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ACCULTURATION AND ITS IMPLICATIONS FOR THE ACADEMIC ACHIEVEMENT  
AND SUBJECTIVE WELL-BEING OF EAST ASIAN INTERNATIONAL STUDENTS

By

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A capstone project submitted for Graduation with University Honors

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## **Abstract**

The U.S. higher education system hosts a wide range of international students, with the majority being from East Asian countries (Institute of International Students, 2020). East Asian international students may have particular difficulty with acculturating into a novel environment given their predominant interdependent self-construals, which contrasts with the largely independent cultural imperative of the West. The present study investigates the potential associations between international students' acculturation, self-construal (SC), and their academic and psychological adjustment (e.g., achievement goals, academic achievement, subjective well-being) to shed light on how East Asian international students can best adapt to a new culture. Participants included a total of 24 East Asian international students (9 male, 15 female; age range: 18 to 22). Results from a series of correlation analyses indicated that there were significant correlations between time in the U.S. and the integration strategy, and assimilation, separation, and marginalization with avoidance-based achievement goals. Additionally, both types of self-construal were associated with performance-avoidance goals, with independent SC in a negative direction and interdependent SC in a positive direction. Perhaps surprisingly, there was no association between acculturation strategies and students' self-reported well-being. The findings suggest that academic achievement is not the sole precursor to academic achievement and well-being among East Asian international students. Further longitudinal research may provide a more comprehensive understanding of the association between acculturation and achievement goals in this unique student population.

**Keywords:** acculturation, self-construal, academic achievement, achievement goals, well-being

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## **Acculturation and Its Implications for the Academic Achievement and Subjective Well-Being of East Asian International Students**

According to the Open Doors Report of 2020, the United States hosts approximately 1,075,496 international students, indicating a 48.7% increase in foreign student enrollment over the most recent decade (Institute of International Students, 2020). The largest share of students originate from East Asian countries, which accounts for 26.7% of all international students and 62.1% of all Asian students. China, Japan, and South Korea, in particular, are home to the vast majority of Asian students that study abroad in order to gain cultural knowledge and awareness, learn a new language, and fulfill a variety of other personal motivations (Sánchez, Fornerino, & Zhang, 2008). Given the increasing importance of higher education to globalization and internationalization (Altbach & Knight, 2007), the influx of East Asian students that participate in foreign study programs gives rise to concerns regarding their well-being and their academic achievement when faced with a new culture, given that they are accustomed to highly collectivist societies. International students, in general, learn to cope with challenges faced in a new environment by utilizing acculturation strategies to help them develop the resources to adapt. The present study focuses on how East Asian international students respond to these challenges and the positive (and negative) outcomes that occur as a result.

International students can be categorized as sojourners, or individuals who stay in the host country for a short period of time to attain a particular goal and then return to their home country (Li, Wang, & Xiao, 2019). This categorization makes them distinct from immigrants, who often move abroad to seek a new place of residence for increased opportunity or to find refuge from war-stricken areas or impoverished conditions (Hazen & Alberts, 2006).

International students are immersed in an educational environment where they have a unique set

of experiences within a specialized population. However, they often face much difficulty in a school environment because of their limited cross-cultural connections (Bochner, 2006).

International students may find that an attempt at interpersonal connection with native students would not be beneficial, as potential relationships may seem like a waste of time given the brevity of their stay. Students may also find other challenges with adjusting to a new culture. Simply surviving in an unfamiliar context can result in numerous difficulties including, but not limited to, finding a place to live, speaking to others in English, and providing themselves with adequate food and transportation (Wu, Garza, & Guzman, 2015). Problems could also extend to the academic setting. The inability to be fluent in the host language can inhibit subject comprehension and completion of writing-intensive assignments (Galloway & Jenkins, 2009). Additionally, international students are frequently met with receiving institutions that are ill-prepared to support student behavior influenced by their particular cultural backgrounds (Selvadurai, 1990). This disharmony is exemplified by inadequate academic counseling and a lack of international student workshops and seminars. The difficulties that international students face could ultimately lead to poor academic achievement and exacerbate difficulties with well-being.

International students of East Asian descent, among other ethnic backgrounds, may experience particular difficulty in a Western university because of the stark cultural differences that they are not accustomed to. It has been found that the norms, values, and beliefs of a culture can affect an individual's self-construal, or their views of the self in relation to others. Individuals accustomed to Asian cultures (e.g., China, Japan), which are highly collectivist, tend to view the self as an *interdependent* entity, in which one's behavior is determined, and contingent on, the perceived thoughts of *others* in a situation (Markus & Kitayama, 1991). On

the contrary, individuals in Western countries are predisposed towards an *independent* self-construal, where they view themselves as bounded, integrated wholes that are separate from others and have a unique configuration of internal attributes. Individuals with an independent self-construal generally act with the intent to satisfy internal needs—enhancement of self-esteem, self-actualization, motive to achieve—and attain a level of autonomy and separateness. Western society underscores this independent self-construal through the construction of institutions and policies that promote an active pursuit of success by allowing individuals to express their selves and push ahead of others (Markus & Kitayama, 2003). Thus, students from Asian cultures who maintain an interdependent self-construal may feel that their inclination to restrain their inner attributes and demands may not be beneficial, and in fact detrimental, in meeting the Western culture imperative (Murray, 1938).

