

HOW DO MEXICAN AMERICAN STUDENTS' PERCEPTIONS OF THE COLLEGE
CAMPUS ENVIRONMENT AND PARENTAL SUPPORT CONTRIBUTE TO
SELF-EFFICACY?

by

Ashley Valadez, M.S.

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Committee Members:

Edna Alfaro, Chair

Betsy Blunk

Melissa Delgado

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I: INTRODUCTION AND PURPOSE

Background

Mexican American college students' academic achievement is a high priority nationwide. While Mexican-origin students college-going rates have continued to increase over the last decade, between 2002 and 2012, specifically, Hispanic college-going rates have dramatically increased from only 54% to 70% (National Center for Education Statistics, 2013). Such awareness was reflected by their increased rates of college enrollment. In the United States by 2016, 35% of Latinos between the ages of 18 and 24 were enrolled in either a two- or four-year college (Pew Research, 2016). While that is nearly a 15% increase from the Latino college enrollment rates in 1993 (i.e., 22%), there are still significant gaps between college enrollment and completion rates among US Latino college students (Pew Research, 2016). In 2014, for example, only 15% of the US Latinos who enrolled in college completed their higher education in four years and obtained a bachelor's degree or higher (Pew Research, 2016). These statistics have guided researchers to identify several factors that contribute to Latinos' academic outcomes at the college-level. College self-efficacy has emerged as a key correlate of college students' academic outcomes (Aguayo, Herman, Ojeda, & Flores, 2011; Feldman & Kubota, 2015; Garriott & Flores, 2013; Majer, 2009). Given that self-efficacy serves as one factor that is an identified correlate of Mexican-origin college students' academic success, it is important to gain a better understanding of the factors that can promote self-efficacy among Mexican-origin college students.

Taking these factors into consideration the purpose of this study was to examine two specific factors that have been found to be associated with Mexican-origin college

students' self-efficacy ratings. Specifically, this study examined how Mexican-origin college students' perceptions of their university and perceived academic support from mothers and fathers were related to their college self-efficacy. In addition, the current study controlled for students' acculturation, gender, generational status, and parents' level of education.

II: LITERATURE REVIEW

College Self-Efficacy and Bandura's Social Cognitive Theory

Bandura's social cognitive theory (1986) provides a framework to assess Mexican-origin college students' self-efficacy. According to Bandura (1977), self-efficacy is defined as one's self-evaluation of their competence to successfully execute a course of action necessary to reach a desired outcome, such as academic success. The social cognitive theory suggests that self-efficacy is a critical determinant of an individual's thoughts and behaviors (Bandura, 1999). In order to successfully accomplish a task, individuals must believe in their ability to achieve success (Gore, Leuwerke, & Turley, 2005). This notion is supported with research related to academic achievement. As previously stated, researchers have found a significant relation between college self-efficacy and academic success (Feldman & Kubota, 2015; Yuan, Weiser, & Fisher, 2016). According to Bandura (1993) individuals confidence in their abilities contribute to their preparedness for different college academic scenarios. These findings generalize to research with Mexican-origin college students in that higher levels of college self-efficacy were related to higher levels of academic success among Mexican-origin college student populations (Majer, 2009). Taken together, this research highlights the importance of further examining Mexican-origin college students' self-efficacy.

When working with Mexican-origin and Latino populations, researchers have identified three critical components of students' self-efficacy during college (i.e., course efficacy, roommate efficacy, and social efficacy, Solberg, O'Brien, Villareal, Kennel, & Davis, 1993). Course efficacy was defined as students' confidence in their abilities to manage their time effectively, keep up to date with school work, take good class notes,

and understand their textbooks (Solberg et al., 1993). In addition, roommate self-efficacy was defined as students' confidence in their abilities to get along with their roommate(s), socialize with their roommate(s), divide shared space with their roommate(s), and share responsibilities of chores in the home with their roommate(s) (Solberg et al., 1993). Finally, social self-efficacy was defined as students' confidence in their abilities to participate in class discussions, ask questions during class, talk to professors, make new friends, go out on a date, and join a student organization (Solberg et al., 1993). Together, these three components target the actions necessary for college success. Therefore, students' confidence in their abilities to successfully accomplish these tasks define Mexican-origin students' college self-efficacy.

