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# Latino/a Freshman Struggles: Effects of Locus of Control and Social Support on Intragroup Marginalization and Distress

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The transition to college can be difficult for many students; however, Latina/o students can face unique cultural stressors, impacting psychological health. Intragroup marginalization, or feeling marginalized by members within one's cultural community, is one such stressor that can impact Latina/o students' college experiences. Despite the challenges many Latina/o students face, Latina/os also demonstrate resilience and the ability to succeed. This study expands existing research on intragroup marginalization, using a cross-sectional design to test a mediational model of intragroup marginalization from friends and psychological distress, with locus of control and peer social support in a sample of 137 Latina/o college freshmen from a large public university in the western United States. Intragroup marginalization from friends predicted psychological distress. In addition, locus of control and social support from friends were identified as mediating variables. This research demonstrates the negative impact of intragroup marginalization from friends for Latina/o students, as well as the protective role of having an internal locus of control and peer social support on experiences of psychological distress. Results also highlight unique factors related to Latina/o freshmen college experiences as a means for improving Latina/o students' success in college.

Keywords: Latina/o college student, intragroup marginalization, psychological distress, locus of control, social support

Latina/os are the nation's largest minority group, making up more than 55 million people, or about 17% of the U.S. population (U.S. Census Bureau, 2015). While 2.2 million Latina/os were enrolled in college in 2013, only 15% (3.1 million) of Latina/os over the age of 25 hold a bachelor's degree, compared with about 36.2% of Whites, 22.5% of Blacks, and 53.9% of Asians (National Center for Education Statistics, 2013; U.S. Cen-

sus Bureau, 2015). Latina/o high school dropout rates have reduced by half over the past decade (from 32% to 14%) and Latina/o college enrollment in two- and 4-year colleges and universities has more than tripled over the past 20 years (National Center for Education Statistics, 2013; Pew Hispanic Center, 2012). Despite these improvements, however, Latina/os still have the highest dropout rates and lag behind other groups in attaining a 4-year degree (National Center for Education Statistics, 2013). Part of this discrepancy is because Latina/os are less likely than other groups to enroll in 4-year colleges, attend academically selective universities, and enroll full-time (National Center for Education Statistics, 2013). Given these low achievement rates, improving Latina/os' advanced educational attainment, retention, and success in college is a top priority (Castillo, 2009; Fry, 2002; Ojeda, Navarro, Rosales Meza, & Arbona, 2012).

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The transition from high school to college can be stressful and overwhelming for many students (Bennett & Okinaka, 1990; Llamas & Morgan Consoli, 2012; Solberg & Villarreal, 1997). However, ethnic/racial minority students can experience unique cultural stressors, such as discrimination and prejudice, that may negatively impact psychological well-being (Arbona & Jimenez, 2014; Rodriguez, Myers, Morris, & Cardoza, 2000) and contribute to psychological distress (Lam, 2007; Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003). Psychological distress can have detrimental effects on students' academic achievement and college persistence (Eisenberg, Golberstein, & Hunt, 2009). This can be particularly salient for Latina/o college students because they report higher rates of psychological distress compared with their non-Latina/o peers (Arbona & Jimenez, 2014; Chacon, Cohen, & Strover, 1986).

Latina/o college students often experience culturally related difficulties, including acculturative stress, intergenerational conflict, alienation, and discrimination, all of which can negatively impact students' well-being, mental health, and sense of belonging within the university (Gloria & Castellanos, 2003; Kim, 2011). Given these negative campus experiences, it is not surprising that many Latina/o students continue to experience the university as alienating and unwelcoming (Castellanos & Gloria, 2007; Castellanos, Gloria, & Kamimura, 2006; Gloria & Segura-Herrera, 2004). However, feelings of marginalization and exclusion can occur not only with members of the larger university community, but also within the Latina/o college community, referred to as intragroup marginalization (Castillo, Cano, Chen, Blucker, & Olds, 2008; Castillo, Conoley, Brossart, & Quiros, 2007; Llamas & Morgan Consoli, 2012; Llamas & Ramos-Sanchez, 2013). Latina/os grow-up receiving messages from other Latina/os about what it means to be Latina/o and, simultaneously, within the educational system they also encounter expectations rooted in dominant cultural values. During the process of adjusting to college, Latina/o students can feel unable to live up to cultural expectations and experience cultural distancing between themselves and their Latina/o culture (Castillo, 2009). Latina/o college students can experience stress because of pressures by members of their own ethnic group about how to behave, accusations of acting "White," and demands to stay loyal to their Latina/o culture (Lopez, 2005; Ojeda et al., 2012).

