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## Leadership among Sorority Women: Self-Efficacy, Setting-Level Norms, and Participation

Authors	khatib, Nadim
Citation	Khatib, Nadim. "Leadership among Sorority Women: Self-Efficacy, Setting-Level Norms, and Participation." 2017. Thesis, Georgia State University. <a href="https://doi.org/10.57709/10066728">https://doi.org/10.57709/10066728</a>
DOI	<a href="https://doi.org/10.57709/10066728">https://doi.org/10.57709/10066728</a>
Download date	2026-03-06 21:53:07
Link to Item	<a href="https://hdl.handle.net/20.500.14694/13434">https://hdl.handle.net/20.500.14694/13434</a>

LEADERSHIP AMONG SORORITY WOMEN: SELF-EFFICACY, SETTING-LEVEL  
NORMS, AND PARTICIPATION

by

NADIM KHATIB

Under the Direction of Wing Yi Chan, PhD

ABSTRACT

There is a gender gap in political and business leadership. the purpose of this study is twofold. First, it investigated the extent to which leadership self-efficacy would be associated with leadership participation among sorority college students. Second, it examined the extent to which the sorority setting, through setting-level norms, would moderate the effect of leadership self-efficacy on participation. The current study found that higher leadership efficacy is related to higher leadership participation in female college students who are sorority members. This study also found that behavioral setting-level norms are related to leadership participation. This study found that the interaction between leadership self-efficacy and behavioral norms had a

significant negative relationship with leadership participation. Scientific and practical implications are discussed, as well as future directions based on our findings.

INDEX WORDS: Gender, Stereotypes, Leadership, Community, Norms, Efficacy

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NADIM KHATIB

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of  
Masters of Arts  
in the College of Arts and Sciences  
Georgia State University

2017

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May 2017

## **DEDICATION**

I want to thank my supportive family for encouraging me along the way and supporting me in every way possible. I want to thank my friends for also being there and pushing to complete this milestone.

## **ACKNOWLEDGEMENTS**

I acknowledge my advisor Dr. Chan and the committee members Dr. Kuperminc and Dr. Swartout for their help with this thesis.

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## 1 INTRODUCTION

There is a gender gap in political and business leadership. In the United States, women are underrepresented in elected office, making up only 19.4 % of the U.S. Congress and 22.4% of governors (Catalyst, 2017; National Women Political Caucus, 2013). Furthermore, only 4.8% of Fortune 1000 companies' CEOs are women (Catalyst, 2014; Catalyst, 2013). The Center for Information and Research on Civic Learning and Engagement (CIRCLE) found that the leadership gap between the genders starts as early as kindergarten. Girls in Kindergarten reported lower levels of leadership confidence, leadership expectations, and leadership interest than boys, which may contribute to the leadership gender gap in adulthood (CIRCLE, 2013). Data from a nationally representative sample show that in freshman year of college, 7.6% more men reported high leadership confidence than women; subsequently, in senior year 13.7 % more men reported high leadership confidence than women (CIRCLE, 2013). The gender gap in leadership seems to persist and grow as women transition into adulthood.

Although recent research suggests that gender stereotypes contribute to women having lower levels of leadership self-efficacy (i.e. beliefs in their abilities and skills to lead), no research has specifically examined the role of leadership self-efficacy on leadership participation. Previous research suggests that women who internalize negative gender stereotypes incorporate those stereotypes into their self-concept and have low self-efficacy in the stereotyped domain (Eccles-Parsons et al., 1983). Beyond individual differences in women's experiences of gender stereotypes, community psychology research has found that social settings can have an influence on individuals within those settings through multiple ways, such as setting-level norms and relationships (Tseng & Siedman, 2007). However, research has not examined how setting-level norms could moderate the relationship between leadership self-

efficacy and leadership participation. Previous research suggests that undergraduate students who exhibit the strongest development in leadership are often members of fraternities and sororities (Astin, 1993). Sorority settings in particular, because of their all-women gender-composition, provide more opportunities for women to participate in leadership. However much of the research utilizes membership as a proxy measure to examine social processes within sororities (Astin, 1993; Antonio, 2001; Kezar & Moriarty, 2000). Social processes, such as setting-level norms, have the potential to explain the effect of sororities on leadership participation among college women. Thus, the purpose of this study is threefold. First, it investigated the extent to which leadership self-efficacy would be associated with leadership participation among sorority college students. Second, it examined the extent to which the sorority setting, through setting-level norms, would be associated with leadership participation. Finally, it examined whether setting-level norms would moderate the effect of leadership self-efficacy on participation.

## **1.1 Previous Research**

### ***1.1.1 Stereotypes***

Stereotypes are assumptions that are informed by cultural norms and values used by people to make inferences about others based on their perceived group membership (Cardwell, 1996). Research has found that stereotypical female characteristics (e.g., emotional, soft, kind) are incongruent with those of leaders (e.g., strong, authoritative, strict; Eagly & Karau, 2002). In a meta-analysis, Koenig and colleagues (2011) found that leader categories are usually more similar to stereotypically masculine and male traits than to feminine and female traits. This relationship was endorsed by females and males from adolescent to adulthood.

Researchers have examined the masculinity of leadership based on three paradigms, most popular of which was the Think Manager-Think Male paradigm (Koenig et al., 2011). Studies that applied the Think Manager-Think Male paradigm asked participants to rate leaders, women, or men on a large number of gender-stereotypical traits (e.g., Boyce & Herd, 2003; Karau, 2005; Koenig, et. al., 2011; Neergaard et. al., 2007; Schein, 1973; Schein et. al., 1996). Studies found that when comparing each category's ratings (i.e., leaders, men, or women), stereotypical characteristics were similar between men and leaders, and less similar between leaders and women. These results suggest that people usually associate leaders with males but not females. According to a recent meta-analysis, the mean effect size for reporting similarities between leaders and men was .65, whereas the mean effect size for reporting similarities between leaders and women was .25 (Koenig et al., 2011). Thus, leader characteristics were perceived more similar to men than they are to women. The association between leaders and stereotypical male characteristics suggests that women are not suitable for leadership positions (Bem, 1981).