Social Cognitive Theory and Predictors of College Self-Efficacy

Bandura's Social Cognitive Theory (1977) also provides a foundation to better understand the factors that may promote Mexican-origin college students' self-efficacy. For instance, Bandura suggests that social systems create specific interactions (e.g., social or institutional environments) significant to an individual's self-efficacy development (Bandura, 1999). As students feel more comfortable within the university environment, they demonstrate an enhanced level of perceived self-efficacy (Bandura, 1993). The concepts Bandura (1999) proposed are applicable to the current study in that Bandura discussed how environmental structures (i.e., college campuses) and self-efficacy are related. For example, when Hispanic students feel a strong sense of unity within a diverse campus population, they report more positive perceptions of their college campus that can contribute to their higher levels of self-efficacy (Edman & Brazil, 2009). Further delving into how parental support influences students' perceptions of the university,

researchers will be able to further explore how these crucial perceptions can contribute to students' belief in their ability to perceive and demonstrate self-efficacy during college.

Parental Support

Researchers have established a relationship between parent support and college self-efficacy (Lopez, 2014; Solberg et al., 1993). Parental support can be defined as parents' investment in their children's academic work (Hossain & Shipman, 2009), academic guidance (Zalaquett, 2005) and parental encouragement (Arana, Castaneda-Sound, Blanchard, & Aguilar, 2011; Chapin, 2014). Parent support may be particularly important given the role that the family plays within the Latino culture (Ong, 2006). Hispanic college students have noted family encouragement, specifically how families pushed them to work hard and go to school, as a core factor in creating more successful academic outcomes (Arana et al., 2011). Additionally, studies have found a correlation between parent support and students' confidence in their academic abilities (Chapin, 2014). In examining Mexican American high school students Chapin (2014) determined that higher levels of parental support was related to students' individual goals of attending college after graduation. While, Solberg et al., (1993) studied Mexican American college students and Lopez (2014) examined Latino college freshman, both researchers determined that higher levels of parental support were related to self-efficacy during college. Zalaquett (2005), further defined family support from parents as providing students with the ability to not only succeed in high school, but guiding them to achieve higher educational goals, such as attending college. While parents may face barriers to effectively assist in their children's academic learning (Ong et al., 2006), parental involvement, such as providing encouragement to children is beneficial as they

attend school in order to help them remain positive about their academics in order to help them to succeed (Chapin, 2014). Ultimately, these positive approaches from parents, can provide pathways for students to not only progress, but achieve self-efficacy (Lent, Singley, Sheu, Gainor, Brenner, Treistman, & Ades, 2005; Bandura, 1999). Thus, parents' academic support is a critical variable to consider when examining Mexican-origin college students' self-efficacy.

Although, previous scholars have clustered parents together when examining the relation between support and self-efficacy, it may be important to consider the separate influence of mothers and fathers because of the variation in dynamics among these two familial relationships (Lowe & Dotterer, 2012). Researchers have found that mothers and fathers interact with their children at different rates with mothers interacting more than fathers (Hossain & Shipman, 2009). Additionally, mothers' and fathers' behaviors differ in how they are related to college self-efficacy. For example, researchers determined that while mothers' warmth was a positive predictor of their children's intrinsic motivation, fathers' warmth was not related to children's intrinsic motivation (Lowe & Dotterer, 2012). Thus, given that mothers' and fathers' behaviors differentially predict children's outcomes, it is possible that mothers' and fathers' support could differentially predict Mexican-origin college students' self-efficacy. The current study will be among the first studies to examine the independent role of mothers' and fathers' support on Mexican-origin college students' academic self-efficacy.

