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Academic Competence, Self-Efficacy, and Achievement Expectations Among International Students at the University of Central Florida

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ACADEMIC COMPETENCE, SELF-EFFICACY, AND ACHIEVEMENT

EXPECTATIONS AMONG INTERNATIONAL STUDENTS AT THE

UNIVERSITY OF CENTRAL FLORIDA

by

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A thesis submitted in partial fulfillment of the requirements
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ABSTRACT

With the vast and continued growth of international students in the U.S., it is important to focus on this expanding group and identify factors that aid or hinder academic performance, achievement, expectations, and competence. Factors known to affect academics among international students, such as language barriers, acculturation to American society, university support and structure, social integration at the university, family support, and motivating factors to study in the U.S were examined. It was hypothesized that these known factors would negatively correlate with the academic outcomes of international students examined in the current study. It was also hypothesized that these factors can combine to best predict the academic outcomes of international college students. First, intercorrelations were conducted with the independent and dependent variables to determine if the factors examined in the study (i.e., language barriers, acculturation to American society, university support and structure, social integration at the university, family support, and motivating factors to study in the U.S.) are negatively correlated with the academic outcomes of international students. Then a series of linear regressions was conducted to test the hypothesis that these factors can combine to best predict the academic outcomes of international college students. Results found significant relationships between the predictor variables and the outcome variables in this study, specifically among support (university, familial, and social), acculturation, language barriers, motivating factors to study, and self-efficacy.

ACKNOWLEDGEMENTS

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CHAPTER ONE: INTRODUCTION

Since the Immigration Act of 1990, along with other administration acts, there has been an uprising in immigration to the United States (U.S.). This increase in immigration is due to the growing motivation to pursue higher education. This is especially true for students interested in the domains of science, technology, engineering, and mathematics (STEM). According to Zong, Zong, and Batalova (2015) at the Migration Policy Institute, the number of international students studying in the U.S. has more than doubled since 1990, jumping from 408,000 in the 1990-1991 school year to 975,000 in the 2014-2015 school year. The average undergraduate international student spends 4-6 years studying to obtain their bachelor's degree, but the length of their stay in the U.S. varies depending on various factors such as field of study, income, and visa acquired. With the vast and continued growth of international students in the U.S., it is important to focus on this expanding group and identify factors that aid or hinder academic performance, achievement, expectations, and competence. The current study examined academic outcomes among international students at the University of Central Florida. Factors known to affect academics among international students, such as language barriers, acculturation to American society, university support and structure, social integration at the university, family support, motivating factors to study in the U.S., and the migration experience (i.e., migrating, separation and reunification) were examined.

Theoretical Perspective

Portes and Rumbaut (2001) propose that adaptation is uneven across immigrant groups, with variations depending Lon their socioeconomic context following migration. From this

perspective, economic hardship, language barriers, and other sources of post migration stress may compromise academic competence and achievement for international students through several avenues. First, these conditions might be expected to limit parental involvement and support in the international student's academic environment. Second, these conditions may interfere with the international student's level of university support and engagement directly, leading to less positive attitudes toward academics, poorer competence, and lower expectations. Third, unique experiences of postmigration stress among international students may impede academic success.

Factors Affecting International Student Academic Achievement

The academic performance of international students can be impacted by numerous factors including language barriers, acculturation to American society, university support and structure, social integration at the university, family support, and motivating factors to study in the U.S.

Language barriers are the biggest issue for international students who do not speak English (or it is not their first language). The language barrier causes various hardships such as stress, anxiety, and having no sense of belonging. This stress often has a negative impact on their academics, as well as psychological well-being, social interactions (inside and outside of the classroom) and involvement at the university. Chavajay and Skowronek (2008) found, through open-ended interviews, that the international students believed knowing English well was extremely important to succeed academically and socially. A key factor in academic success is the students' fluency in the English language. Research supports that having a better grasp of the English language leads to greater success in courses and a better understanding of the material (Artiaga, 2013). Specifically, international students had to spend more time reading and

understanding material than native speakers to engage in classroom discussions (Artiaga, 2013). Students noted that it often took them three times longer to complete assignments due to the English language barrier. This additional work frequently caused stress and led to feelings of being overworked (Artiaga, 2013). Students also reported that they wished universities provided more resources for them to better practice their English skills. Understanding the English language allows the international students to not only feel more comfortable and confident in their academics, but also to integrate smoother during their transition into American society.

Understanding of the English language not only affects the international student's academics, but also their acculturative change. Acculturative change is when an individual moves to a new society and beings to adapt to the new culture. Culture shock is heavily related to language barriers. International students have reported that often they could understand what was being said, but had troubles truly understanding the meaning or specific cultural references. This culture shock then left them feeling lost (Park, Lee, Choi, & Zepernick, 2016). International students often feel out of place and lonely being in a new country and misunderstood by individuals who hold different cultural values than themselves. They often feel biases and stereotyping upon arrival, which makes them less likely to be socially involved with others. This leads to additional stress and induced anxiety. International students will often turn to additional resources to help them cope with their culture shock. Some of these resources are university support, family support, or other coping methods. This includes task-oriented (using their time more efficiently), emotional-oriented (altering emotional responses to the stressor), and avoidance-oriented strategies (avoiding the issue by distraction). International students that used

one or more of these resources found themselves better off than those who did not (Park et al., 2016).