In addition to role incongruity (i.e., women's gender role is incongruent with leadership roles), women who violate the assigned gendered-roles are often viewed negatively and treated poorly. When women do achieve high status in leadership, it is usually accompanied by resentment and negative treatment from their peers and the public (Martell & DeSmet, 2001; Koenig et al., 2011). Research on gender stereotyping in the workplace reveals that female managers are often perceived as lacking in leadership ability and viewed less favorably when compared to their male counterparts (e.g., Eagly & Karau, 2002; Heilman et al., 1989; Martell et al., 1998). Therefore, gender stereotypes contributes to the gender gap in leadership by not only suggesting that women are not capable of becoming leaders, but further by subjecting women leaders to prejudicial treatment. Extensive research exists to explain the relationship between

gender stereotypes and the gender gap in leadership. More specifically, psychological research has assessed stereotype threat and its effects on leadership self-efficacy and participation. Research has consistently found that priming with explicit gender-stereotypes (stereotype-threat) is associated with lower leadership self-efficacy and participation among women (e.g., Davies, Spencer, & Steele, 2005; Hoyt, 2005).

Often, the effects of stereotypes are implicit. For example, many women endorse negative stereotypes about their gender and how their abilities are viewed in several domains (Bonnot & Croizet, 2007; Chalabaev, Sarrazin, & Fontayne, 2009; Chalabaev et al., 2013). Many women include those stereotypes as part of their self-concept (Chalabaev et al., 2013). For example, Bonnot and Croizet (2007) examined the effect of stereotypes on women's math efficacy in a sample of undergraduate female psychology students. Female college students who endorsed the negative gender stereotypes at a greater level (i.e., reported agreement that women are inferior in math) reported lower levels of self-efficacy in math. In another study, Chalabaev, Sarrazin, and Fontayne (2009) examined stereotype endorsement among girls in 6<sup>th</sup> to 9<sup>th</sup> grades and its effects on their perceived ability in soccer. The study found that girls who endorsed the stereotype about women's ability in soccer (i.e., reported that men are good at soccer and women are not) reported lower soccer self-efficacy than those who did not endorse it.

### ***1.1.2 Leadership Self-Efficacy***

Self-efficacy refers to individuals' beliefs in their abilities to use their skills to achieve a specific task (Bandura, 1997). Self-efficacy does not necessarily depend on the individuals' skill levels, but rather on their beliefs in the ability to use those skills successfully to achieve a task (Bandura, 1997). Research on self-efficacy has repeatedly found that high self-efficacy is related to greater success and that people with higher levels of self-efficacy are more effective than

those with lower levels (Bandura, 1982; 1986; 1997; Bandura & Wood, 1989). Research has also found that self-efficacy affects motivation to participate in a variety of domains by affecting the activities that individuals choose to do (Bandura, 1982). Therefore, it is important to consider self-efficacy to better understand what contributes to women's engagement in stereotypically masculine activities. After much research on self-efficacy, Bandura (2007) commented on its use in the literature by explaining that self-efficacy is a domain-specific factor that needs to be treated as such. In other words, self-efficacy measures should match the domain included as the outcome as general self-efficacy may not provide a clear idea about how efficacy relates to specific outcome. Therefore, the present study specifically examined leadership self-efficacy and its impact on leadership participation.

Murphy (1992) defines leadership efficacy as belief in the ability to lead. Because self-efficacy is a domain-specific construct (Bandura, 2007), leadership efficacy could be more important in predicting leadership participation, performance, and effectiveness than general efficacy or general self-esteem (Bandura, 1997; Grossman, Brink, & Hauser, 1987; Smith, 1989). No research, to our knowledge, has explicitly examined how leadership self-efficacy is related to leadership participation. However, research has found that leadership self-efficacy is related to several other leadership outcomes. For example, research has found that leadership self-efficacy of Reserve Officers' Training Corps (ROTC) cadets was related to leadership effectiveness, as rated by their officers and peers (Chemers, Watson, & May, 2000). Cadets who had higher levels of leadership self-efficacy also had higher leadership effectiveness rating from their peers and superiors. Other studies have found similar results such that perceived leadership ability is positively related to leadership effectiveness. For example, Siebert, Sargent, Kraimer, and Kaizad (2016) examined how leadership self-efficacy is related to leadership effectiveness and

promotability in retail managers in Australia. Among other findings, researchers reported that higher leadership self-efficacy was related to higher effectiveness and promotability of retail managers. Chan and Dragsaw (2001) examined how leadership self-efficacy was related to motivation to lead for newly enlisted members of Singaporean military. Researchers found that leadership self-efficacy was positively related to motivation to lead. Finally, university students were asked to report their leadership self-efficacy, previous leadership participation, and intention to be a leader (McCormick, Tanguma, Lopez-Forment, 2002). The study found that higher leadership self-efficacy was related to higher prior leadership experience and more intent to participate in leadership roles. The current study, therefore, examined the relation between leadership self-efficacy and leadership participation in female college students. Furthermore, the present study investigated how social settings such as sororities affects the relationship between efficacy and leadership participation for sorority members in the United States.