Student Perceptions of their University

Student perceptions of their college campus environment may be expressed as their sense of belonging to the campus community (Edman & Brazil, 2009), faculty and

staff members being readily accessible, and the availability of a variety of support programs and activities (Arana et al., 2011). When defined as such, researchers have found a strong link between Latino students' positive university perceptions and students' academic self-efficacy. In studying Hispanic middle-school students, Chun & Dickson (2011) determined that more positive perceptions, such as through school belonging was related to self-efficacy. Additionally, with a sample of Mexican-origin college students having faculty and staff members being readily accessible and the accessible support programs and activities were related to increased self-efficacy (Arana et al., 2011). These findings generalize to Latino college students.

Perceptions of the campus environments within universities vary for Mexican American college students (Gloria, Herrera, & Castellanos, 2016). In this study, it was determined that Mexican-origin students' perceptions of the university environment contributed to not only their success, but also their perceptions of the campus climate. These findings can further be supported by a previous study that found Latino students' positive perceptions of their university environment to be linked to higher social efficacy (Edman & Brazil, 2009). Further, these positive perceptions were found to be associated with cultural congruity related to school belonging, social support, and academic efficacy. When examining perceptions of the university with Mexican-origin students, researchers have demonstrated that the University Environment Scale is a valid and reliable assessment tool to examine Mexican American's experiences (Gloria & Kurpius, 1996). Mexican Americans who demonstrated a higher score on the University Environment Scale reported more positive feelings about their integration into the campus environment (Castillo, Conoley, Choi-Pearson, Archuleta, Phoummarath, & Van

Landingham, 2006). The University Environment Scale is different from others that evaluate self-efficacy of Mexican-origin students, in that it measures cultural items specific to this population. For example, the confidence with which Mexican-origin students feel they can handle the pressures of family in relation to their adjustment to college. However, while this instrument is beneficial in the study of Mexican-origin students' self-efficacy, it is also useful across cultures. In that it addresses both cultural and universal college issues that are common nationwide related to self-efficacy. While many previous studies have examined how Mexican American students' perceptions of the university environment contribute to self-efficacy, it is imperative to further examine this relation while simultaneously examining parental support as another contributing factor to self-efficacy. One significant benefit in examining both the relations between student perceptions of the university and parental support is that it allows for a more in-depth understanding of self-efficacy.

Hypotheses

The current study was guided by three hypotheses:

Hypothesis 1: Mothers' academic support was expected to positively relate to Mexican-origin college students' self-efficacy. As mothers' academic support increases, students' college self-efficacy is expected to increase.

Hypothesis 2: Fathers' academic support was hypothesized to positively relate to Mexican-origin college students' self-efficacy. Specifically, as fathers' academic support increases, self-efficacy was expected to increase in college students'.

Hypothesis 3: It was hypothesized that Mexican-origin college students' perceptions of the university environment would positively relate to their self-efficacy

during college. Specifically, Mexican-origin college students' self-efficacy was expected to increase as students' perceptions of their university environment increased.

III: METHODOLOGY

Participants

A total of 259 Mexican-origin college-level students from Texas State University and University of Texas-Pan American (54 male, 205 female) participated in the current study to examine predictors of self-efficacy. Participants ranged in age from 18 to 25 years ($M = 19.81$; $SD = 1.659$).

Procedure

Data were collected as part of a larger study that was designed to study the relations between parenting behaviors and Mexican-origin college students' academic outcomes. The study was open to all undergraduate majors; however, in order to participate, students had to self-identify as Mexican-origin and be enrolled as a college student at one of two Hispanic-Serving Institutions. The data were obtained through detailed surveys that were self-administered online, and students were paid \$10 for participating in the study.

Variable: College Self-Efficacy

Students' confidence in completing college coursework, managing time efficiently, and getting help and information at school, were measured using the College Self-Efficacy Inventory (Solberg, O'Brien, Villareal, Kennel, & Davis, 1993). This inventory consists of 19 items, which had students' responses scored using a 0-10 Likert scale (0 [Not at all confident] to 10 [extremely confident]). Students were asked questions related to their confidence in their college-level work, such as "research a term paper" or "manage time effectively." This measurement has been demonstrated to be both reliable

and valid with similar populations (Ojeda, Flores, & Navarro, 2010). With the current study's sample, the measure obtained a Cronbach's alpha of .93.