During the students transition into American society, it is important that their new home university offers them support academically and socially. Students will often turn to their university when they need guidance, whether it be from faculty or fellow students. International students have reported that when faculty were aware of their international background they became more supportive and understanding when it came to assignments and teaching. They often spent more time making sure that the international student understood the material clearly, which lead to better academic outcomes (Rabla, 2017). In a study conducted by Irunga (2011), international students stated that they had gained successful tools, such as thinking and analyzing critically from their fellow students as well as faculty, which contributed to their academic success. This can be seen through extra university support centers such as tutoring, writing, libraries, services, counseling, and opportunities to connect with other students. Connecting with other students is fundamental for social support. Irunga (2011) found that universities provided spaces and opportunities readily available for the international students to connect with other individuals at the university (whether it be faculty or other students) with similar backgrounds. This led them to support groups and organizations to help integrate them, which then led to being involved more academically. Having a sense of belonging and feeling welcomed at the university has been positively correlated with higher grades (Guan, 2017). Overall, there has been a satisfaction with the services provided by the university for international students as well as a safe comfortable learning environment (Preston, 2016).

Another important factor with integration into the university for international students is social support. Social support is important to help students keep their confidence up and grow as a new person during their continuous transition and have a sense of acceptance and connection among their peers (McSorley, 2017). Most students often study in the U.S. alone with no acquaintances, so it is important to build relationships to alleviate homesickness, fear, and depression (Cho, 2017). This helps their integration process go smoother. Social integration can be seen through many forms, such as getting involved in a student organization or club, working, or simply meeting other students in classes or residence halls (Cho, 2017). In a study conducted by Rabla (2017), participating in extracurricular activities was reported as being helpful with integrating and interacting with other college students. International students often felt disconnected before joining a club and afterwards it helped give them a purpose which helped boost their moods, which lead to better grades. Some international students have reported they felt most comfortable around other students who shared the same cultural background as themselves, while others reported they purposefully avoided other students with their cultural background due to wanting to meet new people and improve their English (Cho, 2017). International students who became involved in the university's life showed more success academically as well as psychologically than those who did not (Rabla, 2017).

Family support is extremely crucial for a first-year student, whether they are studying in their home country or abroad. Most students start their first year alone and it is their responsibility to meet other students and branch out. In a study conducted by Cho (2017), it was found that international students that had no family support had higher feelings of loneliness, which lead to psychological distress and decreased academic success. While this may come

naturally and easy to some, making friends tends to be a struggle during the first few weeks or months at their university so having family to lean on is important, whether it is emotionally or financially. Park and colleagues (2016) found that family support for their academics was typically received as financial (which the parents used as emotional support), which helped reduce burdens and caused less stress, leading to better academic achievement and focus. International students often turned to their family for help with assisting them with translating homework and other assignments to help with their academic success. Family also tended to be a motivating factor for students when coming to the U.S., giving students a huge motivation to succeed academically (Douglas-Chicoye, 2007).

The primary motivating factor for international students seeking to study abroad in the U.S. is academics. Higher education in the U.S. is viewed as being extraordinary and the best destination to foreign countries, so often families want to send their children where they perceive they can succeed the greatest, despite having other offers to stay in their home country (Douglas-Chicoye, 2007). International students often want to pursue higher education on their own terms, and the more motivated they were, the better they succeeded academically during their studies (Artiaga, 2013). Along with striving to succeed academically, international students also place other goals that motivate them to study in the U.S., such as learning the English language, improved academics and environment, gaining a new perspective of their home country, and increased education and opportunities (Chao, Hegarty, Angelidis, & Lu, 2017; Cho, 2017). An important theme found in the interviews from Chinese international students conducted by Chao and colleagues (2017) at two northeast American universities was that international students prefer the U.S. academic system. In addition, the students stated that China's academic system

was not innovative and became unappealing to them. Family was also a huge motivator for attending college. There was a combination of self-motivation (them believing they had to) and family motivation (believing their family thought they had to). Finances played a role in deciding to come to the U.S. or not. According to Douglas-Chicoye (2007) in the study on Caribbean students' decisions to come to the U.S. to study, some participants from wealthier families had their financial help while others used savings, loans or working jobs to pay for their education. Since studying abroad was expensive, looking at academic success was a huge factor on if they would make the decision to come (Douglas-Chicoye, 2007).

Migrating to a new country to study often comes with difficult challenges when adjusting to a new life. With most international students coming to study in the U.S. alone, they often are faced with psychological obstacles such as homesickness, depression, and heightened sadness, which can be a result from language barriers, isolation, integration, and acculturation. In a study conducted by Horne, Lin, Anson, and Jacobson (2018) that examined international students against domestic students, they found that international students were more likely to report higher levels of dissatisfaction in regard to campus inclusion and social integration, which suggests that importance of social interactions on campuses and the potential for easing student transition into a foreign country. When international students are engaged and integrated socially and academically, they can experience greater academic success through the effort of educational integration (Arshakian & Wang, 2017). The lives of students outside the classroom is an important factor that helps during the initial migration process, whether it is getting involved and networking or having family support to rely upon (Mwale, Alhawasawi, Sayed, & Rind, 2018). Forming a healthy attachment through parental figures along with professors and academic

faculty to help alleviate acculturative stress positively predict student success in the form of academia in a study by Han, Pistole, and Caldwell (2017) on Asian international students. In a study conducted by Klomegah (2006), family structure played a role in the degree of isolation or feelings of alienation that international students were subjected to. Proximity to their host country from their new location played a role in the student's ability to adjust and acclimate to the differing culture and therefore subjects to a greater chance of excelling academically.