Though an interdependent self-construal may not be fitting in an individualist society, there is evidence that individuals can maintain both an independent and interdependent self-construal. A study by Trafimow et al. (1991) found that self-construals could both be influenced by culture and by situational primes. Chinese students, whose culture inclines towards the development of an interdependent prime, were able to be primed to express more independent views of the self. Furthermore, Cross and Markus (1991) found that East Asian exchange students had better interdependent self-construals than American students but had similar development of independent self-construals. Results suggest that the East Asian students learned to cope with individualist situations in the American university and develop their independent view of self. An individual from a collectivist culture may thus have a well-developed independent self-construal. Similarly, an individual from an individualist culture can develop an interdependent self-construal.

Singelis (1994) proposed four different self-construal patterns. Individuals who are able to maintain both a developed independent and interdependent self can be identified as bicultural. These individuals have life experiences and are able to function successfully in more than one culture. Individuals that have a strong independent self-construal and a weak interdependent self-construal are classified as Western. The Traditional classification is indicative of a strong interdependent self-construal and a weak independent self-construal. Lastly, culturally-alienated individuals have both poorly developed interdependent and independent self-construals. The type of construal exhibited is largely influenced by the varying amounts of cultural contact and adjustment choices made by individuals. The time spent in a particular type of society (individualist or collectivist) thus can determine the development of a specific construal type. Additionally, these self-construal classifications are especially relevant to acculturation (Yamada & Singelis, 1999), as acculturation is pertinent to the mechanisms of change between cultures and to the variety of adaptive behaviors that could be adopted to succeed in a novel environment.

### **Acculturation**

Acculturation occurs when groups or individuals from one culture make contact with groups or individuals from another culture, and it results in cultural and psychological change in both the group acting and the group being acted upon. At both the cultural (group) level and psychological (individual) level, the characteristics and goals of each level can determine what comes out of the acculturation process, the degree of acculturation, and for how long it occurs. Through acculturation, individuals can adopt a variety of strategies in order to adapt to a new culture successfully.

Berry's (1980) model of acculturation proposed four different kinds of acculturation strategies: integration, assimilation, separation, and marginalization. The strategy utilized largely



depends on two key issues: 1) the preference to maintain one's heritage culture and identity and 2) the preference to participate in the larger society. When one wishes to maintain their cultural beliefs and values (1) and participate in the larger society (2), then the integration strategy is defined. When only maintenance of one's ethnic values is desired, then the assimilation strategy is adopted. The separation strategy is utilized when the group or individual only seeks to maintain their heritage, and the marginalization strategy is used when the participating entity strikes out against the larger society and also does not maintain connection with the home culture. The marginalization strategy is usually espoused when an individual has little interest or possibility in participating in both the dominant and ethnic culture (Berry, 2005). It may be the case that discrimination or exclusion prevents the individual from becoming ingrained within the larger society. This creates a conflict between the initial preferences of a group or individual and is resolved by an unsought strategy.

Conflict is not solely tied to the marginalization strategy. When the dominant group enforces certain forms of acculturation, the minority group or individual's desire to, say, integrate may not be reciprocated. The dominant group can execute policies or uphold institutions that may disrupt the minority entity's preference to freely participate. A misalignment between the goals of the dominant and non-dominant group can result in the acculturative stress phenomenon (Berry, 2003). Acculturative stress occurs when an individual understands that he or she cannot simply adjust to them and must find ways to adapt. It can manifest as mildly disruptive and pathological behaviors, as well as symptoms such as anxiety, depression, identity confusion, anger, etc. Ways of adaptation could be positive or negative, in which individuals either adjust to become more like their environments or attempt to resist or

change the environment—ultimately leading to either well-adapted outcomes or maladaptive outcomes (Berry, 1992).

International students who are well-adapted are more likely to have positive academic and well-being outcomes (Bastien et al., 2018). Evidence on the direct effects of acculturation strategy on academic success is limited; however, Ward & Rana-Deuba (1999) found that the acculturation strategy used predicts positive adjustment outcomes. More specifically, they discovered that integration and assimilation are related to better psychological adjustment and fewer social difficulties, respectively. With the use of acculturation strategies that lead to good adjustment outcomes, students could adopt beneficial behaviors such as self-regulated learning strategies (Chirkov et al., 2007) or set achievement goals that align with increased academic achievement. Additionally, students who utilize the integration and assimilation strategies are more likely to score high on well-being measures (Li, Wang, and Xiao, 2019).