Variable: Students' Perceptions of College

Participants provided feedback about their perceptions of the campus environment using the University Environment Scale (Williams & Horvath, 1996). All 14 survey questions were answered using a 5-point Likert scale (1 [Not true at all] to 5 [Very True]). Students were asked questions related to their perceptions of the campus such as "University staff have been warm and friendly" and "The university seems to value minority students." This scale has been demonstrated to be both a reliable and valid measure with similar demographic populations (Gloria & Kurpius, 1996, Williams & Horvath, 1996). With the current study's sample, the measure obtained a Cronbach's alpha of .83.

Variable: Parental Support

Perceived support from mothers and fathers was assessed using the Academic Support & Guidance Scale (Nauta & Kokaly, 2001). This scale consisted of 16 questions in total, with 8 questions related to each student's mother and 8 questions related to each student's father. Items were scored using a 5-point Likert scale that ranged from (1 [strongly disagree] to 5 [strongly agree]). This scale asked the students questions related to how they perceived support from their mother and father in assisting them in their academic and career decisions, such as "This person stands by me when I make important academic and career decisions" and "This person tells or shows me general strategies for a successful life." This scale has been demonstrated to be both a reliable and valid measure with similar demographic populations (Ong, Phinney, & Dennis, 2006). With

the current sample, the measure obtained a Cronbach's alpha of .92 for maternal support questions and a Cronbach's alpha of .95 for paternal support questions.

Control Variables

Acculturation. Given that researchers have found that higher rates of acculturation were related to higher levels of college self-efficacy in Mexican-origin college student samples (Aguyayo et al., 2011; Garriott & Flores, 2013; Ojeda, Castillo, Meza, & Pina-Watson, 2014), acculturation was included as a control variable in the current study. For this study, students' acculturation was measured using the Acculturation Rating Scale for Mexican Americans-II (Cuellar, Harris, & Jasso, 1980). This rating scale consists of 13 items related to students' Anglo cultural adaptation. Responses are identified and then scored using a Likert scale (1 [Not at all] to 5 [Extremely often or almost always]). Students were asked questions related to their cultural modifications, such as "I associate with Anglos" or "I like to identify myself as an Anglo American." This particular measure has been demonstrated to be both reliable and valid with similar demographic populations (Basanez, Dennis, Crano, Stacy, Unger, 2014; Ojeda, Flores, & Navarro, 2010). With the current sample, the measure obtained a reliability rating of .64. However, after conducting a reliability analysis, further examination of item level descriptors, inter item correlations, and an alpha scale were used to determine if any of the 13 items were to be deleted. Through this process, we identified one item (i.e. "I read in English") as impacting the other items. When deleted the coefficient alpha increased to .71.

Gender. Gender was also included as a control variable, as previous studies have found that Latino males have reported higher levels of self-efficacy at the beginning of

their college experience in comparison to Latina females (Lopez, 2014; D'Lima, Winsler, & Kitsantas, 2014). For this study, participants were asked the question, "What is your gender?" and responded with a male or female response. In this particular study sample, 79% of the participants identified as female, while 21% identified as male.

Generational Status. Generational status has been found to be a contributing factor towards higher levels of self-efficacy during college (Hernandez, Robins, Conger, & Widaman, 2016), therefore, generational status was used as a control variable for this study. In this study students provided family birth history for not only themselves, but also both of their parents. For this current study's sample, 83% of the students were born in the United States, while 17% were born in Mexico. Mothers of students were identified as 41% being born in the United States and 58% born in Mexico while students' fathers were identified as 35% being born in the United States and 61% being born in Mexico.

Parents' Level of Education. Research has found that parents' level of education is associated with students' self-efficacy during college (Hossain & Shipman, 2009). Therefore, for the current study, parents' level of education was used as a control variable. Students reported, through family educational attainment history, that 44 % of their fathers and 47 % of their mothers graduated from college with a bachelor's degree or higher.