According to the Social Cognitive Theory (Bandura, 1986), human behavior can be described in terms of the dynamic and reciprocal transactions between personal factors, such as self-efficacy, and the social network or setting. Therefore, a setting-level variable, such as social norms, would moderate the relations between and individual level-factor and individual behaviors. For example, when individuals perceive that behaviors in a given domain are perceived as prevalent among members of their social group, they tend to have higher self-efficacy in that domain (Kang & Kim, 2015; Stok, Verkooijen, Ridder, Wit, & Vet, 2014). In addition, those studies found that both higher levels of self-efficacy and perceiving that a behavior is more prevalent were related to more engagement in that behavior. Finally, findings from one study indicate that beyond the main effects, the interaction between the individual level variable and context level also had a significant positive relationship with behaviors (Kang &

Kim, 2015). These studies provide evidence to suggest that self-efficacy and norms are related and that their interaction also relates to behavioral outcomes. Therefore, the current study examined how self-efficacy is related to leadership participation. This study also examined how general, ideological, and behavioral norms are related to leadership participation. Finally, this study tested whether each dimension of norm would moderate the relationship between leadership self-efficacy and leadership participation in sorority members.

### ***1.1.3 Social Settings***

Leadership self-efficacy functions as an individual-level correlate (motivator) of leadership outcomes. However, per the Social Cognitive Theory (Bandura, 1986) the contexts and groups to which we belong also affect behaviors. Therefore, it is also important to examine the impact of group-level correlates on leadership. Through groups, we create a social setting in which we interact with other members. A social setting is when people come together in a new relationship over a sustained period to achieve certain shared goals (Cherniss & Deegan, 2000). Research has found that social processes, such as norms, within social settings affect individual attitudes and behaviors (e.g., Rappaport, 1977; Siedman & Tseng, 2011). Therefore, it is important to consider the impact of social processes within social settings on leadership.

### ***1.1.4 Setting-Level Norms***

Norms are important to examine in order to understand what drives individual behavior within groups. Norms are social processes that reflect interactions between an individual's beliefs and behaviors and those of others in the same setting (Tseng & Seidman, 2007). Research indicates that we rely particularly on norms when we are faced with ambiguous and unfamiliar situations (Baumeister & Leary, 1995). This could be applicable to leadership as society, and women, often view it as an unfitting position for women. In addition, previous research suggests

that due to our awareness of the need to belong we engage in socially accepted behaviors to increase our acceptance in groups (Baumeister & Leary, 1995). Therefore, the current study examined how setting-level norms about leadership are related to leadership participation for sorority women.

#### ***1.1.4.1 Multiple Dimensions of Setting-Level Norms***

Much of the previous literature on norms has focused on behavioral or descriptive norms (i.e., perceived prevalence of a behavior within the group). Other studies have also considered injunctive norms, which take an ideological and attitudinal approach to norms (Larimer et al., 2011). Research on these dimensions of norms has found mixed results. For example, Larimer and colleagues (2011) found that behavioral norms about drinking were related to concurrent drinking behavior among sorority members but not to future drinking behavior. In addition, they found that injunctive (ideological) norms about drinking were predictive of alcohol consumption a year later, after controlling for concurrent drinking (Larimer et al., 2011). In another study, researchers examined the relationship between setting-level norms and political participations in college students from 32 universities across the United States (Shulman & Levine, 2012). Researchers measured behavioral norms (i.e., perception of prevalence of behaviors) and general norms (i.e., interest and access of a behavior in the group) and ideological norms (i.e., attitudes and ideology about the domain) for each university. Zero order correlations showed that behavioral norms were related to actual political participation. On the other hand, the study found that ideological norms were positively related to individuals' beliefs and attitudes. In other words, behavioral norms were related to behaviors, and ideological norms were related to attitudes. Finally, they found that general norms were not related to participation. Multilevel analysis found that general norms and ideological norms were both predictive of individual

political behaviors (e.g., engagement in political discussions at school). Individuals from schools where political participation is perceived as more prevalent participated in more political activities than their peers. However, this relationship did not reach significance for descriptive norms. These findings suggest that setting-level norms has different dimensions that can impact individuals' behaviors differentially within a social setting. Therefore, this study examined how each dimension of setting-level norms would impact leadership participation among sorority women.

### ***1.1.5 Alternative Social Settings: Sororities***

Recent research has identified creating alternative social settings as an intervention to address many social problems (e.g., intolerance of diversity, discrimination; Cherniss & Deegan, 2000). According to Cherniss and Deegan (2000), an alternative setting should be radically different from normative social settings in the way of perceiving, enacting, and experiencing of basic relationships and activities. Much of the application of this intervention approach is evident within the educational context (e.g., classroom, school, university; e.g., Aronson et al., 1978; Cherniss & Deegan, 2000). Alternative settings change the organizational structures, goals, or ideology of a social setting (Cherniss & Deegan, 2000). Alternative social settings, such as sororities, challenge gender stereotypes and societal norms and are therefore examined in this study.

Sororities can serve as an alternative social setting because they deliver a different set of beliefs and embrace different norms about sisterhood, leadership, volunteerism, and academic achievement. However, much of the research on Greek social settings has focused on problem behaviors such as drug use and alcohol consumption. For example, research suggests that sorority members use alcohol at a higher rate than non-sorority members in other college social