The Current Study

The current study examined the academic outcomes among international students. Factors identified in previous research that may affect academics among international students include language barriers, acculturation to American society, university support and structure, social integration at the university, family support, motivating factors to study in the U.S., and the migration experience (i.e., migrating, separation and reunification). It was hypothesized that these known factors would negatively correlate with the academic outcomes of international students examined in the current study. It was also hypothesized that these factors can combine to best predict the academic outcomes of international college students.

CHAPTER TWO: METHOD

Participants

Data from the current study came from a recent study conducted at the University of Central Florida (UCF). Participants included 79 international college students who answered a 50-minute online questionnaire. Participants were recruited through the UCF GLOBAL department, which identified current students who met the criteria for participating and provided these students with a link to participate in the online questionnaire. In order to participate, students must have migrated to the U.S. from another country.

The majority of participants were female (59.5%, $n = 47$) and between the ages of 18 and 25 (63.3%, $n = 50$). Participants migrated to the U.S. from over 46 countries, including Brazil, China, Iran, India, and Saudi Arabia.

Measures

Demographic questionnaire. Four questions were used to assess participants' age, biological sex, and country of origin.

Perceived University Support. The Student Perception of University Structure and Support Scale (Wintre et al., 2009) was used to assess participants' perception of university structure and support. This scale contained a total of 21 items that are scored on a 5-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." An example item is "I feel anonymous in my program at the University of Central Florida." A total of 8 items were reverse coded. Items were then summed to derive a total score that was used in analyses. Alpha reliability for the current study was .89.

University Social Integration. To measure the extent of social integration, students were asked a total of 9 items to assess their integration in peer groups and extracurricular activities at the University of Central Florida. Items were modified from Abdul (2007). Items were scored on a 5-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." A sample item for extracurricular activities integration is "I participate in cultural events on campus" and a sample item for peer group integration is "Student groups on campus promote friendship." Items for extracurricular activities integration were summed to derive at a total score that was used in analyses. Additionally, items for peer group integration were also summed to derive at a total score that was used in analyses. Alpha reliability for the extracurricular activities subscale in the current study was .77 and for the peer group interactions subscale was .74.

Family Social Support. To assess the extent to which participants felt that their family was supportive of their academic goals, four items were used from Cheng, Ickes, and Verhofstadt (2012). Items were scored on a 5-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." A sample item was "My family members encourage me in my studies here at the University of Central Florida." Items were summed to derive at a total score that was used in analyses. Alpha reliability for the current study was .78.

Immigration motivation. Participants were asked a total of 34 items to assess their motivations for immigrating to the U.S. (Hazen & Alberts, 2006). All items were scored on a 4-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." Items assessed participants' reasons to come to the U.S. initially, incentives to stay in the U.S., incentives to return to their home country, disincentives to return to their home country, and disincentives to stay in the U.S. Items for each reason were summed to derive total scores that was used in

analyses. For the current study, alpha reliability for the subscale regarding reasons to come to the U.S. initially was .44, incentives to stay in the U.S. was .72, incentives to return to the home country was .73, disincentives to return to the home country was .80, and disincentives to stay in the U.S. was .69.

Acculturation. A total of 42 items were used to assess participants' acculturation to the U.S. (Zea, Asner-Self, Birman, & Buki, 2003). All items were scored on a 5-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." The scale measured cultural identity, language competence, and cultural competency. The language competence subscale was used as an indicator of English proficiency for the current study. Items for each of these three subscales were summed to derive at total scores that was used in analyses. Alpha reliability for the cultural identity subscale was .65 in the current study, .92 for the language competency subscale and .86 for the cultural competency subscale.

Academic self-efficacy. To assess participants' academic self-efficacy items assessing organization and planning major, academic efficacy, learning efficacy, verbal efficacy, and quantitative efficacy from Landry (2013) were used. This scale included a total of 32 items that were scored on a 5-point Likert scale with *1* being "very weak" and *5* being "very strong." Items for organization and planning major, academic efficacy, learning efficacy, verbal efficacy, and quantitative efficacy were summed to derive at total scores that was used in analyses. Alpha reliability for the organizing and planning major subscale was .83 for the current study, .83 for the academic efficacy subscale, .37 for the learning self-efficacy subscale, .70 for the verbal self-efficacy subscale, and .73 for the quantitative self-efficacy subscale.

Academic competence. Following Wright and Levitt (2014), participants were asked two questions to assess their expectations for college and career choice. These included "How sure are you that you will graduate from college?" and "How sure are you that you will have the job that you want?" Additionally, the competence subscale of the Positive Youth Development Inventory (PYDI) was also used to assess participants' academic competence (Arnold, Nott, & Meinhold, 2012). This scale included a total of 14 items that was scored on a 5-point Likert scale with *1* being "strongly disagree" and *5* being "strongly agree." A sample item is "I am a creative person." Items were summed to derive at a total competence score that was used in analyses. Alpha reliability for the current study was .84.

CHAPTER THREE: RESULTS

Preliminary analyses were conducted to determine the reliability of scales, distributional characteristics, intercorrelations of measures, and the extent of missing data. If missing data was present with less than 10% missing, data imputation was performed using a simple mean substitution (Kline, 2005). If a participant or a variable contained more than 10% missing it was discarded.

