. V., & Kim, S. Y. (2016). Measurement equivalence of the PALS academic self-efficacy scale. *European Journal of Psychological Assessment, 32*, 61-67 doi: 10.1027/1015-7579/a000331

Dweck, C., S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273. doi:10.1037/0033-295X.95.2.256

Elliot, A. J., Murayama, K., & Pekrun, R. (2011). A 3 x 2 achievement goal model. *Journal of Educational Psychology, 103*(3), 632-648. doi: 10.1037/a0023952.

Elliot, A. J., Murayama, K., Kubovcick, A., & Lichtenfeld, S. (2015). Potential-based achievement goals. *British Journal of Educational Psychology, 85*(2), 192-206. doi: 10.1111/bjep.12051.

Feldman, D. B., & Kubota, M. (2015). Hope, self-efficacy, optimism, and academic achievement: Distinguishing constructs and levels of specificity in predicting college grade-point average. *Learning and Individual Differences, 37*, 210-216. doi: 10.1016/j.lindiff.2014.11.022.

Gong, Y., & Fan, J. (2006). Longitudinal examination of the role of goal orientation in cross-cultural adjustment. *Journal of Applied Psychology, 91*(1), 176. doi: 10.1037/0021-9010.91.1.176.

Hall, E. D., McNallie, J., Custers, K., Timmermans, E., Wilson, S. R., & den Bulck, J. V. (2017). A cross-cultural examination of the mediating role of family support and parental advice quality on the relationship between family communication patterns and first-year college student adjustment in the United States and Belgium. *Communication Research, 44*(5), 638-667. doi: 10.1177/0093650216657755.
Kemristekdikti (2017). Statistik pendidikan tinggi (Higher education statistical year book). Jakarta: Pusdattin Ristek Dikti. Retrieved from http://kopertis3.or.id/v5/wp-content/uploads/Buku-Statistik-Pendidikan-Tinggi-2017.pdf.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf.

Heffer, T., & Willoughby, T. (2017). A count of coping strategies: A longitudinal study investigating an alternative method to understanding coping and adjustment. *PloSOne*, 12(10), e0186057. doi: 10.1371/journal.pone.0186057.

Huang, C. (2016). Achievement goal achievement goal construct: Other measures: Different labels for the same constructs or different constructs with similar achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136(3), 422. doi: 10.1037/0033-29095.40118.

Hullman, C. S., Schragger, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136(3), 422. doi: 10.1037/a0018947.

Jorgensen, N., A., Nelson, L., J., & Duan, X. (2017). Perceived parenting practices and adjustment: Moderation by cultural values in Chinese emerging adults. *Emerging Adulthood 2017*, 5(5) 371-376. doi: 10.1177/216769681794800.

Kapitanoﬀ, S., & Pandey, C. (2018). Collaborative testing in statistics: Group interaction, anxiety, and class performance. *Statistics Education Research Journal*, 17(2), 51-67. Retrieved from http://www.stat.auckland.ac.nz/~serj.

Kompas. (2008). ITB bakal lakukan sistem akademis ketat (ITB Will Implement Strict Academic System). *Kompas.com*. Retrieved From https://regional.kompas.com/read/2008/01/24/19342238/ITB.Bakal.Berlakukanan.Sistem.Akademis.Ketat.

Liran, B. H., & Miller, P. (2017). The Role of Psychological Capital in Academic Adjustment among University Students. *Journal of Happiness Studies*, 1-15. doi: 10.1007/s10902-017-9933-3.

Lowinger, R., He Z., Lin, M., & Ghang, M (2014). The impact of academic self-eﬃcacy, acculturation diﬃculties, and language abilities on procrastination behavior in Chinese international students. *College Student Journal, 48* (1), 141-152.

Marcotte, D., Diao, T. M., & Parè, M. L. (2017). Adjustment to college and prediction of depression during post-secondary transition. *European Journal of Psychology of Education*, 1-22. doi: 10.1007/s10212-017-0346-9.

Montgomery, S., Gregg, D. H., Somers, C. L., Pernice-Duca, F., Hoffman, A., & Beeghly, M. (2017). Intrapersonal variables associated with academic adjustment in United States college students. *Current Psychology*, 1-10. doi: 10.1007/s12144-016-9533-0.

Marsh, H. W., & Hau, K. T. (2003). Big-Fish-Little-Pond eﬀect on academic self-concept: A cross-cultural (26-country) test of the negative eﬀects of academically selective schools. *American Psychologist, 58*(5), 364. doi: 10.1037/0003-066X.58.5.364.