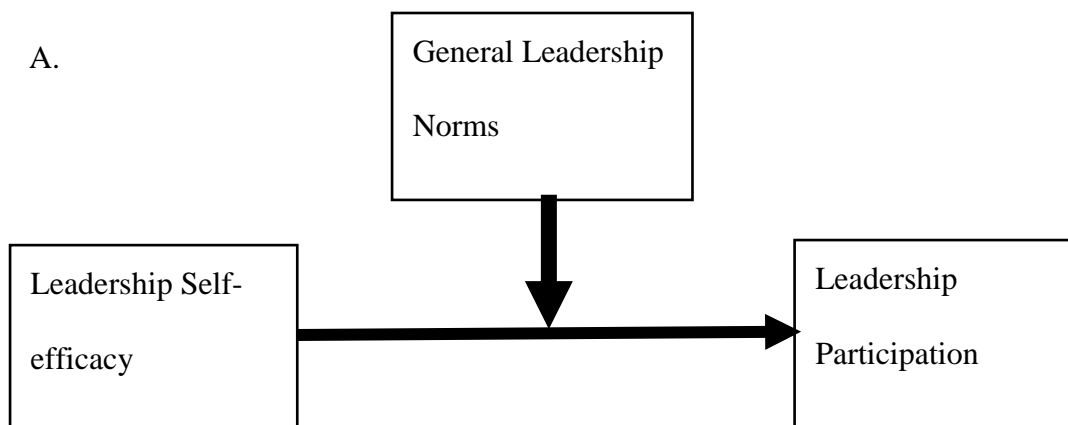
settings. (e.g., Lo & Globetti, 1995; McCabe et al., 2005). In addition, most research on sororities has only focused on membership as a measure of this setting. There have been, however, studies that examined norms within sorority settings. For example, norms explain the differences in behaviors between sorority members and non-members. In a study of almost 2700 undergraduate college students in Washington, participants were asked to report norms around drinking for multiple groups on campus. Students, along with sorority members, perceived sororities as having norms that tolerate higher alcohol consumption than other campus groups (Larimer, Turner, Mallett, & Geisner, 2011). A main finding from that study was that norms were positively related to alcohol consumption. In other words, organizations that were perceived to have more positive norms about prevalence of drinking reported higher levels of alcohol consumptions than organizations with low norms. Norms are therefore an important predictor of behaviors, and may explain the findings other studies have found about the higher level of alcohol consumption in sorority members than non-sorority members (e.g., Lo & Globetti, 1995; McCabe et al., 2005). Previous research on norms shows that perceptions of prevalence in behaviors or attitudes, including expectations regarding those behaviors, positively predict the likelihood of individuals engaging in such behaviors (e.g., Berkowitz, 2003). Therefore, this study examined setting-level norms about leadership in sororities settings and how they relate to leadership participation.

## **2 CURRENT STUDY**

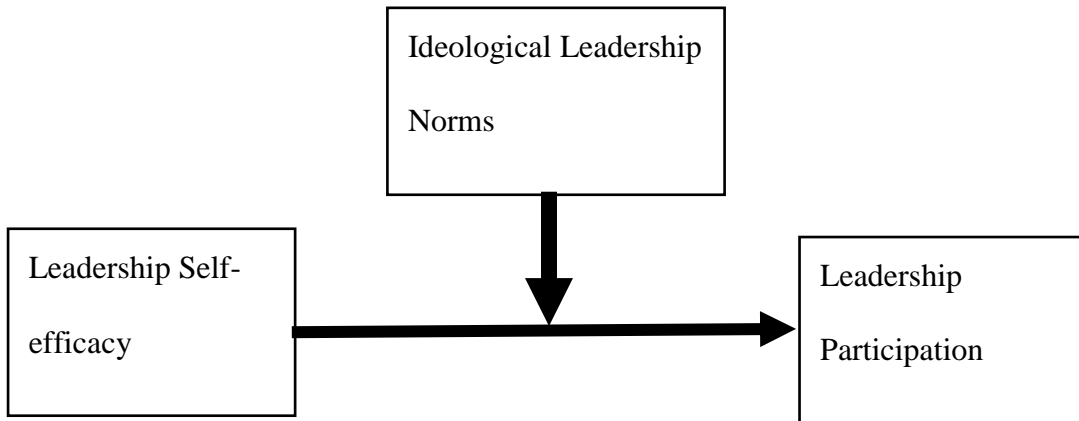
According to the Social Cognitive Theory (Bandura, 1986), human behavior is the dynamic and reciprocal transactions between personal factors, such as self-efficacy, and the social network or setting. Therefore, a setting-level variable, such as social norms, would moderate the relationship between and individual level-factor and individual behaviors. Previous

research has examined the relationship between self-efficacy and setting-level variables such as norms. Studies found that participants who perceived behaviors as more prevalent in their group had higher levels of self-efficacy in that domain (Kang & Kim, 2011; Stok et al., 2014). In addition, those studies found that both variables had a main effect on the behavioral outcome; such that, higher levels of self-efficacy and perceived prevalence in behaviors are both related to more engagement in that behavior. Finally, findings from one study indicate that beyond the main effects, the interaction between self-efficacy and norms was also a significant predictor of individual behaviors (Kang & Kim, 2015). These studies provide evidence to suggest that self-efficacy, norms, and their interaction are important in predicting individual behaviors. Therefore, this study examined how self-efficacy is related to leadership participation. This study, also, examined how norms are related to leadership participation. Finally, this study tested whether each dimension of norm would moderate the relationship between leadership self-efficacy and leadership participation in sorority members. It was hypothesized that leadership self-efficacy would be positively related to leadership participation. It was also hypothesized that setting-level norms would be positively related to leadership participation. Finally, it was hypothesized that setting-level norms about leadership would moderate the relationship between leadership self-efficacy and participation. Such that, at high levels of setting-level norms the relationship between leadership efficacy and participation would be stronger than at low levels of norms.