### **Achievement Goals**

The acculturation strategy chosen may influence academic achievement through the type of achievement goals that international students set for themselves as they study abroad. An achievement goal can be defined as “the purpose for engaging in competence-related behavior” (Elliot & Hulleman, 2017). According to the 2 x 2 achievement goal framework proposed by Elliot and McGregor (2001), there are four goal profiles: mastery-approach, mastery-avoidance, performance-avoidance, and performance-approach. Mastery goals are focused on developing competence through task mastery, whereas performance goals are focused on demonstrating competence relative to others. Accordingly, mastery goals tend to focus on individual learning, whereas performance goals focus on outperforming others (Dweck, 1986). The approach and avoidance forms of motivation regard striving towards success and striving to avoid failure,

respectively (Elliot, 1999). Thus, individuals who adopt mastery-approach goals strive for competence, performance-approach goals strive to outperform others, mastery-avoidance goals avoid incompetence, and performance-avoidance goals avoid underperforming relative to others.

There is debate in the achievement goal literature as to which goals lead to higher and lower academic achievement. Brockbank, Smith, and Oliver (2020) found that both performance-approach and mastery-approach goals positively predicted academic grade. This is in accordance with Huang's (2012) study which showed that approach motivations were associated with higher academic achievement and avoidance motivations were associated with lower academic achievement. Hall et al. (2015), on the other hand, found that mastery-approach goals were not associated with achievement. Regarding lower achievement, Elliot and McGregor (2001) found that avoidance-based goals, particularly performance-avoidance goals, were associated with lower academic achievement because of the adoption of maladaptive behaviors and negative emotions. Alrakaf et al. (2014), instead, found that mastery-avoidance goals were most negatively associated with low academic performance. When problems from the original achievement goal questionnaire (AGQ) were critiqued and revised to form the AGQ-revised, it was found that both approach and avoidance goals positively predicted academic performance, though approach goals did so more than avoidance goals (Brockbank, Smith, and Oliver, 2020).

### **Subjective Well-Being**

Well-being is comprised of hedonic (presence of affect and satisfaction of desires) and eudaimonic (presence of meaning and fulfillment of human potential) perspectives. The hedonic view of well-being is synonymous with subjective well-being (SWB), which can be measured by level of positive affect (PA), level of negative affect (NA), and satisfaction with life (Diener & Emmons, 1984; Diener et al., 1985). Positive affect and negative affect constitute the affective

component of subjective well-being, and satisfaction with life, the cognitive component. A study by Zheng, Sang, & Wang (2004) found that the SWB of Chinese international students in Australia significantly differed across acculturation strategies adopted. In particular, students who were integrated into the host society had significantly higher SWB than their peers who were assimilated, separated, or marginalized. This agrees with Berry's (1992) contention that integration brings about the least acculturative stress due to an individual's ability to access bicultural resources and develop coping strategies with bicultural support. In turn, acculturative stress has been determined to positively associate with negative affect, and negatively associate with positive affect (Pan et al., 2007; Pan et al., 2008). Furthermore, Berry & Hou (2016) found that immigrants who used the integration and assimilation acculturation strategies had the highest scores of life satisfaction, while those who used the separation and marginalization strategies had significantly lower scores. This suggests that being involved with the larger society is vital to the satisfaction of immigrants.

### **The Present Study**

International students utilize a variety of acculturation strategies to adapt to challenges while studying abroad. East Asian students, in particular, can face difficulties in adapting to the Westernized culture and aligning their interdependent self-views with the largely independent self-views that American culture is oriented towards developing. The first goal of the present study is to explore the associations between self-construal and acculturation strategy. Despite potential difficulties in adapting to a new culture and attaining an independent self-construal, literature has shown that a bicultural self-construal profile—one that is high in both independent and interdependent self-construal—is associated with increased time in the U.S. and interest in integrating into other cultures (Yamada & Singelis, 1999). Additionally, Shim et al. (2013)

determined that assimilated and integrated East Asian international students were characterized by high independent self-construal, while separated and marginalized students displayed high interdependent self-construal. The present study hypothesizes that students who predominantly use the integration strategy will have both a high independent and interdependent self-construal. Students who utilize the assimilation strategy will exhibit a high independent self-construal and a low interdependent self-construal, which parallels the Westernized self-construal pattern. Students who use the separation strategy will exemplify the Traditional self-construal pattern, which indicates a high interdependent self-construal and a low interdependent self-construal. Lastly, the marginalization strategy will result in students with lacking development in both the independent and interdependent construals. It is also predicted that the longer a student is in the US, the greater the prevalence of the bicultural and Westernized self-construal patterns, and of the integration and assimilation acculturation strategies.