Data Analyses

Bivariate correlation analyses were utilized in order to examine if the participant variables were related to the dependent measures. A multiple regression in SPSS was used in order to predict how Mexican-origin students' perceptions of the campus environment and their perception of parental support from mothers and fathers related to

their college self-efficacy. Acculturation, gender, parents' level of education, and generational status were entered in the first step as control variables. The predictors were then entered to include students' perceptions of the university environment, mothers' support, and fathers' support. In addition, an F-test was used to determine whether the model created was appropriate for the data set based on the identified p-value.

IV: RESULTS

Means and standard deviations for study variables are reported in Table 1. Simple correlation coefficients were computed between all control and predictor variables in order to clarify the relationship between each of the variables and self-efficacy (See Table 2). Higher levels of college self-efficacy were related to higher levels of acculturation, maternal academic support, and students' perceptions of the university environment. Higher levels of students' perceptions of the university environment were related to higher levels of acculturation, maternal support, and paternal support. Females reported more positive perceptions of the university environment than males reported. As students reported higher levels of academic support from their fathers, they also reported higher levels of fathers' education and higher levels of maternal academic support. Higher levels of mothers' academic support were related to higher levels of acculturation and both maternal and paternal education levels.

Table 1

Means and Standard Deviations for all Study Variables

<u>Variable</u>	<u>Mean</u>	<u>SD</u>
Acculturation	3.91	.45
Mothers' Highest Level of Education	6.20	2.78
Fathers' Highest Level of Education	6.13	2.80
Students' Sex	.24	.43
Students' Generational Status	.18	.38
Mothers' Generational Status	.59	.50
Fathers' Generational Status	.67	.51
Mothers' Academic Support	4.45	.75
Fathers' Academic Support	4.12	1.05
University Environment	5.53	.84
College Self-Efficacy	7.55	1.49

Table 2

Correlations for Study Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Acculturation	---									
2. Mothers' Highest Level of Education	.03									
3. Fathers' Highest Level of Education	.00	.50***								
4. Students' Sex	.23***	.00	-.05							
5. Students' Generational Status	.18 **	-.13*	-.06	.07						
6. Mothers' Generational Status	.03	.46***	.32***	-.03	.26***					
7. Fathers' Generational Status	.00	-.26***	-.30***	.13	.28***	.35***				
8. Mother's Academic Support	.15*	.24***	.16*	-.10	-.01	.00	-.09			
9. Father's Academic Support	.02	.13	.20**	-.02	-.00	.04	-.06	.57***		
10. University Environment	.19**	-.03	.09	-.13*	.03	.05	.10	.19**	.16*	
11. College Self Efficacy	.21**	.01	-.03	-.07	.12	.11	.07	.25***	.05	.31***

Note. *p < .05. ** p < .01. *** p < .001

Regression Analyses

In Model 1, as the participants reported higher levels of acculturation, their self-efficacy increased (see Table 3). Generational status was found to be significantly related to college self-efficacy. Students who were born outside the US reported higher levels of self-efficacy. Gender, parents' level of education, and parents' generational status were not related to self-efficacy.

In Model 2, all three of the predictor variables (university environment, mothers' academic support, and fathers' academic support) were found to be related to college self-efficacy. Higher levels of students' perceptions of the university environment and maternal academic support were related to higher levels of college self-efficacy. Contrary to Hypothesis 2, as students reported higher levels of academic support from fathers, they reported lower college self-efficacy. When looking at the control variables, the results of the regression indicated that there was a positive relation between students' acculturation and college self-efficacy, such that as participants' reported higher levels of Anglo orientation, they also reported higher levels of college self-efficacy. In addition, when looking at generational status and college self-efficacy, a positive relationship was also determined among the study sample. No significant relations emerged, however, between college self-efficacy and gender or gender and parents' educational level.