Data was then analyzed in SPSS. First, intercorrelations were conducted with the independent and dependent variables to determine if the factors examined in the current study (i.e., language barriers, acculturation to American society, university support and structure, social integration at the university, family support, motivating factors to study in the U.S., and the migration experience) were negatively correlated with the academic outcomes of international students. Then a series of linear regressions were conducted to test the hypothesis that these factors (i.e., language barriers, acculturation to American society, university support and structure, social integration at the university, family support, motivating factors to study in the U.S., and the migration experience) can combine to best predict the academic outcomes of international college students.

Intercorrelation of Study Measures

Intercorrelations among international college students can be found under Table 1. There were quite a few correlations present, some being positive and some being negative. Some correlations were found at the $p < .05$ level and some at the $p < .01$ level (refer to Table 1). Significant positive correlations were found between acculturation and perceived university support, academic competence, organizing, academic, learning, and verbal self-efficacy. Positive

correlations were also found between perceived university support and social integration, family support, and academic competence. Social integration had some positive correlations with academic competence, incentives to return to their home country, and organizing self-efficacy. There were some positive correlations between some of the factors related to immigration (e.g., reasons to come to the U.S. initially, incentives to stay in the U.S., disincentives to return to the home country). Incentives to return to their home country was also positively correlated with social integration in peer group interactions. Disincentives to stay in the U.S. was positively correlated with academic self-efficacy. Academic self-efficacy showed a significant positive correlation with verbal, organizing, learning, and quantitative self-efficacy. Organizing self-efficacy presented a positive correlation with learning, verbal, and quantitative self-efficacy. Learning self-efficacy showed a correlation with verbal and quantitative self-efficacy. Lastly, verbal self-efficacy had a positive correlation with quantitative self-efficacy.

Significant negative correlations were found between acculturation and organizing self-efficacy, family support, and academic competence. Perceived university support showed negative correlations among motivating factors to study in the U.S., organizing, academic, learning, and verbal self-efficacy. Social integration only showed significant negative correlations among academic, learning, and verbal self-efficacy. Family support presented negative correlations with organizing, academic, learning, and verbal self-efficacy. Some motivating factors related to immigration were negatively correlated (e.g., reasons to come to the U.S., incentives to return to their home country, incentives to stay in the U.S., disincentives to stay in the U.S., disincentives to return to their home country). There was also a negative correlation between disincentives to stay in the U.S. with perceived university support. Lastly,

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academic competence showed some negative correlations among organizing, academic, learning, and verbal self-efficacy. All of these outcomes showed to negatively correlate with the academic outcomes of the international students examined and went with our hypothesis.

Regressions among Academic Outcomes

A series of six linear regressions were conducted to determine if the factors that negatively correlate with the academic outcomes can be combined to best predict the academic outcomes of international students. The first regression conducted was for academic competence and was significant with perceived university support $b = .376$, $t (2.415) = .019$, $p < .01$, along with social integration in their peer group $b = .319$, $t (2.214) = .013$, $p < .01$. Proportion of variance reported as $R^2 = .369$, $F (14, 56) = 2.342$, $p < .01$. Results of regression analysis can be found in Table 2.

The second regression administered was for organizing self-efficacy and was significant with acculturation in their cultural identity $b = -.291$, $t (-2.612) = .012$, $p < .01$, language competency $b = .243$, $t (1.971) = .054$, $p < .01$, perceived university support $b = -.413$, $t (-2.953) = .005$, $p < .01$, and social integration through their peer group $b = -.274$, $t (-2.114) = .039$, $p < .01$. Proportion of variance reported as $R^2 = .490$, $F (14, 56) = 3.841$, $p < .01$. Results of regression analysis can be found in Table 3.

The third regression tested was for academic self-efficacy and was significant just with perceived university support $b = -.385$, $t (-2.653) = .010$, $p < .01$. Proportion of variance reported as $R^2 = .452$, $F (14, 56) = 3.301$, $p < .01$. Results of regression analysis can be found in Table 4.

The fourth regression computed was for learning self-efficacy and was significant only with perceived university support $b = -.236$, $t (-1.557) = .125$, $p < .01$. Proportion of variance

reported as $R^2 = .400$, $F (14, 56) = 2.665$, $p < .01$. Results of regression analysis can be found in Table 5.

The fifth regression tested for verbal self-efficacy and was significant with acculturation in language competency $b = .277$, $t (2.117) = .039$, $p < .01$, and with perceived university support $b = -.300$, $t (-2.015) = .049$, $p < .01$. Proportion of variance reported as $R^2 = .422$, $F (14, 56) = 2.919$, $p < .01$. Results of regression analysis can be found in Table 6.

The sixth regression tested for quantitative self-efficacy. There were no significant findings regressions in this area. Proportion of variance reported as $R^2 = .145$, $F (14, 56) = .681$, $p < .01$. Results of regression analysis can be found in Table 7.

CHAPTER FOUR: DISCUSSION

The current study examined academic outcomes among international students. It was hypothesized that factors related to academic performance (i.e., language barriers, acculturation to American society, university support and structure, social integration at the university, family support, motivating factors to study in the U.S., and the migration experience) would negatively relate to academic outcomes and would be able to combine to best predict the academic outcomes of international college students (Portes & Rumbaut, 2001). The findings of this study support the hypotheses and the findings of previous research in several ways.