The second goal is to explore the associations between acculturation strategies, achievement goals, and academic achievement of East Asian international students. The acculturation strategy chosen influences whether adaptations to new cultural environments are beneficial or detrimental. Additionally, Brockbank, Smith, and Oliver (2020) found that approach goals positively predicted academic performance to a greater degree than did avoidance goals. With the integration strategy being the most beneficial to academic and well-being adaptations (Cemalcilar & Falbo, 2008), it is hypothesized that students who utilize integration, followed by assimilation, will lead to a greater degree of approach goals than avoidance goals. Students who utilize separation and marginalization strategies, on the other hand, will have more avoidance goals than approach goals, and less goals overall than assimilation or integration strategies. It is also predicted that approach-oriented goals will positively correlate with student

GPA more than avoidance-oriented goals. Furthermore, results from a study by Lee, Aaker, & Gardner (2000) have suggested that individuals who espouse an interdependent self-construal are likely to prefer avoidance-oriented goals, where in the process of trying to fit in with others, will make salient negative aspects of the self. Those who adopt an independent self-construal, on the other hand, will be more approach-oriented, which primarily has a positive valence. Because these forms of self-construal are a product of the type of society one is disposed to (individualist, collectivist), people in American society would have more approach goals, whereas those in an East Asian society would have more avoidance goals (Tanaka & Yamauchi, 2004). Thus, it is hypothesized that East Asian international students who espouse a predominantly interdependent self-construal will maintain higher amounts of avoidance goals than approach goals.

The final goal of the present study is to determine which acculturation strategies lead to higher positive affect, lower negative affect, and higher satisfaction with life in East Asian international students. Research has shown that because integrated individuals are able to successfully have resources from both home and host cultures, they could best cope with the demands from the new environment (Zheng, Sang, & Wang, 2004). Assimilated and separated individuals could pull resources from at least one culture, whereas marginalized individuals have the least access to resources, most acculturative stress, and worst psychological and sociocultural adaptation outcomes (Berry, 2005; Berry et al., 2006). It is hypothesized that the integration strategy will lead to higher subjective well-being, followed by the assimilation and separation strategies. The marginalization strategy will result in the lowest well-being scores. Moreover, Markus, Kitayama, & Kurokawa (2000) found that general good feelings were associated with interdependence and socially engaging behaviors in Japan, and independence and socially disengaging behaviors in the U.S. Though general good feeling (e.g., calm, elated) was similar

across culture, there were variations in the associations of these feelings. Those who practiced interdependence experienced good feelings when they engaged with others, but not when they displayed disengaging behaviors. Contrarily, those who practiced independence experienced good feelings when they disengaged. Thus, it is predicted that East Asian international students who maintain a dominant interdependent self-construal while in America (an individualist culture) will experience less positive affect and more negative affect than those who maintain a dominant independent self-construal.

## **Method**

### **Participants**

The sample for the present study consisted of 24 (37.5% male, 62.5% female) undergraduate students from an accredited, postsecondary, and minority-serving institution in southern California. Participants ranged from 18 to 22 years of age, with a mean age of 19.96. The targeted sample consisted of students who were of East Asian ethnicity and nationality (home country is an East Asian country), and who were studying abroad in the United States for the Fall and Winter quarters. East Asian countries and regions included China, Hong Kong, Japan, South Korea, Taiwan, Macau, and Mongolia. Data collected showed that 16 participants (66.67%) of the sample identified as Chinese, 2 participants identified as Japanese (8.33%), 3 participants identified as South Korean (12.5%), and 3 participants identified as Taiwanese (12.5%). None of the participants were from Hong Kong, Macau, or Mongolia. The average time these students spent in the U.S. was 4.25 years. All participants were able to speak and read English. The exclusionary criteria were put in place to assess the effects of the chosen measures on a particular subgroup of international students.

## **Procedure**

Participants were recruited with the assistance of the International Affairs office, the UCR extension center, and a number of student organizations. Two recruitment groups were formed: students who signed up through the Psychology Research Participation System (SONA Systems) and students who were directly administered the survey following completion of an interest form (non-SONA). SONA participants were compensated with one unit of course credit, and non-SONA participants were compensated with a raffle entry to potentially win 1 of 3 \$25 gift cards. Participants from both groups were administered a single, online survey that was prefaced with the informed consent form, in which participants responded either ‘Yes, I consent’ or ‘No, I do not consent’. Participants emails were collected in order to debrief them and provide them with a summary of the study’s results; however, names were not collected to protect the participants’ privacy. For ethical purposes, the raffle portion of the study replaced the email identifiers with a unique identification number, and the survey responses were kept separate from the ID numbers. Reminders were sent to participants who signed up for the study through SONA systems or who completed the interest form but had not yet completed the survey a week thereafter. Student identifiers were deleted following completion of the study report.

## **Materials**

An online survey was developed and administered using Qualtrics software. There were 118 items on the survey that included demographic questions, seven scales, and GPA and TOEFL information. Several scales were divided into sub-scales, and two of the scales—the reasons for learning scale and the flourishing scale—have been omitted to allow for a closer examination of the other research variables.



**Demographics.** Items include indication of nationality, home country, years lived in home country, post-graduate plans, gender, age, current academic year, and major.