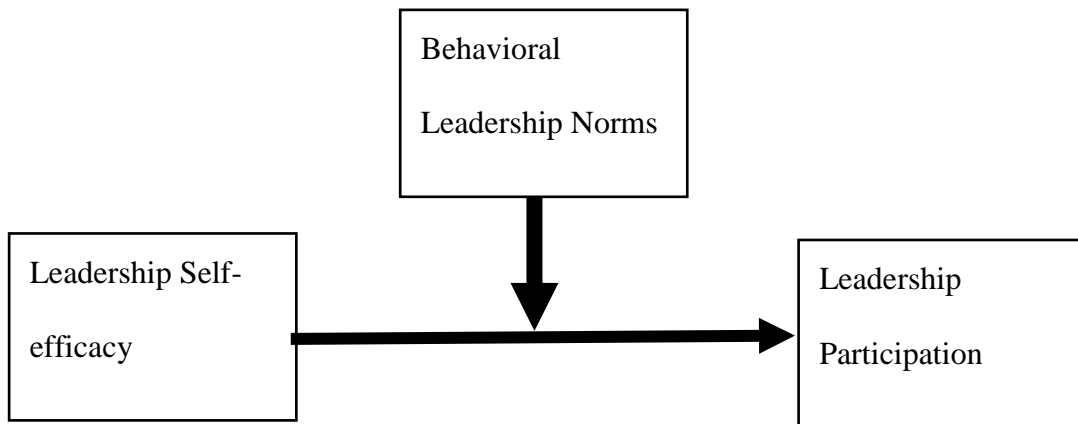
*Figure 1. Hypothesized Regression Models*



B.



C.



### 3 METHODS

#### 3.1 Participants

Participants were sorority members and undergraduate students from universities across the United States. Participants included members of Historically-White sororities (40%), Historically-Black sororities (40%), and multicultural sororities (20%). We invited GSU

sororities through an online forum for GSU organizations, OrgSync. The leaders of each sorority received an email explaining the aim of the study, requesting their assistance to encourage participation with their sorority, and including a recruitment email for the leaders to send to their sorority sisters. We also discussed the research project with the sorority councils to encourage participation. Because of a low response rate from GSU sororities ( $n = 31$ ) recruitment was expanded to include any U.S. college student sorority member. We used the online forum AmazonTurk to recruit participants. Potential participants viewed the survey post on AmazonTurk that explains the aims of the study, the group of interest (sorority members), and the qualifications to participate in the study (age, enrollment in university, location, membership in a sorority). Once they have chosen to participate, participants provided informed consent online. Two hundred participants started the survey through AmazonTurk. After deleting participants who did not fill out the survey, the sample size was reduced to 171. The total number of participants from both sources was 202.

Participants were all female and had a mean age of 23.12. 66% were White, 12% Black/African American, 7% Latino/Hispanic, 7% Asian American, and 8% mixed/other. Average number of years in sorority was 2.3 years.

### **3.2 Procedure**

Participants first read a consent form online. Upon giving consent, participants completed an online survey including different measures to assess self-efficacy, leadership participation, and setting-level norms. Participants also completed a set of questions about demographics, including age and ethnicity.

### 3.3 Measures

#### 3.3.1 *Leadership Self-Efficacy*

We used the Leadership Self-Efficacy Scale (Bobbio & Manganelli, 2009) to assess women's leadership self-efficacy. The original measure was created after administering a survey with multiple general self-efficacy and leadership self-efficacy scales to about 700 adults (including 372 university students; Bobbio & Manganelli, 2009). Examples of items include: "I am able to set a new direction for a group if the one taken doesn't seem correct to me", "I am confident in my ability to get things done". The scale had 21 items and the response was on a 7-point Likert-type scale with 1 = *absolutely false* to 7 = *absolutely true*. Reliability of the scale was .92 for our sample of female sorority members.

#### 3.3.2 *Leadership Participation*

We modified the Political Participation Scale (Shulman & Levine, 2012). The new scale asked participants to indicate whether they have participated in eight leadership activities (Yes/No). The measure consists of eight items. Yes was coded as "1" and No was coded as "0". Leadership in this scale included leadership training activities, individual leadership activity, and volunteer activity to address leadership at all its levels within college environment. Sum is calculated to measure leadership participation. Example items are: "Have you attended some formal leadership training since joining the sorority?", "Have you served on the executive board of an organization (including your sorority) since joining the sorority?", "Have you completed a volunteer project?", "Have you ran or been elected to the student government association?". Reliability for this measure was .63 for our sample of sorority women.

#### **Perceived Descriptive Setting-level Norms about Leadership**

The following three scales were used to measure three different dimensions of setting-level norms about leadership (i.e., general, ideological, and behavioral).

### **3.3.3 General Norms**

Participants responded to six statements regarding access and interest in leadership within their sorority. Items from the general norms scale include: “How would you rate your sorority’s emphasis on leadership?”, “In comparison to other sororities, how would you rate your sorority members’ interest in serving in leadership positions?”, “In comparison to other sororities, how would you rate the level of your sorority’s access to leadership positions for new members (less than one year)?”, “In comparison to other sororities, how would you rate the level of your sorority’s access to leadership positions for old members (more than one year)?”. Items were rated on a likert-scale ranging from 1 = *very low*, to 7 = *very high*. The measure had a reliability of .86 for our sample.

### **3.3.4 Ideological Norms**

This scale asks participants to report their sorority’s ideology around leadership. Shulman and Levine (2012) used a one-item scale to measure ideological norms. For this study, however, we expanded the scale to three items in order to better capture the construct. We modeled the following items based on the original study by changing the domain of interest and specifying the setting of interest (sororities). Items from the Ideological Norms Scale are: “How supportive is your organization of women as leaders?”, “How supportive is your organization of increasing the number of female leaders in all fields?”, and “How supportive is your organization of the idea that both women and men are equally capable of effectively serving in all leadership positions?” Responses were recorded on a likert-type scale ranging from 1 = *Not supportive*, to 7 = *Very supportive*. The reliability of this scale was .92 for our sample.