Results of this study found that international students generally felt better acculturated when they experienced support from their university. This led to an increase in academic competence as well as academic, organizing, learning, and verbal self-efficacies. This finding is consistent with Irunga (2011) in that increased university support is related to academic success. Irunga (2011) concluded that this improved academic success was related to the international student being more involved and feeling a sense of belonging at their university, leading them to being more involved academically. Guan (2017) also found that feeling a sense of belonging and feeling welcomed at their university was associated with higher academic grades.

The positive correlations found between social integration and academic competence are consistent with previous research (Cho, 2017; Rabla, 2017) in that a student participated more at the university, whether it was through extracurriculars or peer group interactions, when they felt there was support. This support could come directly from their university, their peers, or their family. This led to an increase in academic competence and organization. When these factors are not present, the international college student can suffer academically. Also, when the

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international college student did not have social integration, they often wanted to return to their home country, which lead to difficulties with academic competence. The positive correlations found between family support and academic competence and success can also be supported by previous research. This familial support can be seen through finances (Park and colleagues, 2016), motivational factors (Douglas-Chicoye, 2007), and emotional support (Cho, 2017), all of which lead to a higher academic success.

The positive motivating factors to stay in the U.S. came back as hypothesized. When the international student had a reason to come to the U.S. initially, one would expect that they would, in turn, have an incentive to stay in the U.S. and not want to return to their home country. If they had an incentive to stay in the U.S., they would not have a reason to return to their home country. Previous research done by Douglas-Chicoye (2007) showed that international students chose to study abroad in the U.S. because of the American higher academic system and would even deny offers for higher education in their home countries. This led to an enticement to complete their studies abroad. The international student having a positive or negative academic self-efficacy would either increase or decrease their verbal, organizing, learning, and quantitative self-efficacies. This is consistent with research completed by Chao and colleagues (2017) in that self-motivation and self-perception positively affected academic achievement. This again, shows that these factors are all important and can affect academic outcomes.

The negative correlations for motivating factors to come to the U.S. also came back as hypothesized. Results indicated that when a student had increased reasons to come to the U.S., they did not have incentives to return to their home country. When they had increased incentives to stay in the U.S., they did not have incentives to return to their home country or any

disincentives to stay in the U.S. When they had a disincentive to return to their home country, they had a decreased incentive to return to their home country and vice versa. This is supported by previous research that found that students who had additional incentives aside from academics (e.g., learning the English language, increased education opportunities, new environment, gain a new perspective on their home country), did not have reasons to return to their home country (Cho, 2017; Chao et al., 2017). If the international student viewed that they had less perceived university social support then they felt a disincentive to stay in the U.S., or if they felt comfortable with the university support then they did not feel a disincentive to stay. Han, Pistole, and Caldwell (2017) showed in their study that forming a solid support system through the university, whether it be from faculty or peers, helped integrate the student and make them feel comfortable in their new environment and stay.

The results show an importance between having family, university, and peer support in order to improve academic outcomes, wishing to stay in the U.S, wanting to come to the U.S., and to feel acculturated within American society and at their university. The results of this study further emphasize this importance. In order for international students to succeed academically, it is critical that they receive support from their university and peers. These students need to have a sense of belonging and feel recognized at their institution. They also need a strong backbone to rely on through those around them and those supporting them back home. This shows that importance and affect that acculturation and mental health play on an international students' scholarly goals. An international student's organizing self-efficacy highlighted the importance of their cultural identity, language competency, perceived university support, and peer group interactions. The student needs to have a strong belief in themselves and their language abilities

and understanding, especially during their acculturation and migration process, which is reflected in their learning self-efficacy. It is essential that the international student is able to understand the language that is being spoken in their environment. This can help reduce a culture shock and a sense of feeling lost among their peers, which has been supported by Han, Pistole, and Caldwell (2017). They are able to, in turn, learn better when they have a grasp of the language. Verbal self-efficacy also ties into this in that it is also significant with language competency. They need to not only be able to understand the language, but they need to be able to communicate with others as well. This is why it is also significant with perceived university support.

Significance of Study

The current study is significant considering that the rate of international students wishing to study abroad is increasing (Zong & Batalova, 2015). If this trend continues, universities need to know how to accommodate them properly, so they are able to succeed academically. This study adds on to previous research highlighting the importance of support (university, peer, and familial), acculturation within their peers, positive cultural identity, being able to understand and speak the language, positive incentives, and wishing to stay in the U.S. (Cho, 2017, Guan, 2017; Han, Pistole, & Caldwell. 2017; Irunga, 2011; McSorley, 2017; Rabla, 2017). All of these factors can help improve the academic outcomes for international students. Considering that universities strive to achieve high scholarly rates, they can use this information to improve outcomes for this growing group of students. The theory presented by Portes and Rumbaut (2001) which emphasized the significance in language barriers and acculturative stress, is consistent with the findings of this

study. These factors ultimately have an effect on social interaction among peers and faculty, and familial support, which then has an effect on their academic competence and achievement.

<u>Limitations and Implications for Future Research</u>

Limitations of the current study include that it was only conducted at one university in one region of the United States. Previous studies usually included data gathered from multiple institutions to help give a broader range of data (e.g., Chao et al., 2017; Guan, 2017). With this study being geographically confined to the Southeastern United States, it is not possible to ensure that international students on the opposite coast would present similar results. Future research should consider collecting data at multiple institutions. The study was also not able to include conclusions based on country of origin due to limitations related to sample size. It is unsure if the results can be generalized to all international students. Future research should include a larger sample size to enable comparisons based on country of origin. There may be some components that are stronger or weaker when it comes to affecting the impact of specific factors on academics. While the questionnaire was sent out only to international students through UCF Global, limiting the chance for non-international student respondents, this also limited the amount of responses recorded. Perhaps some students did not see the invitation or chose not to participate due to a lack of incentives to participate. Also, with the questionnaire was self-report and online. Therefore, it is not possible to ensure accuracy or honesty in terms of participant responses. Another limitation is that some of the subscales (reasons to come to the U.S. initially, cultural identity, learning self-efficacy) did not have a credible alpha reliability (below .70). Due to this, one cannot ensure that those scales produced reliable results.