**Self-Construal Scale.** The Self-Construal Scale (SCS) was developed by Singelis (1994) and assesses the strength of an individual's independent and interdependent self-construals. The latest version of the scale was used for the study. It includes an additional six questions to improve the internal reliabilities of both the independent and interdependent sub-scales. It is comprised of fifteen questions that address an independent self-view (e.g., 'I do my own thing, regardless of what people think') and 15 questions that address an interdependent self-view (e.g., 'I feel good when I cooperate with others'). All responses were made on a five-point Likert-type scale with a '1' indicating 'strongly disagree' and a '5' indicating 'strongly agree'. Each participant's scores were added (1-5) and divided by 15 in order to find the mean score. The independent and interdependent subscales were shown to be two separate factors rather than opposite poles of a single construct; thus, each subscale was calculated and considered independently.

**The East Asian Acculturation Measure.** The East Asian Acculturation Measure (EAAM) is a scale developed by Barry (2001) that measures the four different acculturation strategies as it pertains to East Asian immigrants. The 29-item scale is comprised of 8 *assimilation*, 7 *separation*, 5 *integration*, and 9 *marginalization* items. Attitudinal and behavioral aspects of social interaction and communication styles are addressed. For the present study, items were adjusted to a five-point Likert-type scale, with a '1' indicating strongly disagree and '5' indicating 'strongly agree'. The mean score was found by adding the subjects' scores (1-5) and dividing by the number of questions per subscale.

**Achievement Goals Questionnaire-Revised.** The achievement goal questionnaire-revised (AGQ-R) was created in order to attend to several problems of previous achievement goal measures identified by Elliot & Muruyama (2008). The measure consists of 12 items which represent the four goals in the 2 x 2 model of goal achievement, in which each goal falls along the performance-mastery and approach-avoidance dimensions. In the present study, the AGQ-R was used to determine which types of goals East Asian international students tend to adopt. Each item was scored on a five-point Likert scale and averaged to form four different indexes: performance-approach, mastery-approach, mastery-avoidance, and performance-avoidance. Additionally, both approach profiles and both avoidance profiles were combined to create two general approach and avoidance profiles for analysis.

**The International Positive and Negative Affect Schedule Short Form.** The I-PANAS-SF is composed of two five-item affect scales: one to measure positive affect (e.g., inspired, determined) and the other to measure negative affect (e.g., upset, ashamed). Covariances in the original PANAS measure have allowed for item reduction while retaining content validity (Thompson, 2007). The revised scale is also internally consistent, as determined by Karim, Weisz, & Rehman (2011). The present study uses the scale to ask to what extent students generally feel 1 of the 10 affective states included: upset, hostile, alert, ashamed, inspired, nervous, determined, attentive, afraid, and active. A score of '1' indicates 'never' and a score of '5' indicates 'always'. The scores of each subscale are added up and divided by five to find the mean affective state of each participant.

**The Satisfaction with Life Scale.** The SWLS is a five-item scale that was developed by Diener et al. (1985) in order to measure the global cognitive judgements of one's satisfaction with life. The scale was adjusted to a five-point Likert scale to maintain compatibility with the

rest of the survey measures and to minimize the cognitive load for respondents completing the lengthy survey. Sample questions include “In most ways my life is close to ideal” and “So far I have gotten the important things I want in life.” Responses range from “strongly disagree” (1) to “strongly disagree” (5). Scores are added up and divided by five to determine how satisfied participants are with their lives at the present moment.

**GPA.** Participant GPA was an indicator of their level of academic achievement.

**TOEFL.** Participant TOEFL score was an indicator of their English writing, reading, and comprehension ability. It was not directly used in any analyses, as it was just a marker of general language competence.

## **Results**

Of the 56 participants who completed the survey, 32 (57.1%) participants were excluded from the analyses for not meeting the study criteria, as they were either of East Asian ethnicity but not East Asian nationality (7.1%), not ethnically or nationally East Asian (28.6%), or have lived in the US for too long (21.4%). The remaining 24 (42.9%) participants were of East Asian ethnicity, East Asian nationality, and have lived in the US since at least 12 years of age.

Recruitment began late October and extended till early February, when the most recent participant entry was collected. All suitable participants responded to every question—therefore, there was no missing data.

A series of correlation analyses were performed to address the hypotheses. The first set of correlations examined the associations between the acculturation strategy participants used and their self-construals. Additionally, correlation analyses were performed on the time participants have been in the US with both acculturation strategy and self-construal. The second set of correlations explored the associations between acculturation strategies, achievement goals, and

academic achievement. Particularly, the associations between acculturation strategies and achievement goals along the approach-avoidance dimension were investigated, as well as the associations between achievement goals and student GPA. Furthermore, self-construal was explored with regard to achievement goals. The final set of correlations explored the relationships between acculturation and the components of subjective well-being: positive affect, negative affect, and satisfaction with life. In addition, the relationships between self-construal and affect were looked at.