Table 3
Hierarchical Regression Analysis for Variables Predicting Self-Efficacy

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Students' Sex	-.17	.24	-.03	.04	.22	.01
Students' Generational Status	.57	.27	.14*	.48	.26	.12*
Mothers' Highest Level of Education	.06	.04	.11	.01	.04	.03
Fathers' Highest Level of Education	-.02	.04	-.03	.00	.04	.00
Mothers' Generational Status	.35	.23	.11	.27	.22	.09
Fathers' Generational Status	.03	.22	.01	-.00	.20	-.00
Acculturation	.78	.22	.23***	.50	.22	.15*
Mothers' Academic Support				.53	.15	.26***
Fathers' Academic Support				-.22	.10	-.15*
University Environment				.45	.11	.25***
R ²		.08			.11	
F for change in R ²		2.85			9.81	

Note. * $p < .05$. ** $p < .001$

V: DISCUSSION

The purpose of this study was to further investigate how Bandura's Social Cognitive Theory (1977, 1999) was related to students' perceptions of the college campus environment and parental support. In examining these factors, the current study built on Bandura's Social Cognitive Theory (1977) by further examining college self-efficacy among a Mexican-origin college population. Guided by Bandura's Social Cognitive Theory (1977) higher levels of academic support from mothers and fathers were expected to be related to higher levels of college self-efficacy. In addition, as supported by Bandura's Social Cognitive Theory (1999), more positive perceptions of the university were also expected to be related to higher levels of self-efficacy during college. These hypotheses partially supported Mexican-origin college students' perceptions of the university environment and maternal academic support were both positively related to college self-efficacy. Paternal academic support, however, was negatively related to college self-efficacy. These findings contribute to the literature by underscoring the importance of examining mothers' and fathers' data separately.

Mexican-origin college students' generational status was found to be related to their self-efficacy during college. Increased generational familiarity and expectations of college for second-generation students in comparison to that of first-generation students was noted by studies conducted by Van and Bui (2002), as well as, Ramos-Sanchez & Nichols (2007). Similar levels of familiarity with the college environment would enable both 1st and 2nd generation college students to report similar levels of self-efficacy and perceptions of the campus environment. Bandura (1977) emphasizes the importance of social interactions that contribute to the development of self-efficacy. Specifically, he

notes that it is important to not only recognize the perception of an individual's motivation, but also the role of the situation as it relates to the individual's overall experience (Bandura, 1993). In conclusion, it was determined that students' perceptions of the college campus environment, parental support, and acculturation were each related to college self-efficacy among this study's Mexican-origin college population.

While some researchers have examined parental support as a combined measure of mothers' and fathers' support (Hossain & Shipman, 2009; Rueger, Malecki, & Demaray, 2010), the current study examined the mothers' and fathers' as separate constructs. Findings demonstrated that Mexican-origin college students' reports of academic support from mothers was positively related to students' self-efficacy during college whereas fathers' academic support was found to be negatively related. Differences between the effects of maternal and paternal support emerged in a similar study with high school students such that Hispanic girls' academic motivation was only related to maternal academic support, while Hispanic boys' academic motivation was only related to paternal academic support (Alfaro, Umana-Taylor, & Bamaca, 2006). Furthermore, a study by McBride, Dyer, Liu, Brown, and Hong (2009) determined that while mothers take on a more primary role in children's education, fathers frequently take on a secondary role and typically become involved when the child is struggling in school. Thus, it is possible that students with lower levels of college self-efficacy are eliciting more support from their fathers, which could account for the negative relation between college self-efficacy and academic support from fathers. Researchers have found the acculturation of Mexican-origin college students to be related to their self-efficacy during college. These findings are aligned with previous studies that have found a correlation

between these two variables among the same population (Ojeda, Castillo, Rosales, Meza, & Pina-Watson, 2014). In the study, it was determined that acculturation positively influenced Mexican American college men's career-related self-efficacy.