Additionally, future research can consider categorizing students by academic year (i.e., freshman, sophomore, junior, or senior). Perhaps the students need specific assistance during various years in college. The study also did not include GPA averages. This can be an important factor because one needs to be able to evaluate how the student is doing academically in order to see if the factors tested are really affecting them.

APPENDIX A

Table 1 *Significant Correlations with International Students*

	1.	2.	3.	4.	5.	6.
1. Cultural Identity		-.091	-.195	.254*	-.007	.005
2. Language Competency	-.091		.233*	-.153	.028	-.212
3. Cultural Competency	-.195	.233*		-.185	-.128	-.128
4. Perceived University Support	.254*	-.153	-.185		.207	.284*
5. Extracurricular Activities	-.007	.028	-.128	.207		.465**
6. Peer Group Interactions	.005	-.212	-.128	.284*	.465**	
7. Family Social Support	.153	-.296**	-.058	.505**	.063	.023
8. Reasons to Come to the U.S. Initially	-.119	.097	-.059	.083	.106	-.169
9. Incentives to Stay in the U.S.	-.006	.066	.081	.178	.045	-.154
10. Incentives to Return to Home Country	.177	-.182	-.090	-.081	.013	.263*
11. Disincentives to Return to Home Country	-.195	.196	.041	.088	-.004	-.186
12. Disincentives to Stay in U.S.	-.077	-.043	.084	-.381**	.087	.069
13. Academic Competence	.108	-.234*	-.282*	.463**	.224*	.436**
14. Organizing Self-Efficacy	-.324**	.322**	.213	-.473*	-.033	-.283*
15. Academic Self-Efficacy	-.085	.305**	.253*	-.493**	-.150	-.313**
16. Learning Self-Efficacy	-.054	.474**	.251*	-.337**	-.195	-.304**
17. Verbal Self-Efficacy	-.207	.412**	.154	-.428**	-.130	-.270*
18. Quantitative Self-Efficacy	-.088	.094	.058	-.112	-.030	-.102

$*p < 0.05$, $**p < 0.01$

Table 1 cont. *Significant Correlations with International Students*

	7.	8.	9.	10.	11.	12.
1. Cultural Identity	.153	-.119	-.006	.177	-.195	-.077
2. Language Competency	-.296**	.097	.066	-.182	.196	-.043
3. Cultural Competency	-.058	-.059	.081	-.090	.041	.084
4. Perceived University Support	.505**	.083	.178	-.081	.088	-.381**
5. Extracurricular Activities	.063	.106	.045	.031	-.004	.087
6. Peer Group Interactions	.023	-.169	- .154	.263*	-.186	.069
7. Family Social Support		.190	.185	-.131	.118	-.219
8. Reasons to Come to the U.S. Initially	.190		.692**	-.475**	.596**	-.215
9. Incentives to Stay in the U.S.	.185	.692**		-.614**	.771**	-.269*
10. Incentives to Return to Home Country	-.131	-.475**	-.614**		-.631**	.440**
11. Disincentives to Return to Home Country	.118	.596**	.771**	-.631**		-.204
12. Disincentives to Stay in U.S.	-.219	-.215	-.269*	.440**	-.204	
13. Academic Competence	.220	.018	.034	.045	-.023	-.085
14. Organizing Self-Efficacy	-.266*	.024	-.081	-.070	.013	.169
15. Academic Self-Efficacy	-.332**	.037	-.078	.055	.046	.285*
16. Learning Self-Efficacy	-.283*	-.058	-.021	-.087	-.007	.024
17. Verbal Self-Efficacy	-.317**	.006	-.214	.003	-.063	.146
18. Quantitative Self-Efficacy	.063	-.024	-.118	.072	.000	.173

*$p < 0.05$, **$p < 0.01$

Table 1 cont. *Significant Correlations with International Students*

	13.	14.	15.	16.	17.	18.
1. Cultural Identity	.108	-.324**	-.085	-.054	-.207	-.088
2. Language Competency	-.234*	.322**	.305**	.474**	.412**	.094
3. Cultural Competency	-.282*	.213	.253*	.251*	.154	.058
4. Perceived University Support	.463**	-.473**	-.493**	-.337**	-.428**	-.112
5. Extracurricular Activities	.224*	-.033	-.150	-.195	-.130	-.030
6. Peer Group Interactions	.436**	-.283*	-.313**	-.304**	-.207*	-.102
7. Family Social Support	.220	-.266*	-.332**	-.283*	-.317**	.063
8. Reasons to Come to the U.S. Initially	.018	.024	.037	-.058	.006	-.024
9. Incentives to Stay in the U.S.	.034	-.081	-.078	-.021	-.214	-.118
10. Incentives to Return to Home Country	.045	-.070	.055	-.087	.003	.072
11. Disincentives to Return to Home Country	-.023	.013	.046	-.007	-.063	.000
12. Disincentives to Stay in U.S.	-.085	.169	.285*	.024	.146	.173
13. Academic Competence		-.645**	-.644**	-.309**	-.478**	-.216
14. Organizing Self-Efficacy	-.645**		.642**	.486**	.510**	.281*
15. Academic Self-Efficacy	-.644**	.642**		.397**	.542**	.258*
16. Learning Self-Efficacy	-.309**	.486**	.397**		.439**	.367**
17. Verbal Self-Efficacy	-.478**	.510**	.542**	.439**		.297**
18. Quantitative Self-Efficacy	-.216	.281*	.258*	.367**	.297**	