### 3.3.5 Behavioral Norms

The last scale was modified from Shulman and Levine (2012) scale. We modified the scale to ask participants about the percentage of their sorority members they believe have engaged in a variety of leadership behaviors. Example items include: “What is the percentage of members of your sorority who have attended some formal leadership training since joining the sorority?”, “What is the percentage of members of your sorority who have served on the executive board of an organization (including your sorority) since joining the sorority?”, “What is the percentage of members of your sorority who have completed a volunteer project?”, “What is the percentage of members of your sorority who have run or been elected to the student government association?”. The responses are participants’ estimations of the actual numeral percentages (in 10 percentage increments) from 0% to 100%. The measure used by Shulman and Levine (2012) had a reliability of .87. The measure in our study had a reliability of .89.

### 3.4 Data Analysis Plan

All data analyses were conducted using SPSS 20 (IBM, 2011). We first conducted zero-order correlations to assess bivariate correlations among study variables. We used the three norms scales as separate measures to assess each dimension of social norms. For the moderation analysis, we ran three separate models with leadership self-efficacy as the independent variable, leadership participation as the dependent variable, and each one of the norm dimension as the moderator. We also accounted for several covariates including age, number of years in sorority, and race to control for any effect personal characteristics may have on study variables. We conducted a t test to examine whether there were racial differences (White vs. non-White). Results showed that there was a significant difference between White and non-White participants in leadership participation  $t(198) = -1.53 p = .01$ . Specifically, participants who identified as

White had lower levels of leadership participation ( $M = 4.47$ ,  $SD = 2.12$ ) than participants who identified as non-White ( $M = 4.91$ ,  $SD = 1.71$ ). In addition, we conducted a t-test to examine differences between the two sources of data (GSU or MTurk). Based on results from the t-tests, we decided to also control for source of data in subsequent analyses as the two data sources were significantly different in leadership participation  $t(61.70) = -2.26$   $p = .03$ . Participants who were recruited through GSU had higher level of leadership participation ( $M = 5.19$ ,  $SD = 1.3$ ) than did participants recruited through MTurk ( $M = 4.56$ ,  $SD = 2.08$ ).

## 4 RESULTS

### 4.1 Descriptive Statistics

Table 1 presents means, standard deviations, and correlations among all study variables. Consistent with previous research, leadership self-efficacy was positively related to participation ( $r = .23$ ,  $p < .01$ ). Leadership self-efficacy was positively associated with general norms ( $r = .54$ ,  $p < .001$ ), ideological norms ( $r = .61$ ,  $p < .001$ ), and behavioral norms ( $r = .15$ ,  $p < .05$ ). Leadership participation was positively related to general norms ( $r = .21$ ,  $p < .001$ ) and to behavioral norms ( $r = .34$ ,  $p < .001$ ), but not with ideological norms ( $r = .14$ ,  $p = ns$ ).

*Table 1. Means, Standard Deviation, and Correlations of Variables*

Variable	Mean (SD)	Correlations				
		1	2	3	4	5
1. Leadership Self-efficacy	5.87 (.08)	1	.54***	.61***	.152*	.23**
2. General Norms	5.34 (.07)		1	.66***	.42***	.21**
3. Ideological Norms	6.12 (.08)			1	.18*	.14
4. Behavioral Norms	5.57 (.13)				1	.34***
5. Leadership Participation	4.64 (1.98)					1

Note:  $n = 179$ , \*  $P < .05$ ; \*\*  $P < .01$ ; \*\*\*  $P < .001$

## 4.2 Main Analyses

Three hierarchical regression analyses were conducted to examine the extent to which the three dimensions of norms would moderate the relationship between leadership self-efficacy and participation.

We standardized each of the variables to obtain a meaningful zero by converting model variables to z-score. All models included three covariates: data source, age, and years in sorority. All models also included the independent variable, leadership efficacy, in the second step. The second step of each model also included one dimension of norms: general, ideological, or behavioral norms. Finally, we created the interaction term between leadership efficacy and each dimension of norms by multiplying the standardized variables. The interaction term was entered in the third step of each of the models respective to the dimension of norms tested (i.e., LSE<sub>x</sub>GN, LSE<sub>x</sub>IN, LSE<sub>x</sub>BN were entered in the models respectively).

### 4.2.1 General Norms

Results from the first step in the model showed that none of the covariates were significant predictors of leadership participation,  $R^2 = 0$ ,  $F(4, 182) = .80$ ,  $p = ns$ . (see Table 2). In the second step, all covariates remained non-significant. Leadership self-efficacy was nearing significance ( $\beta = .17$ ,  $p = .06$ ) and general norms was a non-significant predictor either ( $\beta = .11$ ,  $p = ns$ ). The second step of the model explained 4% of leadership participation  $F(6, 180) = 2.24$ ,  $p < .05$ ,  $R^2_{\Delta} = .04$ . In the final step of the model, all covariates remained non-significant predictors. Leadership efficacy was a significant predictor of leadership participation ( $\beta = .18$ ,  $p < .05$ ) but general norms were not significant predictors of leadership participation ( $\beta = .12$ ,  $p = ns$ ); and finally, the interaction term was not a significant predictor of leadership participation ( $\beta$

= .07,  $p = ns$ ). The model predicted 4% of the variance in leadership participation  $F(6,180) = 2.02, p = ns, R^2_{\Delta} = .00$ .