The correlation results revealed that there were no significant associations between the four acculturation profiles and both independent and interdependent self-construals, as shown in Table 1 below. That is, integration ( $M = 3.55$ ;  $SD = .86$ ), assimilation ( $M = 2.09$ ;  $SD = .77$ ), separation ( $M = 3.48$ ;  $SD = .58$ ), and marginalization ( $M = 2.76$ ;  $SD = .88$ ) did not correlate with independent self-construal ( $M = 3.45$ ;  $SD = .51$ ) or interdependent self-construal ( $M = 3.53$ ;  $SD = .48$ ). Additionally, there was no significant correlation between time in the U.S. ( $M = 15.71$ ;  $SD = 2.68$ ) and independent SC,  $r(24) = -.29$ ,  $p = .17$ , or interdependent SC,  $r(24) = .26$ ,  $p = .22$ . However, there was a correlation between time in the U.S. and integration,  $r(24) = .45$ ,  $p = .03$ , indicating that the longer an individual had stayed in the U.S., the more likely they were to utilize the integration strategy.

The correlation tests between acculturation strategies, achievement goals, and academic achievement resulted in similar outcomes, though there were a few more significant findings. As shown in Table 2, integration was not significantly correlated with either approach goals ( $M = 3.44$ ;  $SD = .45$ ),  $r(24) = .09$ ,  $p = .66$ , or avoidance goals ( $M = 3.57$ ;  $SD = .48$ ),  $r(24) = .27$ ,  $p = .20$ . However, assimilation was shown to positively correlate with both approach,  $r(24) = .43$ ,  $p = .04$ , and avoidance goals,  $r(24) = .56$ ,  $p = .004$ , though with avoidance more so than approach.

In other words, individuals who participated more in the host culture than maintained their own culture tended to adopt both types of achievement goals. Separation negatively correlated with avoidance goals,  $r(24) = -.56, p = .004$ , while marginalization positively correlated with avoidance goals,  $r(24) = .46$ , though to a lesser degree than assimilation. These results indicate that students who solely maintained their ethnic culture and identity tended to lessen the amount of avoidance goals espoused. As for self-construal, results showed that independent SC negatively correlated with performance-avoidance goals,  $r(24) = -.52, p = .009$ , and interdependent SC positively correlated with performance-avoidance goals,  $r(24) = .47, p = .02$ . In other words, students who have an interdependent self-construal tended towards striving to not underperform relative to others, while those who had an independent self-construal tended to not espouse this particular goal. Lastly, achievement goals were not found to be correlated to student GPA ( $M = 3.43; SD = .41$ ).

As shown in Table 3, the last set of correlation analyses revealed no significant correlations between acculturation strategies and positive affect ( $M = 3.15; SD = .58$ ), negative affect ( $M = 2.95; SD = .79$ ), and satisfaction with life ( $M = 2.83; SD = .96$ ). Marginalization was trending towards a negative correlation with life satisfaction, but it did not reach significance,  $r(24) = -.37, p = .075$ . Both independent and interdependent self-construals did not correlate with positive and negative affect, though the relationship between independent SC and positive affect was trending towards a positive correlation,  $r(24) = .35, p = .097$ .

## **Discussion**

The goal of the present study was to investigate the associations between self-construal, acculturation, and their outcome variables in order to determine which strategies and self-views could benefit East Asian international students during their sojourn. By exploring the strategies

with which students acculturate, insights are gained as to the potential determinants of acculturation and how students choose to acculturate given constraints. Additionally, the self-views of students were surveyed to evaluate if there was a connection between self-construal and the acculturation process. Investigating these proposed links have shed light into how student academic achievement and well-being is affected.

It was hypothesized that the acculturation strategies utilized would mirror the self-construal patterns proposed by Singelis (1994). Integration, as the identification and participation of both home and host culture, would lead to the development of a relatively pronounced independent and interdependent self-construal. Assimilation, separation, and marginalization would also lead to the development (or lack) of the respective self-construals: high independent and low interdependent SC, low independent and high interdependent SC, and low independent and interdependent SC. It was also predicted that the length of stay in the U.S. corresponded with the tendency to utilize the assimilation or integration patterns. With regard to goals and academic achievement, it was predicted that integration would lead to more approach than avoidance goals, and assimilation, separation, and marginalization (broadly in that order) would show an increasing inclination towards the lesser-achievement avoidance goals and an inhibition of goals overall. Achievement was hypothesized to be correlated with approach goals more so than avoidance goals, and an interdependent self-construal with avoidance goals more so than approach goals. Lastly, with regard to well-being, it was hypothesized that integration would show the highest subjective well-being, and independent SC would show higher positive than negative emotion and interdependent SC, higher negative than positive emotion.