While several studies have explored the impact of minority-related stressors on Latina/o college students' psychological health and wellbeing, these studies often focus on stressors occurring between the individual and the larger dominant society (e.g., discrimination, acculturative stress, and language barriers; Gluszek & Dovidio, 2010; Gonzales, Germán, & Fabrett, 2012; Pérez, Fortuna, & Alegría, 2008). Fewer studies have directly examined the psychological impacts of within group stressors, such as intragroup marginalization (Castillo, Conoley, Choi-Pearson, Archuleta, Van Landingham, & Phoummarath, 2006; Llamas & Morgan Consoli, 2012). Furthermore, despite these many barriers and difficulties, Latina/o students often demonstrate incredible resilience (Llamas & Morgan Consoli, 2012; Morgan Consoli & Llamas, 2013; Morgan Consoli, Delucio, Noriega, & Llamas, 2015) and continue to successfully navigate higher education despite challenges (Castellanos et al., 2006; Gloria & Segura-Herrera, 2004). Identifying protective factors is key to better understanding how Latina/o students can overcome these challenges.

#### **Stress Models**

Models of Latina/o mental health suggest that stressors can be both universal and culturally specific (Cervantes & Castro, 1985; Stein et al., 2012; Vega, Hough, & Miranda, 1985). These models posit that cultural stressors related to one's ethnic background (such as intragroup marginalization) can be influenced by a variety of important factors (i.e., locus of control, selfefficacy social support, spirituality) pertaining to mental health outcomes for Latina/o college students (i.e., psychological distress). In addition, Lazarus and colleagues (e.g., Folkman, Schaefer, & Lazarus, 1979; Lazarus, 1966; Lazarus & Folkman, 1984) developed a cognitively oriented theory of stress. Within this theory, stress is viewed as a relationship between the individual and the environment-with the meaning that an individual places on the stressful event being closely related to his or her subsequent functioning (Lazarus & Folkman, 1984). The theory identifies two processes, cognitive appraisal and coping, as critical mediators of the stressful experiences and their outcomes (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984).

Cognitive appraisal describes the evaluative cognitive process that intervenes between the stressor and the individual's reactions (Lazarus, 1966). As part of the appraisal process, several variables, including locus of control, may play a role in the experience of stress and subsequent functioning (Lazarus, 1966; Roddenberry & Renk, 2010). Lazarus' theory suggests that locus of control may impact stress (Lazarus, 1966), with negative life events reducing an individual's sense of personal control, thereby inducing feelings of helplessness or impairing the individual's ability to cope, and resulting in increased mental health problems (Haine, Ayers, Sandler, Wolchick, & Weyer, 2003). Applications of the theory have found an internal locus of control to serve as a partial mediator between stress and illness among college students (Roddenberry & Renk, 2010). However, past research has noted the lack of diversity in testing such a model, suggesting the need for testing with other ethnic groups (Roddenberry & Renk, 2010).

The second process, coping, describes the individual's efforts to manage the demands of the stressful event. Coping is an important mediator of emotional outcomes and is often used to explain the variability in outcomes associated with stress (Folkman, Lazarus, Gruen, & DeLongis, 1986). Social support, the most highly studied coping resource, can facilitate adaptive responses, having positive effects on physical and mental health (Morgan Consoli et al., 2015;

Thoits, 1995; Vogel & Wei, 2005) and has been found to serve as a mediator of psychological distress (Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Stevens et al, 2013; Trunzo & Pinto, 2003). Applying the model, negative life events can impact one's perception that he or she has the available support needed to overcome the event, resulting in negative mental health outcomes. Conversely, believing social support is available can enhance one's self-image and increase one's belief that he or she has the resources needed to overcome the difficulty, ultimately having a positive impact on mental health (Pierce, Baldwin, & Lydon, 1997). Understanding the potential roles of locus of control and social support may help to provide a broader picture in understanding the psychological health of Latina/o students. To this end, the present study applies models of Latina/o mental health (Cervantes & Castro, 1985; Stein et al., 2012; Vega, Hough, & Miranda, 1985) and the cognitively oriented theory of stress by Lazarus and colleagues (e.g., Folkman et al., 1979; Lazarus, 1966; Lazarus & Folkman, 1984) to expand previous research on intragroup marginalization by examining its impacts on psychological distress, as well as testing the potential mediating factors of locus of control and social support (Figure 1).

#### **Intragroup Marginalization**

Given the impact that minority stressors can have on Latina/o psychological health, the examination of a within-group cultural stressors seem may be important to explore. Intragroup marginalization refers to the perceived interper-

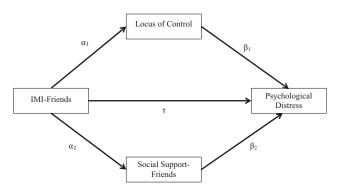


Figure 1. Conceptual mediation models. IMI = Intragroup Marginalization Inventory.