*Table 2. Regression Analysis Results from the First Model with General Norms.*

Variables	Step 1			Step 2			Step 3		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
Group	.52	.40	.10	.16	.12	.03	.17	.41	.03
Race	.05	.11	.04	.05	.11	.03	.03	.11	.02
Age	-.01	.03	-.03	-.01	.03	-.03	-.01	.03	-.03
Years in Sorority	.09	.08	.08	.04	.08	.04	.05	.08	.05
Leadership Self-efficacy				.31	.17	.16	.35	.17	.18*
General Norms				.22	.17	.11	.24	.17	.13
Efficacy X Gen. Norms							.13	.14	.07
(Constant)	4.61	.72		4.79	.71		4.70	.72	
Adjusted R <sup>2</sup>		.00			.04*			.04*	
Change in Adj. R <sup>2</sup>					.04			.00	

Note:  $n = 179$ , \*  $P < .05$ ; \*\*  $P < .01$ ; \*\*\*  $P < .001$

#### 4.2.2 Ideological Norms

Results from the first step showed that none of the covariates were significant predictors of leadership participation  $R^2 = -.01, F(4,182) = .68, p = ns$ . In the second step, all covariates remained as non-significant predictors (see Table 3). Leadership self-efficacy was a significant predictor of leadership participation ( $\beta = .23, p < .05$ ) but ideological norms was not ( $\beta = -.03, p$

= ns). The second step of the model explained 3% of leadership participation  $F(6,180) = 1.88, p = ns, R^2_{\Delta} = .03$ . In the final step of the model, all covariates remained non-significant predictors. Leadership efficacy was a significant predictor of leadership participation ( $\beta = .23, p < .05$ ); Ideological norms was not a significant predictor of leadership participation ( $\beta = -.01, p = ns$ ); and finally, the interaction term was not a significant predictor of leadership participation ( $\beta = .02, p = ns$ ). The model predicted 3% of the variance in leadership participation  $F(7,179) = 1.61, p = ns, R^2_{\Delta} = .00$ .

*Table 3. Regression Analysis Results from the Second Model with Ideological Norms.*

Variables	Step 1			Step 2			Step 3		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
Group	.50	.40	.09	.29	.41	.06	.29	.41	.05
Race	.04	.11	.03	.06	.10	.04	.05	.11	.04
Age	-.01	.03	-.02	-.01	.03	-.02	-.01	.03	-.02
Years in Sorority	.07	.08	.07	.03	.08	.03	.03	.08	.03
Leadership Self-efficacy				.44	.18	.23*	.44	.18	.23*
Ideological Norms				-.05	.18	-.02	-.01	.21	-.01
Efficacy X Ide. Norms							.04	.15	.03
(Constant)	4.56	.71		4.72	.70		4.69	.72	
Adjusted R <sup>2</sup>		.00			.03			.03	
Change in Adj. R <sup>2</sup>					.03			.00	

Note: n = 179, \* P < .05; \*\* P < .01; \*\*\* P < .001

### 4.2.3 Behavioral Norms

Finally, results from the first step in the third model showed that none of the covariates were significant predictors of leadership participation  $R^2 = .003$ ,  $F(4,182) = .68$ ,  $p = ns$ . In the second step, all covariates remained non-significant predictors (see Table 4). Leadership self-efficacy was a significant predictor ( $\beta = .18$ ,  $p < .05$ ) and behavioral norms was a significant predictor as well ( $\beta = .31$ ,  $p < .001$ ). The second step of the model explained 13% of leadership participation  $F(6,180) = 5.43$ ,  $p < .001$ ,  $R^2_{\Delta} = .13$ . In the final step of the model, all covariates remained non-significant predictors. Leadership efficacy was a significant predictor of leadership participation ( $\beta = .16$ ,  $p < .05$ ); Behavioral norms was a significant predictor of leadership participation ( $\beta = .35$ ,  $p < .001$ ); and finally, the interaction term was also a significant predictor of leadership participation ( $\beta = -.17$ ,  $p < .05$ ). The model predicted 15% of leadership participation  $F(7,179) = 5.61$ ,  $p < .001$ ,  $R^2_{\Delta} = .02$ .

Table 4. Regression Analysis Results from the Third Model with Behavioral Norms.

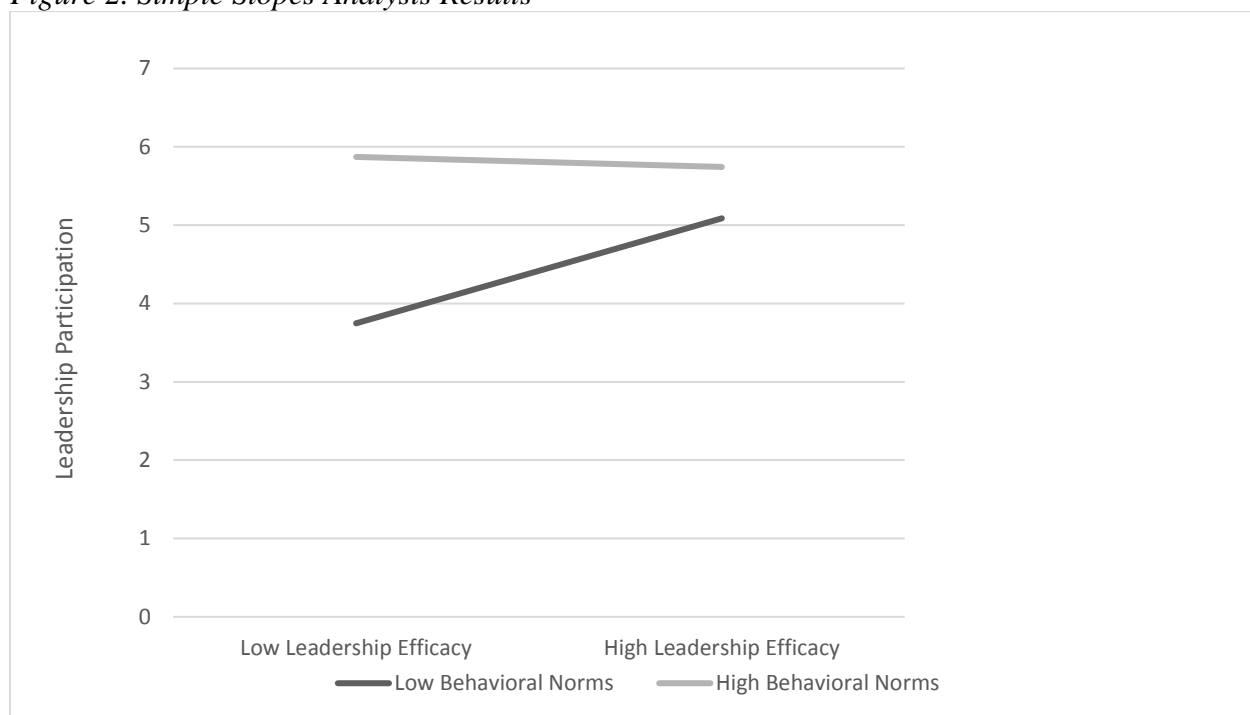
Variables	Step 1			Step 2			Step 3		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
Group	.53	.41	.10	-.04	.39	-.01	-.05	.39	.03
Race	.06	.11	.04	.03	.10	.02	.03	.10	.02
Age	-.01	.03	-.03	-.01	.03	-.04	-.02	.03	-.03
Years in Sorority	.09	.08	.09	.03	.08	.03	.03	.08	.05
Leadership Self-efficacy				.35	.14	.18*	.30	.14	.16*
Behavioral Norms				.62	.14	.32**	.70	.14	.35**
Efficacy X Beh. Norms							-.37	.15	-.17*
(Constant)	4.62	.72		4.94	.68		5.11	.67	