In general, the hypothesized relations among the variables for the first research goal were not evident. Each acculturation strategy was not correlated with either the independent or

interdependent self-construals. There are two possible explanations for the lack of associations: (1) the sample size was inadequate to detect the associations; (2) there were potential moderating factors that limited the effect of each acculturation strategy on the development of self-construal. It is believed that the latter may have had a greater influence on the findings because there were no general trends in significance. For instance, interdependent SC seemed to trend towards assimilation more so than away from it and further from separation more so than towards it. It may also be the case that the development of one's self-construal varies as a result of contextual differences within the university area. Even though an individual had indicated that they incline towards talking to Asian people, for example, they may generally be in an area where the Western culture is quite pronounced and thus, are more prone to developing their independent self. Furthermore, though self-construal types adopted were not influenced by length of stay in America, our results indicate that the integration strategy was associated with length of time in the U.S. This agrees with Barry's (2001) finding that individuals who stay longer in America tend to utilize the integration strategy. However, the findings did not agree with regards to assimilation, though assimilation in the current study was trending towards a positive correlation. It may then be the case that length of stay, among other variables, moderated the relationship between acculturation strategy and self-construal.

The hypotheses regarding the associations between acculturation strategies, achievement goals, and academic achievement received some support. Although integration was not found to be significantly correlated with both approach and avoidance goals, assimilation, separation, and marginalization each had an association with achievement goals. Assimilation was found to positively correlate with both approach and avoidance goals, which indicates that students who inclined towards participating in the host culture had higher achievement goal orientations. It

may be the case that students who are more accustomed to the host environment may have a greater awareness and understanding of the types of goals that will help them achieve. An interesting finding was that separation was found to be negatively correlated with both avoidance goals, but marginalization was found to be positively correlated with a single avoidance goal—performance-avoidance. Given that separated individuals have access to at least one cultural resource for support (Yamada & Singelis, 1999), it is conceivable that separation would result in the adoption of some sort of positive goal, despite avoidance goals not being the most effective for academic achievement (Brockbank, Smith, and Oliver, 2020). However, that was not the case in this study, where it seems as though separated individuals utilized no positive goals. Furthermore, because the marginalization strategy generally results in maladaptive behaviors (Berry, 1980), it is interesting to note that the marginalization strategy inclines individuals towards any goals at all. Perhaps the setting of avoidant goals is a coping mechanism for marginalized students, in which they attempt to set goals despite social support.

The self-construal findings parallel the acculturation findings in that the independent self-construal negatively correlates with performance-avoidance goals, and the interdependent self-construal positively correlates with performance-avoidance goals. However, these findings support previous literature that indicates that individuals who predominantly espouse an interdependent self-construal tend towards avoidance-based goals (Lee, Aaker, & Gardner, 2000). Lastly, there was no association with achievement goals and student GPA. The finding that achievement goals did not correlate with GPA was interesting, as there seemed to be no trends towards a correlation. This meant that a student's GPA may be more an identifier of how much work is put into achieving such goals, rather than the type of goals themselves. If a student who primarily maintained performance-avoidance goals invested more effort into reaching such



goals, he or she may academically succeed more than an individual putting less effort in fulfilling their performance-approach goals. Additionally, because the East Asian culture has an emphasis on effort versus ability (Holloway, 1988), the sample could have skewed towards attributing effort towards earning a high GPA. It may also be the case that the relationship between the various achievement goals and GPA was mediated by another factor. Because the links between these constructs are not clear and instead, are few and far between, it is difficult to value the proposed hypotheses.

The last set of hypotheses regarding acculturation and well-being were not supported. None of the acculturation strategies had a meaningful relationship with affect or satisfaction with life. This contrasts with Zhang, Sang, & Wang's (2003) finding that the integration strategy was associated with the highest subjective well-being versus the other acculturation strategies, though the design of that study was different than the present one. The results of the present study may have occurred due to the mediating effects of other, more pertinent emotion-influencing factors. However, it was found that marginalization was trending towards a relationship with well-being in the direction proposed by Berry & Hou (2016). That is, marginalized students have less well-being than students who use other strategies. Furthermore, a relationship between independent self-construal and positive affect was trending in the direction proposed by Markus, Kitayama, and Kurokawa (2000), where the culture students were currently in influenced the effects of their self-construal on their general positive emotion. These general trends are evidence for the application of previous findings a sample of East Asian international students.

### **Limitations**

There were several limitations to the study that may have impeded a more comprehensive analysis. Regarding methodological limitations, there was a relatively small sample of East

Asian international students assessed. This could reduce the statistical power for detecting meaningful associations among the variables. In addition, the relatively small sample may not be representative of the general East Asian student population in Southern California. The study was also self-report, which means that social desirability could have played a role in the responses inputted. Additionally, recruitment did not include random sampling; instead, interested students who may share similar qualities (such as proactiveness) may have influenced the results. Thus, the sample may have not been fully representative of the East Asian international student body. Furthermore, as the mean GPA of the students was 3.43, there may have been attrition of students who may be having difficulties academically. The survey measures were not translated to East Asian languages—thus, students not as confident in English may have also neglected to complete the survey.

The study could have benefitted from a longitudinal design. A longitudinal design would have allowed for an understanding of how acculturation, and the consequent outcome variables, change over time. Additionally, the primary analyses conducted were correlations, which further limited the impact of the results. Given the broad, explorative nature of the study, the associations between the constructs examined may be mediated by a substantial number of factors. Acculturation alone is a construct that entails many sub-constructs and looking at it exclusively with academic achievement or well-being could have allowed for a deeper understanding of the variables and interactions involved.