sonal distancing by members of one's ethnic/ racial group when the individual deviates from cultural norms. Intragroup marginalization is grounded in social identity theory and group dynamics research, which suggests that when a group member does not act in accordance with group norms they threaten the stability of the group. To maintain the group's distinctiveness, nonconforming members are marginalized (Abrams, Marques, Bown, & Henson, 2000; Marques, Abrams, & Serôdio, 2001; Ojala & Nesdale, 2004). Within the context of intragroup marginalization, interpersonal distancing occurs as a social sanction imposed upon an individual for exhibiting behaviors outside of the ethnic/racial group's norms, which can result in criticism, teasing, or rejection (Castillo, 2009; Castillo et al., 2008). This includes both implicit and explicit reminders and in-group pressure to abide by these norms and expectations about issues such as attire, relationships, attitudes, and behaviors (Contrada et al., 2001). Latina/o students can struggle as they try to balance the cultural expectations of the university environment and the expectations of their own Latina/o cultures, particularly as pressure to conform to one's ethnic/racial group has been related to high levels of stress and decreased self-esteem (Contrada et al., 2000). For Latina/o college students, intragroup marginalization from family and friends has been linked to poorer college adjustment, greater acculturative stress, and increased depressive symptoms (Cano, Castillo, Castro, de Dios, & Roncancio, 2014; Castillo et al., 2007, 2008; Llamas & Morgan Consoli, 2012; Llamas & Ramos-Sanchez, 2013).

Family members, peers, and members of the ethnic community can enforce cultural group norms (Castillo et al., 2006). Most research examining intragroup marginalization has focused on intragroup marginalization by family members, noting the cultural emphasis on family among Latina/os (Cano et al., 2014; Castillo et al., 2008; Llamas & Morgan Consoli, 2012). However, some research suggests that a focus on intragroup marginalization by peers may be more developmentally appropriate, given that college students are often away from family and spending increasing amounts of time interacting with peers and friends (Llamas & Morgan Consoli, 2012; Llamas & Ramos-Sanchez, 2013).

#### **Psychological Distress**

Much research has been conducted on the unique challenges faced by Latina/o college students (e.g., racism and discrimination, difficult campus climate, and lack of academic role models), which can elevate students' psychological distress, impacting overall mental health (Crocket, Iturbide, Torres Stone, McGinley, Raffaelli, & Carlo, 2007), academic performance (Alva & de Los Reyes, 1999), and college persistence (Brackney & Karabenick, 1995; Martinez, Sher, Krull, & Wood, 2009). Latina/o college students report greater psychological distress and higher rates of depression and anxiety compared with their non-Latina/o peers (Arbona & Jimenez, 2014; Chacon, Cohen, & Strover, 1986; Contreras, Fernandez, Malcarne, Ingram, & Vaccarino, 2004). Examinations of minority status and psychological distress among Latina/os and White freshman college students found that minority status stressors, such as within-group tensions, were unique predictors of psychological distress beyond that accounted for by demographic variables, acculturation variables, and college role stressors (Saldaña, 1994). These findings highlight the importance of attending to minority status stressors, such as intragroup marginalization, among Latina/o college students. Intragroup marginalization of friends has been linked to acculturative stress (Llamas & Ramos-Sanchez, 2013), and acculturative stress has been found to be a predictor of psychological distress (Hovey, 2000; Toman & Surís, 2004), suggesting a potential relationship between intragroup marginalization of friends and psychological distress.

#### **Locus of Control**

Despite the challenges that Latina/o students face, factors have been identified that can assist Latina/os in coping with these difficulties (Alva & Padilla, 1995). Locus of control refers to the location of perceived power to affect change (Rotter, 1972). An internal locus of control is described as one perceiving event outcomes as contingent on one's own behavior or having high personal control, whereas an external locus of control is defined as one perceiving outcomes in life as beyond one's control and a result of luck or fate or having low personal control.

Locus of control can serve as an interpersonal resource aiding in adjustment or can hinder coping (Haine et al., 2003). An internal locus of control has been identified as an important factor in emotional adjustment and coping with stress and has been associated with efforts to improve functioning and greater resistance to psychological dysfunction (Parkes, 1984; Solomon, Mikulincer, & Avitzur, 1988; Spector et al., 2001; Strickland, 1978). In addition, it is associated with well-being and a more positive psychological adaption (Shapiro, Schwartz, & Astin, 1996). College students with an internal locus of control report feeling more accepted than those with an external locus of control (Kang, Chang, Chen, & Greenberger, 2015). Having an external locus of control has been found to be more stressful and predictive of psychological distress (Lazarus & Opton, 1966; Ward & Kennedy, 1992) and less life satisfaction (Crisson & Keefe, 1988; Mirowsky & Ross, 2003).

It has been suggested that there may be ethnic/racial differences in how locus of control may relate to distress and well-being (Pervin, 1999). For example, Latina/os have been found to report higher external locus of control than Whites (Burns, Maniss, Young, & Gaubatz, 2005; Kang et al., 2015). Research on the impact of locus of control for Latina/os has been mixed. Some research has posited that an external locus of control may have positive effects, such as diminished stress when facing difficulties and promoting physical and psychological well-being such as in other populations (Flórez et al., 2009). Another study found an external locus of control to mediate the relationship between religiosity and life satisfaction (Fiori, Brown, Cortina, & Antonucci, 2006). Other research on Latina/o college students has linked an internal locus of control to resilience (Bonanno, 2004) and well-being (García, Ramı'rez, & Jariego, 2002). Similarly, a sense of personal control mediated the relationship between discrimination and self-esteem and partially mediated the relationship between discrimination and psychological distress among Latina/os (Moradi & Risco, 2006). Despite the variability in findings, past literature does suggest that locus of control is an important mediator in understanding how stress impacts Latina/o college students. Liang and Bogat (1994) note that there may also be an interactive relationship between cultural factors, locus of control, and social support in how it affects stress for different ethnic/racial groups, suggesting social support may be another important factor to consider.