*p < 0.05, **p < 0.01

Table 2 *Regression Coefficients for Academic Competence*

	Academic Competence
Age	.912
Biological Sex	.706
Cultural Identity	.650
Language Competency	.434
Cultural Competency	.348
Perceived University Support	.019*
Extracurricular Activities	.879
Peer Group Interactions	.031*
Family Social Support	.940
Reasons to Come to the U.S. Initially	.980
Incentives to Stay in the U.S.	.943
Incentives to Return to Home Country	.505
Disincentives to Return to Home Country	.918
Disincentives to Stay in U.S.	.469
R^2	.369
F	2.342

*$p < .01$, **$p < .05$

Table 3 *Regression Coefficients for Organizing Self-Efficacy*

	Organizing Self-Efficacy
Age	.902
Biological Sex	.262
Cultural Identity	.012*
Language Competency	.054*
Cultural Competency	.942
Perceived University Support	.005*
Extracurricular Activities	.510
Peer Group Interactions	.039*
Family Social Support	.692
Reasons to Come to the U.S. Initially	.577
Incentives to Stay in the U.S.	.793
Incentives to Return to Home Country	.297
Disincentives to Return to Home Country	.901
Disincentives to Stay in U.S.	.961
R^2	.490
F	3.841

*$p< .01$, **$p<.05$

Table 4 *Regression Coefficients for Academic Self-Efficacy*

	Academic Self-Efficacy
Age	.912
Biological Sex	.661
Cultural Identity	.679
Language Competency	.649
Cultural Competency	.207
Perceived University Support	.010*
Extracurricular Activities	.893
Peer Group Interactions	.067
Family Social Support	.678
Reasons to Come to the U.S. Initially	.164
Incentives to Stay in the U.S.	.282
Incentives to Return to Home Country	.215
Disincentives to Return to Home Country	.155
Disincentives to Stay in U.S.	.472
R^2	.452
F	3.301

*p< .01, **p<.05

Table 5 *Regression Coefficients for Learning Self-Efficacy*

	Learning Self-Efficacy
Age	.353
Biological Sex	.312
Cultural Identity	.963
Language Competency	.001*
Cultural Competency	.905
Perceived University Support	.125
Extracurricular Activities	.273
Peer Group Interactions	.314
Family Social Support	.774
Reasons to Come to the U.S. Initially	.805
Incentives to Stay in the U.S.	.704
Incentives to Return to Home Country	.710
Disincentives to Return to Home Country	.674
Disincentives to Stay in U.S.	.718
R^2	.400
F	2.665

*$p < .01$, **$p < .05$

Table 6 *Regression Coefficients for Verbal Self-Efficacy*

	Verbal Self-Efficacy
Age	.757
Biological Sex	.266
Cultural Identity	.310
Language Competency	.039*
Cultural Competency	.852
Perceived University Support	.049*
Extracurricular Activities	.583
Peer Group Interactions	.337
Family Social Support	.754
Reasons to Come to the U.S. Initially	.151
Incentives to Stay in the U.S.	.089
Incentives to Return to Home Country	.904
Disincentives to Return to Home Country	.975
Disincentives to Stay in U.S.	.906
R^2	.422
F	2.919

*p< .01, **p<.05

Table 7 *Regression Coefficients for Quantitative Self-Efficacy*

	Quantitative Self-Efficacy
Age	.379
Biological Sex	.366
Cultural Identity	.394
Language Competency	.265
Cultural Competency	.679
Perceived University Support	.813
Extracurricular Activities	.531
Peer Group Interactions	.640
Family Social Support	.197
Reasons to Come to the U.S. Initially	.473
Incentives to Stay in the U.S.	.321
Incentives to Return to Home Country	.509
Disincentives to Return to Home Country	.477
Disincentives to Stay in U.S.	.413
R^2	.145
F	.681

*p< .01, **p<.05

REFERENCES

Abdul, M. (2007). Student attrition and academic and social integration: Application of Tinto's model at the university of Papua New Guinea. *Higher Education, (2),* 147. doi:10.1007/s10734-005-2496-y

Arnold,M. E., Nott, B. D., & Meinhold, J. L. (2012). The positive youth development inventory (PYDI). Corvallis, OR: Oregon State University 4-H Youth Development Program.

Arshakian, A., & Wang, V. (2017). Strategies of supporting Chinese students in international joint degree program. *International Research and Review, 7*(1), 54-76.

Artiaga, M. D. (2014). *A portraiture of six Hispanic women's academic pursuit in a community college setting: A qualitative study. Dissertation Abstracts International Section A: Humanities and Social Sciences.* ProQuest Information & Learning. Retrieved from https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=https://search-ebscohost-com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=psyh&AN=2014-99130-460&site=eds-live&scope=site

Chao, C., Hegarty, N., Angelidis, J., & Lu, V. F. (2017). Chinese students' motivations for studying in the United States. *Journal of International Students,* 7(2), 1-13.