Mascret, N., Elliot, A. J., & Cury, F. (2014). Extending the 3 x 2 achievement goal model to the sport domain: The 3 x 2 Achievement Goal Questionnaire for Sport. *Psychology of Sport and Exercise, 17*, 7-14. doi: 10.1016/j.psychsport.2014.11.001.

Mesidor, J. K., & Sly, K. F. (2016). Factors that contribute to the adjustment of international students. *Journal of International Students, 6*(1), 262-282. Retrieved from http://files.eric.ed.gov/fulltext/EJ1083269.pdf.

Midgley, C., Maehr, M. L., Hicks, L., Roeser, R., Urdan, T., Anderman, E., ... & Middleton, M. (2000). Patterns of adaptive learning survey (PALS). Ann Arbor, MI: Center for Leadership and Learning.

Mruk, C. J. (2013). Defining self-esteem as a relationship between competence and worthiness: How a two-factor approach integrates the cognitive and affective dimensions of self-esteem. *Polish Psycho-logical Bulletin, 44*(2), 157-164. doi: 10.2478/ppb-2013-0018.

Ning, H. K. (2018). Psychometric properties of the 3 × 2 achievement goal questionnaire in a Hong Kong sample. *Journal of Psychoeducational Assessment, 36*(3) 261-272. doi: 10.1177/0734282916677658.

O’Donnell, M. B., Shirley, L. A, Park, S. S., Nolen, J. P., Gibbons, A. M., & Rosén, L. A. (2018). The college adjustment questionnaire: A measure of students’ educational, relational, and psychological adjustment to the college environment. *Journal of College Student
Owen, S. V., & Froman, R. D. (1988). Development of a college academic self-efficacy scale. L.A: National Council on Measurement in Education.

Pahljina-Reinić, R., & Kukić, M. (2015). Students’ goal orientations and college adjustment abstract. Psiholo-gijske Teme, 24(3), 543-556.

Pedersen, E. R., Neighbors, C., Larimer, M. E., & Lee, C. M. (2011). Measuring sojourner adjustment among American students studying abroad. International Journal of Intercultural Relations, 35(6), 881-889. doi: 10.1016/j.ijintrel.2011.06.003.

Podsakoff, P M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. Annual Review of Psychology, 63, 539-569. doi: 10.1146/annurev-psych-120710-100452.

Rodríguez, M. S., Tinajero, C., & Páramo, M. F. (2017). Pre-entry characteristics perceived social support, adjustment and academic achievement in first-year Spanish university students: A path model. The Journal of Psychology, 151(8), 722-738. doi: 10.1080/00223980.2017.1372351.

Schneider, A. A. (1955). Personal adjustment and mental health. NY: Library of Congress Catalog Card.

Schunk, A. H., Pintrich, P., R., & Meece, J., L. (2014). Motivation in education (4th Ed). NJ: Pearson.

Sharma, H. L., & Nasa, G. (2014). Academic self-efficacy: A reliable predictor of educational performances. British Journal of Education, 2(3), 57-64.

Snyder, J. J., Sloane, J. D., Dunk, R. D., & Wiles, J. R. (2016). Peer-led team learning helps minority students succeed. PLoS Biology, 14(3), e1002398. doi: 10.1371/journal.pbio.1002398.

Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? Organizational Research Methods, 9(2), 221-232. doi: 10.1177/1094428105284955.

Thomas, D. M., Love, K. M., Roan-Belle, C., Tyler, K. M., Brown, C. L., & Garriott, P. O. (2009). Self-efficacy, motivation, and academic adjustment among African American women attending institutions of higher education. The Journal of Negro Education, 159-171. Retrieved from https://www.jstor.org/stable/25608732?seq=1#page_scan_tab_contents.

van der Bijl, J.J., & Shortridge-Baggett, L.M. (2001). The theory and measurement of the self-efficacy construct. Scholarly Inquiry for Nursing Practice, 15(3), 189-207.

van Yperen, N. W., Blaga, M., & Postmes, T. (2014). A meta-analysis of self-reported achievement goals and nonself-report performance across three achievement domains (work, sports, and education). PloS one, 9(4), e93594.

Vidiawati, D., Iskandar, S., & Agustian, D. (2017). Mental disorder of freshmen students of primary health university clinic in Jakarta. eJournal Kedokteran Indonesia, 5(1), 27-33. doi: 10.23886/ejki.5.7399.27-33.