#### **Social Support**

The positive impact of social support on coping and stress has been well documented in the literature (Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho, 2011; Vaughan, Foshee, & Ennett, 2010). Social support has been found to lessen the impact of stressors for Latina/o college students and is linked to college success and lower psychological distress (Castillo, Conoley, & Brossart, 2004; Lopez, Ehly, & García-Vázques, 2002). Qualitative studies have found social support, in the form of both peers and family, to be a prevalent theme of thriving (i.e., being better off after an adversity; Carver, 1998) among Latina/o college students (Morgan Consoli, Lopez, Gonzales, Cabrera, Llamas, & Ortega, 2011). Familial social support has been found to be a mediator of acculturation and depression (Rivera, 2007) and a mediator of intragroup marginalization and thriving (Llamas & Morgan Consoli, 2012). Because of the cultural emphasis on family, past research on social support among Latina/os has primarily focused on familial support. However, research suggests that, for college students, peers may play a more significant role in students' psychological adjustment and distress (Llamas & Ramos-Sanchez, 2013). Previous research has found peer support to be a greater predictor of lower psychological distress, greater college adjustment, and greater wellbeing than familial social support for Latina/o students (Páramo, Martínez, Tinajero, & Rodríguez, 2014; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003). In addition, peer social support has been found to be a mediator of intragroup marginalization and college adjustment for Latina/o college students (Llamas & Ramos-Sanchez, 2013). Given past findings, it stands to reason that peer support may mediate the effect of a stressor such as intragroup marginalization, which entails negative judgment from peers.

#### **Present Study**

Despite increased college enrollment rates, Latina/os continue to experience an achievement gap, lagging behind other groups in attaining a 4-year degree (National Center for Education Statistics, 2013). While universities have improved in their recruitment of Latina/o students, retaining and graduating these students remains a challenge, making the first year of enrollment a critical time to explore factors that may contribute to this achievement gap (Oseguera, Locks, & Vega, 2009; Padilla, 2007; Pappamihiel & Moreno, 2011). The purpose of this study was to explore the unique role of intragroup marginalization, a potential contributing factor on psychological distress, by testing a mediational model of intragroup marginalization from friends and psychological distress with locus of control and social support among Latina/o freshmen. Applying the cognitive stress model (Folkman et al., 1979; Lazarus, 1966; Lazarus & Folkman, 1984), it was expected that a lack of personal control (an external locus of control) and social support would result in greater difficulty dealing with experiences of intragroup marginalization of friends, resulting in higher levels psychological distress. It was hypothesized that intragroup marginalization from friends would positively predict psychological distress, with greater experiences of intragroup marginalization from friends predicting greater psychological distress. In addition, it was anticipated that locus of control and social support from friends would mediate the relationship between intragroup marginalization and psychological distress, with intragroup marginalization of friends no longer predicting psychological distress after controlling for locus of control and social support from friends.

#### Method

#### Procedure

Freshman students were recruited through the university-based e-mail system and asked to complete an anonymous online survey. Based upon institutional data from the university during the year of data collection, freshman at the university totaled approximately 4,400, with approximately 27% identifying as Chicano/Latino (n = 1180). All freshman (4,400) were sent an e-mail that briefly described the study, requested their voluntary participation, informed them of their rights as participants, and provided them with a link to a secure website to

complete the online survey anonymously. Students who met the study criteria (freshman and self-identify as Latina/o) were invited to click on the link and complete the survey. Those who did not meet study criteria were not required to engage in any further action and thanked for their time. A consent form was included in the e-mail, which outlined the research study, goals, risks, and benefits of participation, and the participant's right to discontinue the study at any time. The response rate for Latina/o freshman was approximately 13%. Data collection terminated after 2 weeks once the needed sample size (n = 116) was achieved and the budgeted costs for incentives were expended. All participants completed the survey online and received a \$5 gift card for their participation. Click counts were not captured, however, all participants who took the survey completed the entire questionnaire. Human subjects approval was gained prior to data collection and the study was conducted in compliance with the university's internal review board.