Chavajay, P., & Skowronek, J. (2008). Aspects of acculturation stress among international students attending a university in the USA. *Psychological Reports, 103*(3), 827-835.

Cheng, W., Ickes, W., & Verhofstadt, L. l. (2012). How is family support related to students' GPA scores? A longitudinal study. *Higher Education, 64*(3), 399-420.

Cho, J. (2018). *A qualitative exploration of Korean international students rebuilding social*

support in US higher education. Dissertation Abstracts International: Section B: The

Sciences and Engineering. ProQuest Information & Learning. Retrieved from

https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=https://search-ebscohost-

com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=psyh&AN=2017-33540-

110&site=eds-live&scope=site

Douglas-Chicoye, A. (2007). *Going to America: Caribbean students' choice to study in the*

United States of America. Dissertation Abstracts International Section A: Humanities

and Social Sciences. ProQuest Information & Learning. Retrieved from

https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=https://search-ebscohost-

com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=psyh&AN=2007-99190-

589&site=eds-live&scope=site

Ely, C. M. (1995). *Tolerance of ambiguity and the teaching of ESL.* In J. M., Reid (Ed.),

Learning Styles in EFL/ESL Classroom (pp. 85-95). Boston, MA: Heinle & Heinle

Publishers.

Guan, J. (2017). *Assessing International Efforts to Culturally Integrate International*

*Undergraduate Students. Indiana: Indiana University,*1-152.

Han, S., Pistole, M. C., & Caldwell, J. M. (2017). Acculturative stress, parental and professor

attachment, and college adjustment in Asian international students. *Journal of*

*Multicultural Counseling & Development, 45(*2), 111-126.

Hazen, H. D., & Alberts, H. C. (2006). Visitors or immigrants? International students in the U.S.

Population, Space and Place, 12, 201-216.

Horne, S. V., Lin, S., Anson, M., & Jacobson, W. (2018). Engagement, satisfaction, and

belonging of international undergraduates at U.S. research universities. *Journal of International Students*, (1), 351. https://doi-org.ezproxy.net.ucf.edu/10.5281/zenodo.1134313

Irunga, J. N. (2011). *Engaging college students for success: international students in U.S. higher education institutions*.

Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: The Guildford Press.

Klomegah, R. Y. (2006). Social factors relating to alienation experienced by international students in the U.S. *College Student Journal, 40*(2), 303-315.

Landry, C. C. (2003). Self-efficacy, motivation and outcomes expectation correlates of college students' intention certainty. PhD. Thesis. University of Louisiana. Retrieved from http://etd.lsu.edu/docs/available/etd-0409103-084327/

Martirosyan, N. M., Hwang, E., & Wanjohi, R. (2015). Impact of English proficiency on academic performance of international students. *Journal of International Students*, (1), 60.

McSorley, L. D. (2017, January 1). *The Impact of Social Support on Institutional Integration among International Students in the Midwest*. *ProQuest LLC*. ProQuest LLC. Retrieved from https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=https://search-ebscohost-com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=eric&AN=ED577543&site=eds-live&scope=site

Mwale, S., Alhawsawi, S., Sayed, Y., & Rind, I. A. (2018). Being a mobile international

postgraduate research student with family in the United Kingdom: Conflict, contestation

and contradictions. *Journal of Further & Higher Education, 42*(3), 301-312.

Park, H., Lee, M., Choi, G., & Zepernick, J. S. (2016). Challenges and coping strategies of East

Asian graduate students in the U.S. *International Social Work, 60*(3), 733-749.

doi:10.1177/0020872816655864

Portes, A., & Rumbaut, R. G. (2001). *Legacies: The story of the immigrant second generation.*

New York, NY: Russell Sage Foundation.

Preston, N. J. (2017). *Expectations and challenges of international students studying at*

institutions of higher education in the United States. *Dissertation Abstracts International*

Section A: Humanities and Social Sciences. ProQuest Information & Learning. Retrieved

from https://login.ezproxy.net.ucf.edu/login?auth=shibb&url=https://search-ebscohost-

com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=psyh&AN=2017-16343-

150&site=eds-live&scope=site

Rabia, H. (2017). A qualitative investigation of the factors affecting Arab international students'

persistence in the United States. *College Student Journal, 51*(3), 347-354.

Rusch, D., & Reyes, K. (2013). Examining the effects of Mexican serial migration and family

separations on acculturative stress, depression, and family functioning. *Hispanic Journal*

*of Behavioral Sciences, 35(*2), 139-158.

Wintre, M. G., Gates, S.K.E., Pancer, S.M., Pratt, M.W., Polivy, J., Bernie-Lefcovitch, S., &

Adams, G. (2009). The student perception of university support and structure scale:

Development and validation. *Journal of Youth Studies, 12,* 289-306.

Wright, C. L., & Levitt, M. J. (2014). Parental absence, academic competence, and expectations

in Latino immigrant youth. *Journal of Family Issues, 35, 1754-1779.*

Zea, M. C., Asner-Self, K. K., Birman, D., & Buki, L. P. (2003). The abbreviated

multidimensional acculturation scale: Empirical validation with two Latino/Latina

sample. *Cultural Diversity and Ethnic Minority Psychology, 9,* 107-126.

Zong, J., Zong, J. B., & Batalova, J. (2018, June 05). International students in the United States.

Retrieved from https://www.migrationpolicy.org/article/international-students-united-

states