### **Future Directions**

Overall, the findings did little to corroborate past research. Yet, the research was an important first look into the nature of the associations between acculturation, self-construal, academic achievement, and well-being. Future research could explore the associations between

acculturation, achievement goals, and academic achievement more comprehensively. A mediation model could be tested between all three measures to see if achievement goals are significantly associated with both constructs. One could dive a little deeper and determine if there are any mediators of acculturation and achievement goals, or they can attain a more macro-perspective and investigate other connections between acculturation and academic achievement. With regards to well-being, future research could be directed towards the acculturative stress phenomena and affect or satisfaction with life. Moreover, a longitudinal design could be applied to the constructs presented in the study in order to determine if the effects of particular variables on others changes across time.

### **Conclusion and Implications**

Findings from the study show that acculturation strategies and self-construal patterns, though sharing similar conceptualizations, are not directly related to each other. Additionally, the acculturation strategy is not the sole, primary precursor to academic achievement or well-being. However, the role of acculturation in the achievement literature is still to be explored. The influence of acculturation on achievement goals is a unique aspect that warrants further attention, as the type of acculturation strategy utilized could have profound effects—both positive and negative—on the achievement of international students. Increased understanding of goal achievement and well-being in school counseling, administration, and public policy could help orient students towards the optimal acculturation strategies and self-construal patterns. Students could then attain better adaptation behaviors that reinforce approaching and undermine avoiding social and achievement problems. Adjusting to support East Asian international students and their unique set of difficulties, whether they be through their perceived construals or not, can result in a meaningful impact on students from collectivist societies in general.

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**Table 1.***Correlations and Descriptive Statistics for Acculturation Strategies, Self-Constraint, and Time in the US*

Variables	Mean	SD	1	2	3	4	5	6	7
1. TIME_IN_US	4.25	2.27	-						
2. IND_SC	3.45	.51	-.29	-					
3. INT_SC	3.53	.48	-.26	-.20	-				
4. ASSIM	2.10	.77	.36	-.14	-.29	-			
5. SEPAR	3.48	.58	-.29	.14	.01	-.61**	-		
6. INTEGR	3.55	.86	.45*	-.09	.09	.42*	-.56**	-	
7. MARGIN	2.76	.88	.14	-.35	-.05	.22	-.16	-.35	-

Note. \*p < .05. \*\*p < .01, two-tailed.

**Table 2***Correlations and Descriptive Statistics for Acculturation Strategies, Self-Constraint, and Achievement Goals*

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	
1. IND_SC	3.45	.51	-												
2. INT_SC	3.53	.48	-.2	-											
3. ASSIM	2.09	.77	-.14	.29	-										
4. SEPAR	3.48	.58	.14	.01	-.61**	-									
5. INTEGR	3.55	.86	-.08	.09	.42*	-.56**	-								
6. MARGIN	2.76	.88	-.35	-.05	.22	-.16	-.35	-							
7. MAST_APPR	3.64	.51	.04	.15	.28	-.32	-.06	.23	-						
8. MAST_AVOI	3.52	.60	-.26	.25	.44*	-.57**	.27	.3	.41*	-					
9. PERF_APPR	3.25	.74	.06	.37	.33	-.08	.16	.22	.01	.05	-				
10. PERF_AVOI	3.56	.65	-.52**	.46*	.47*	-.36	.21	.46*	.24	.32	.53**	-			
11. APPROACH	3.44	.45	.07	.39	.43*	-.25	.09	.31	.57**	.27	.82**	.57**	-		
12. AVOIDANCE	3.57	.48	-.43*	.42*	.56**	-.56**	.27	.46*	.46*	.68**	.44*	.89**	.62**	-	
13. GPA	3.43	.41	.21	.15	.00	-.10	.17	-.26	.23	.18	.20	.06	.30	.21	-

Note. \*p < .05. \*\*p < .01, two-tailed.

**Table 3***Correlation and Descriptive Statistics for Acculturation Strategies, Self-Constraint, and Achievement Goals*

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1 IND_SC	3.45	.51	-								
2 INT_SC	3.53	.48	-0.2	-							
3 ASSIM	2.09	.77	-0.14	0.29	-						
4 SEPAR	3.48	.58	0.14	0.01	-.61**	-					
5 INTEGR	3.55	.86	-0.08	0.09	.42*	-.56**	-				
6 MARGIN	2.76	.88	-0.35	-0.05	0.22	-0.16	-0.35	-			
7 POS_AFF	3.15	.58	0.35	-0.09	-0.09	-0.18	-0.01	-0.16	-		
8 NEG_AFF	2.95	.79	0.07	-0.14	-0.1	-0.26	0.02	0.38	0.4	-	
9 SATIS_LIFE	3.83	.96	0.3	.41*	0.1	0.11	-0.04	-0.37	0.31	-0.28	-

*Note.* \* $p < .05$ . \*\* $p < .01$ , two-tailed.