# **Participants**

Power analysis to determine adequate sample size for bias-corrected bootstrapping mediation methods must account for the effect sizes for each path ( $\alpha$  and  $\beta$ ). Fritz and Mackinnon (2007) conducted empirical estimates of sample size at .8 power and calculated that a sample of 116 is needed for medium (.39)  $\alpha$  path and large (.59) β path. A total of 151 participants completed the survey; however, 14 indicated they were not of freshman status and were therefore excluded from the analysis. Participants included in the analyses were 137 self-identified Latina/o undergraduate students from a large West Coast public university with a mean age of 18.55 (SD = .61). Approximately 74% of participants self-identified as Mexican, 10% Salvadoran, 6% Guatemalan, 3% Puerto Rican, 2% Peruvian, 2% Honduran, 2% Costa Rican, 7% South American, and 2% Central American. The total exceeds 100% because 9% of the sample identified as having multiple ethnicities. Approximately 71% of the participants identified as female and 29% identified as male. Just over 17% of the sample identified as firstgeneration immigrants to the United States, 66% as second generation, and 17% as third

generation or later. Over 66% were first generation college students.

#### Measures

Intragroup marginalization-friends. Perceived intragroup marginalization was measured using the Intragroup Marginalization Inventory (IMI; Castillo et al., 2007). The IMI is designed to measure the interpersonal distancing that can occur when acculturating individuals are observed to be embracing behaviors and beliefs of a group different from their own ethnic group. The IMI is composed of 3 scales: Family Scale (IMI-Family), Friends Scale (IMI-Friends), and Ethnic Group Scale (IMI-Ethnic Group). Each of the items is rated on a 7-point Likert-type scale, ranging from 1 (never/does not apply) to 7 (extremely often), with higher scores indicating higher perceptions of intragroup marginalization. For this study only the IMI-Friends scale was used. Items on the IMI-Friend consist of statements such as, "Friends of my ethnic group have a hard time accepting why I don't act the way I used to," and "Friends of my ethnic group tell me that I am 'brown on the outside but white on the inside'." Examinations of convergent validity with Latina/o students have found it to be positively correlated with acculturative stress (Castillo et al., 2007). Studies have demonstrated internal reliability estimates for IMI-Friend ranging from .80 to .89 (Castillo et al., 2007; Llamas & Ramos-Sanchez, 2013). For this study's sample, the coefficient alpha was .86.

Psychological distress. Psychological distress was assessed using the Outcome Questionnaire (OQ-45; Lambert et al., 1996) to measure important areas of functioning. The OQ-45 consists of 45 items and is composed of three domains: Symptom Distress (SD), Social-Role functioning (SR), and Interpersonal Relationships (IR). Items are rated on a five-point Likert-type, with high scores indicating greater disturbance. The questionnaire has been normed on undergraduate, community, and clinical samples (Lambert et al., 1996, 2004). The measure has demonstrated high concurrent validity with depression, anxiety, and general distress measures (Lambert et al., 1996). Test-retest reliability and internal consistency values among student populations are .84 and .93, respectively (Lambert et al., 1996). Cronbach's alpha for this study was estimated to be .93.

Locus of control. Locus of control was measured using the Adult Nowicki-Strickland Internal-External Control scale (ANS-IE; Nowicki, 2012; Nowicki & Duke, 1974) because it tends to yield scores that are relatively uncontaminated by social desirability (Finch, Spirito, Kendall, & Mikulka, 1981; Nowicki & Duke, 1974, 1981; Piotrowski, Dunn, Sherry, & Howell, 1983). The ANS-IE is one of the most frequently used locus of control measures (Beretvas et al., 2008). The scale consists of 40 items that require a "yes" or "no" answer, with higher scores indicating an external locus of control. Past research has used a score of 12 or higher to indicate an external locus of control (Fisher et al., 1998; Hulme & Middleton, 2013; Nowicki & Duke, 1974). Items were constructed on the basis of Rotter's (1966) theory of locus of control. An example of an item is, "Do you think that people can get their own way if they just keep trying?" Convergent validity was established by correlating ANS-IE Scale scores with scores on the Rotter Internal-External Locus of Control Scale (Rotter, 1966) and with measures of several personality variables that have been theoretically and empirically related to the locus of control construct. These correlations yielded evidence of adequate construct validity (Marecek & Frasch, 1977). Adequate split-half reliabilities (.74-.86), test-retest reliability (.56-.83), and internal consistency (.66–.75) have been found with young adults and college students specifically (Hulme & Middleton, 2013; Nowicki, 2012; Nowicki & Duke, 1974, 1981). The scale has been found to have predictive validity across ethnicities and socioeconomic statuses (Howerton, Enger, & Cobbs, 1993; Li & Chung, 2009; Nowicki & Duke, 1974; Strickland & Nowicki, 1971). Internal reliability for this study was estimated to be .71.

Social support. The Perceived Social Support questionnaire (PSS-Fr; Procidano & Heller, 1983) contains 20 items assessing perceived social support from friends (e.g., "My friends give me the moral support I need"). Items are rated as either "yes," "no," or "don't know" and scored depending on the direction of the item, a "yes" response is assigned 1 point, indicating support, or 0 points, indicating no support. Strong internal consistency has been found for

Latina/o college students with reliability estimates ranging from .88–.92 (Gloria, Castellanos, Lopez, & Rosales, 2005; Llamas & Ramos-Sanchez, 2013; Rodriguez et al., 2003). Internal reliability for this study was .86.