Limitations

While the current study significantly contributes to our understanding of the factors that relate to Mexican-origin college students' self-efficacy, this study is not without its limitations. In this study, there were more female participants than males in the sample. Previous studies have found significant relationships between gender and other factors found to contribute to college self-efficacy (Hackett & And, 1992; Basáñez et al., 2014). Basáñez et al. (2014) examined acculturation among Hispanics, and found that gender played a significant role during college among the sample being studied. Activities such as dating or staying out late were found to rank higher for women than for men in regards to encountering conflicts surrounding these aspects of social-efficacy (Basáñez et al., 2014). However, enculturation could also be related, especially in that Mexican-origin students would be maintaining their own culture through university experiences and observations within their university environment rather than acquiring the characteristics and norms of a culture that is different than their own which could impact their self-efficacy during college (Ojeda, Flores, & Navarro, 2011). In the current study's sample, females were more highly represented than males, but when examining each campus individually, a more complete understanding of this difference is represented. In 2015, at Texas State University, 58% of the entire student population were female and only 42%. In comparison, at the University of Texas Pan-American in 2014, 56% of the student population was female and 44% male. The fact that the majority

of the sample was female was not surprising given the makeup of the Hispanic-Serving Institutions that were included in this study. This is a limitation of the sample being represented by more females than males and not demonstrating an equal balance. In examining gender, a more equal balance within the sample would provide an opportunity to study the influence that gender has on self-efficacy during college. Future studies examining these variables should conduct their research using a more balanced proportion of male and female participants who are of Mexican-origin.

Directions for Future Research

The results of the study suggests that more research addressing campus perceptions, parental support, and self-efficacy should be conducted among larger samples of Mexican-origin students. In particular, the larger sample size should be collected from more than just two college campuses. In the present study, both Texas State University and the University of Texas-Pan American are Hispanic-Serving Institutions in Texas. Texas State University is represented by a 35% Hispanic population while the University of Texas Pan-American has a much larger Hispanic population consisting of 89% of the student body. In using a larger Hispanic sample collected from a larger and more diverse group of colleges, researchers would be able to gain a clearer understanding of how acculturation and university perceptions are related to self-efficacy during college. In addition, researchers could contribute further to the literature by comparing the diversity among students' college experiences within Hispanic-Serving Institutions as compared to students' experiences at institutions not identified as Hispanic-Serving Institutions. Previous studies have examined Hispanic-Serving campuses in order to capture the variety of students' college experiences, and found

positive correlations among their variables of study (Chun, Marin, Schwartz, Pham, & Castro-Olivo, 2016). Examples include studies regarding acculturation and its influence on Mexican-origin students' perceptions of their university and how these perceptions can contribute to their self-efficacy ratings during college. Future studies examining similar variables should conduct their research using a more diverse sample of Mexican-origin college students at campuses that are both Hispanic Serving and those that are not identified as Hispanic Serving Institutions.

While acculturation is an important factor to address this study found that higher levels of college self-efficacy were related to the participants reporting higher rankings of acculturation. However, in future studies it is important for researchers to also examine enculturation and how it contributes to students' self-efficacy. Previous studies have explored correlations between enculturation and acculturation in regards to college self-efficacy (Castillo, Lopez-Arenas, & Saldivar, 2010; Ojeda, Castillo, Rosales-Meza, & Pina-Watson, 2014). In these particular studies both acculturation and enculturation were determined to be significant predictors of self-efficacy among Mexican American college students (Ojeda, Flores, & Navarro, 2011). It is suggested that in future studies both acculturation and enculturation should be studied to determine how they impact Mexican-origin students' college self-efficacy.

Implications

It is imperative that Hispanic-Serving colleges/universities use these findings to better serve this constantly growing population. Staff development opportunities should be provided in order to address cultural diversity and means to foster academic self-efficacy in the Mexican-origin college student population. Additionally, the academic

advising staff could provide students with an “Introduction to College” course that would be required on degree plans for all new students (Reid, Reynolds, & Perkins-Auman, 2014). This course could include a cultural diversity element, offer students information about the campus and resources available, and provide them the opportunity to enhance their college self-efficacy (Parker, Barnhardt, Pascarella, & McCowin, 2016). Finally, the counseling office could provide small groups or workshops to students and their families to help increase effective parental support at the college level. In combination, these programs and services if provided to Mexican-origin college students, is expected to not only help them in developing their self-efficacy, but in contributing to their academic achievement.

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