#### Results

#### **Preliminary Analysis**

Means, SDs, and correlations for variables are presented in Table 1. A significant positive relationship was found between intragroup marginalization from friends and psychological distress, r = .27, p < .01 and locus of control, r =.20, p < .05. Students reporting higher levels of intragroup marginalization from friends also reported higher levels of psychological distress and higher levels of external locus of control. A significant negative relationship was found between social support from friends and intragroup marginalization from friends, r = -.21, p < .05. Students reporting lower levels of social support from friends also reported higher levels of intragroup marginalization from friends and psychological distress. A univariate analysis of variance was conducted to determine whether participant variables were related to the dependent measure, psychological distress. Participant variables included gender, first generation college student status, and generational status. Participant variables were not significantly related to the dependent measure.

#### **Primary Analysis**

A mediation model was tested using a bootstrapping procedure to test the significance of the indirect effects (Preacher & Hayes, 2008). This method is preferred over traditional mediation approaches (e.g., Baron & Kenny, 1986; Sobel, 1982) because it estimates both the direct and indirect effects simultaneously, does not assume a standard normal distribution, and repeatedly samples the data to estimate the indirect effect (Preacher, Rucker, & Hayes, 2007). Confidence intervals (CIs) and the bootstrapestimated standard errors of the indirect effects were calculated from the probability of the distribution from all the resampled estimates. Such bias-corrected bootstrap methods provide more accurate confidence intervals than other bootstrap methods (MacKinnon, Lockwood, & Williams, 2004).

The mediation model consisted of four components: psychological distress (dependent variable), intragroup marginalization (independent variable), locus of control and social support (mediator variables), and gender, age, and generational status (covariates). Paths were estimated as follows: (a) the relationship between intragroup marginalization from friends and psychological distress (path  $\tau$ ); (b) the relationship between intragroup marginalization from friends and locus of control and social support from friends (paths  $\alpha_1$   $\alpha_2$ ); and (c) the relationship of mediator variables (paths  $\beta_1$   $\beta_2$ ) and intragroup marginalization from friends (path  $\tau$ ) with psychological distress to test for indirect effects (path  $\tau$ '). The indirect effect was quantified as the product of the mean bootstrapped sample estimates (N = 5,000) of the regression coefficients. Bootstrap confidence intervals were generated for the indirect effect. Any indirect effect in which the confidence interval

Table 1 Means, SDs, and Intercorrelations of the Measures (N = 137)

Subscale	1	2	3	4	5	6	7
1. Age		17	.17	.05	.09	.11	86
2. Female		_	.08	22	23	.04	.16
3. Generational status			_	.07	08	.12	.00
4. IMI-Friends				_	.27**	.20*	21*
5. Psychological distress					_	.52**	50**
6. Locus of control						_	37**
7. Social support-Friends							_
M	18.55	.72	2.12	41.55	56.31	13.20	14.50
SD	.61	.45	.94	16.51	22.29	5.12	4.62

Note. IMI = Intragroup Marginalization Inventory.

<sup>\*</sup> p < .05. \*\* p < .01.

does not include zero is considered significantly different from zero, indicating a meaningful effect of mediation.

Path results are presented in Figure 2. The overall model was significant, F(6, 130) = 28. 63, adjusted  $R^2 = .41$ , p < .0001. All direct paths were significant, with coefficients representing unstandardized parameter estimates. Intragroup marginalization of friends positively predicted locus of control ( $\alpha_1 = .06, p < .05$ ) and psychological distress ( $\tau = .36$ , p < .01), with greater intragroup marginalization of friends predicting a higher external locus of control and greater psychological distress. Intragroup marginalization of friends negatively predicted social support from friends ( $\alpha_2$  = -.06, p < .05), with greater intragroup marginalization of friends predicting less social support from friends. Locus of control ( $\beta_1 = 1.66$ , p < .01) positively predicted psychological distress and social support from friends ( $\beta_2$  = -1.64, p < .01) negatively predicted psychological distress, with greater external locus of control predicting greater psychological distress and less social support from friends predicting greater psychological distress.

Using SPSS macros and syntax provided by Preacher and Hayes (2008), indirect effects and bootstrap confidence intervals were calculated based on 5,000 repeated samples. The bootstrapping procedure was used to determine whether the variables of locus of control and social support from friends were significant mediators of distress, whereby zero fell outside of the 95% confidence intervals around the indi-

rect effect. Results of the mediation tests are summarized in Table 2. The bootstrapping procedure indicated that, when controlling for age, gender, and generational status, locus of control (range = .01-.26) and social support from friends (range = .02-.19) were significant mediators of distress. This mediational model represented a large effect size ( $R^2 = .41$ ,  $f^2 = .69$ ).

#### Discussion

This research highlights the negative impact of intragroup marginalization from friends on psychological distress for Latina/o freshmen, as well as the roles of locus of control and social support from friends in this process. As hypothesized, intragroup marginalization from friends predicted psychological distress. This parallels past research findings, demonstrating that intragroup marginalization by family and friends predicts acculturative stress, which has been linked to psychological distress (Toman & Surís, 2004) and depression (Hovey, 2000). This study demonstrates the unique role of intragroup marginalization from friends on psychological distress, and that it may be an important factor to examine when trying to understand the unique challenges Latina/o college students face. Intragroup marginalization from friends has been demonstrated to impact college adjustment (Llamas & Morgan Consoli, 2012; Llamas & Ramos-Sanchez, 2013) and this study's findings further highlight the range of impact that intragroup marginalization from friends can have-not only on the Latina/o stu-

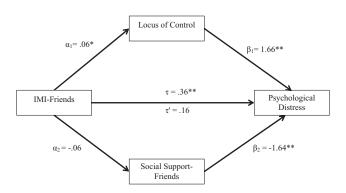


Figure 2. Locus of control and social support as mediators between intragroup marginalization and distress. Coefficients represent unstandardized parameter estimates (SE). F (6, 130) = 28.63, adjusted  $R^2$  = .41, p < .0001. IMI = Intragroup Marginalization Inventory. \* p < .05. \*\* p < .01.

Table 2
Indirect Effect of Intragroup Marginalization From Friends on Distress Through
Locus of Control and Social Support

	Bootstrap estimate of		Bias corrected and accelerated 95% confidence intervals		
Variable	indirect effect	SE	Lower bound	Upper bound	
Locus of control	.10	.06	.01	.25	
Social support-Friends	.09	.04	.02	.19	

dent's academic life, but his or her psychological life as well.

As anticipated, locus of control and social support from friends served as mediators between intragroup marginalization from friends and psychological distress, supporting Lazarus and colleagues' cognitively oriented theory of stress (Folkman et al., 1979; Lazarus, 1966; Lazarus & Folkman, 1984) where cognitive appraisal (locus of control) and coping (social support) serve as mediators of stressful experiences and their outcomes (Lazarus et al., 1999). These findings also parallel previous research, which demonstrated the challenges of having an external locus of control on psychological health (Crisson & Keefe, 1988; Mirowsky & Ross, 2003). An internal locus of control is linked to having an outlook that views life changes as challenges rather than threats, as is perceived by those with an external locus of control; thus those with an internal locus of control are more effective at using their resources (Krause & Stryker, 1984; Ryff, 1989). Despite conflicting research on the role of locus of control in mental health, this study suggests that, for Latina/o college students, the belief that one does not have personal control over one's life is important when encountering intragroup marginalization from friends and can lead to poorer psychological health. Students with an external locus of control may perceive experiences of intragroup marginalization from friends as an insurmountable challenge that is beyond their control and cannot be remedied. Past research has also highlighted the importance of peer social support from friends for Latina/o college students, identifying peer social support as a mediator of intragroup and college adjustment (Llamas & Ramos-Sanchez, 2013). Locus of control and social support may work together so that students who encounter intragroup marginalization from friends believe

that they can actively seek other peers who are supportive and will provide a sense of belonging, thus possibly counterbalancing the negative impacts experienced through intragroup marginalization.

These findings underscore the importance of attending to intragroup marginalization by friends for Latina/o students. Faculty, staff, and counselors working with Latina/o students should consider issues related to intragroup marginalization by friends when working with Latina/o students who are experiencing distress. In addition to assessing for intragroup marginalization, helping students feel empowered so that they can proactively improve their current situations will be important, especially for those with an external locus of control. Concrete solutions that entail the larger community, such as finding other peer groups to join, may be one suggestion for these students. In addition, normalizing the experience as a potential part of the adjustment process to college may help students feel less isolated and alone in their experiences.

While this study focused on Latina/o students, intragroup marginalization is not a "Latina/o only" issue and has been observed among other students of color (Castillo et al., 2007). Given that other students of color also experience intragroup marginalization, this suggests the need for more global change within the context of the larger college environment and the need to promote more acceptance and diversity. This is consistent with recent calls for greater faculty diversity, with some suggesting that the lack of diversity contributes to the achievement gap (Fairlie, Hoffmann, & Oreopoulos, 2014). Similar calls have also been made for greater staff diversity and cultural competence, specifically among counseling center clinicians (New, 2016). Promoting diversity and cultural competence within college counseling centers is also important, suggesting

the need to incorporate intragroup marginalization within clinicians' multicultural training. Many university counseling centers (e.g., University of New Hampshire, University of Nevada, University of North Carolina, University of Kentucky, Syracuse University) recognize and address the unique challenges and needs of students of color programmatically, and including intragroup marginalization into these resources may be valuable (New, 2016). College counseling settings may consider creating groups for students experiencing these issues as a means for them to connect, identify, and develop support systems. Some counseling centers already hold specific groups for students of color (e.g., University of Texas, Illinois State University, Dartmouth College, University of Missouri, Vanderbilt University), which may serve as a feasible mechanism in which to incorporate these findings.

#### Limitations

These findings, while significant, have several limitations that limit the scope of interpretation. First, it is important to note that this study used a cross-sectional design with a selfreport questionnaire and, therefore, no causeand-effect relationship can be asserted. In addition, data collection ended after two weeks when the needed sample size was achieved, because of a limited budget to provide incentives. Given this short turnaround, there may be differences not captured in this study between the students who responded more quickly than those who did not respond. Second, it is important to recognize that the majority of the participants was female and while females are slightly more represented in the college population where the study was conducted, there was an overwhelming representation in this study. Although we controlled for gender, findings could potentially differ among male-only populations. In addition, the choices of gender offered were a binary selection, not allowing for participants who identified as gender nonconforming, possibly causing some participants to self-select out of the study because of this constraint. The majority of participants was Mexican American college students, so findings may not necessarily be generalizable to the large umbrella of individuals identifying as "Latina/o," given that Latina/os represent a heterogeneous group in

terms of national origin, physical appearance, political ideology, immigration status, and class status (Fry, 2002; Johnson, Farrell, & Guinn, 1997). As the study was conducted on the central West Coast, a predominantly Mexican American sample is not surprising (Hurtado, 2002), however, it would be interesting for future studies to examine these constructs in differing parts of the United States, where there may be more diversity in Latina/o culture of origin. The majority of participants was also second-generation immigrants (children whose parent[s] immigrated to the United States). While distress levels did not differ by generational status, it would be interesting to explore the impacts of intragroup marginalization among first-generation students specifically. Last, this study was focused on marginalization within one's ethnic group rather than marginalization that can occur across the campus. Inclusion of this additional factor may serve as a future research direction.

#### **Future Directions and Implications**

Findings from this study shed further light on the role that intragroup marginalization plays in Latina/o students' college experiences. This research helps to expand the literature on intragroup marginalization, further supporting the need to attend to intragroup marginalization by friends to better understand the unique challenges that Latina/o college students may face. Though many studies have explored the construct of intragroup marginalization, a more comprehensive picture is needed to provide a more sophisticated and nuanced understanding of this phenomenon. Such an understanding could provide an effective means of identifying at-risk students as well as aid in developing more targeted interventions.

Within the college environment, intragroup marginalization from friends may be an important issue to address at the beginning of a student's college education. Describing and normalizing intragroup marginalization during college orientation, while also highlighting it as a potential experience and preparing students for adjusting to such difficulties may be helpful. Most orientations focus on the technicalities of registering for classes and navigating the various campus resources (mostly academic resources). However, the process of succeeding

and adjusting to college also involves social and emotional components. Discussing these additional issues and concerns with students at the onset of their college career, as well as highlighting important resources, seems important. For example, while many student orientations introduce students to the college counseling center, it may help to describe college counseling centers as a potential and appropriate resource for students specifically encountering intragroup marginalization as well as other types of discrimination. There have been some specialized orientations for students of color (such as at Yale and University of California, Berkeley) that help to highlight and address the unique issues that can emerge (i.e., "Cultural Connections," Yale, n.d.; "The New Graduate Minority Student Orientation," University of California Berkeley, n.d.). The typical approach by Student Affairs offices has been to bring students of similar ethnic/racial backgrounds together. However, past research has noted that the most successful orientation programs attend to the socioeconomic and cultural backgrounds of students of color (Laden, 1994, 1998); as the current study highlights, a shared ethnic/racial background alone does not ensure that a student will find belonging and support within that group. Explicitly engaging in conversations that introduce the idea of intragroup marginalization may be helpful for students struggling to fit within their own cultural norms.

#### **Abstracto**

La transición hacia la universidad puede ser difícil para muchos estudiantes. Sin embargo, los estudiantes Latina/os pueden enfrentar factores especiales de estrés culturales que afectan a su salud psicológica. Marginación intragrupal, o sea, sintiéndose marginalizado por los mismos miembros de su comunidad cultural, es un tipo de estrés cultural que puede afectar a los estudiantes Latina/os en las experiencias de universidad. A pesar de los desafíos que los estudiantes Latina/os enfrentan, ellos también demuestran resiliencia y la capacidad para triunfar. Este estudio amplía las investigaciones que existen sobre la marginación intragrupal, utilizando un diseño del estudio transversal para probar un modelo de mediación de la marginación intragrupal de amigos y la angustia psicológica. Se usa locus de control y el apoyo social de compañeros en su muestra de 137 estudiantes Latina/os en su primer año en una universidad pública y grande en el oeste de los Estados Unidos. La marginación intragrupal de amigos predice angustia psicológica. También, locus de control y apoyo social de compañeros se identificaron como variables mediadoras. Ésta investigación demuestra el impacto negativo de la marginación intragrupal de amigos para los estudiantes Latina/os, además del rol protector de tener un locus de control y apoyo social de compañeros en las experiencias de angustia psicológica. Los resultados también destacan los factores únicos que les afectan a los estudiantes Latina/os en su primer año de estudio como medios para mejorar el éxito en la universidad para los estudiantes Latina/os.

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