Adjusted R <sup>2</sup>	.00	.13**	.15**
Change in Adj. R <sup>2</sup>		.13	.02

Note: n = 179, \* P < .05; \*\* P < .01; \*\*\* P < .001

Simple slopes analyses were run at both low and high levels of behavioral norms to determine the effect of the interaction between behavioral norms and leadership self-efficacy on leadership participation (See Figure 2 for simple slopes graph). High levels of behavioral norms were specified as one standard deviation above the mean; low levels of norms were calculated as one standard deviation below the mean. Results showed that at low level of behavioral norms, self-efficacy was positively associated with leadership participation ( $\beta = .35, p < .01$ ). On the other hand, leadership self-efficacy was not related to leadership participation at high levels of behavioral norms ( $\beta = -.06, p = ns$ ).

Figure 2. Simple Slopes Analysis Results



## 5 DISCUSSION

### 5.1 General Discussion

The present study examined the relationship between leadership self-efficacy and leadership participation in young women. In addition, this study is the first to examine how perceived setting-level norms about leadership were related to leadership participation among sorority members. Finally, our study also tested how setting-level norms moderated the relationship between leadership self-efficacy and leadership participation. The study operationalized norms as multidimensional, including general norms (i.e., the overall environment of the sorority relating to access and interest in leadership); ideological norms (i.e. the ideology and attitudes about leadership from the sorority's stand point); and finally, behavioral norms (i.e., descriptive norms about the prevalence of leadership activity among other members of the sorority).

The relationship between efficacy and behaviors has been well established in other domains, findings from this study are therefore in line with previous research. Further, little is known about how context plays a role in affecting such relationship. The present study provided some evidence to suggest that setting-level norms, specifically behavioral norms, function as a moderator of the relationship between self-efficacy and participation. More Specifically, women in sororities where they perceive that a high percentage of members are involved in leadership roles participate in leadership activities at a higher level. In contrast, women in sororities where they do not perceive members are involved in leadership are participating in leadership activities at a lower level.

## 5.2 Implications

Findings from the current study are in line with much of the previous research on self-efficacy and behavioral outcomes (Bandura, 1982; 1986; 1997; Bandura & Wood, 1989). Our findings suggest that leadership self-efficacy functions as an individual-level motivator of leadership participation among sorority women (Bandura, 1982). In addition, Zimmerman's (2000) empowerment theory posits that individual-level (i.e. Psychological) empowerment is manifested through higher levels of self-efficacy. Therefore, it is possible that women who reported higher self-efficacy feel more empowered to participate in leadership. Therefore, self-efficacy is important in promoting leadership participation among sorority women. However, as shown by the findings in certain social settings (e.g. ones with high levels of norms about the behaviors) leadership self-efficacy is not always important in promoting leadership participation.

This study expanded on previous research to examine how social processes, manifested as setting-level norms, impact behavioral outcomes in social settings. More specifically, this study found that more prevalent behavioral norms are related to higher levels of leadership participation. This finding adds to evidence from previous research on the relationship between norms and behaviors (e.g. Shulman & Levine, 2012). Further, our findings are in line with other research on sororities that has shown that norms within sororities impact the behaviors and attitudes of their members (Larimer et al., 2011). However, our study found that general and ideological dimensions of norms were not related to leadership participation. Previous research has in fact shown that different dimensions of norms impact behaviors differently (Larimer et al., 2011; Shulman & Levine, 2012). For example, in previous research ideological norms and general norms were related to behavioral outcomes. Findings from our study are therefore contrary to previous research and our hypotheses. According to Bandura's (1971) Social

Learning Theory, both personal experience and observing others' behaviors can help individuals acquire new behaviors. In addition, Bandura (1971) argued that most behaviors that are exhibited by individual are either purposefully learned or accidentally through the influence of having an example of someone engaging in that behavior. Therefore, sorority women may be modeling leadership behaviors for each other. The importance of social learning and role modeling might explain why only behavioral norms are associated with greater level of participation.

Other possible explanations for this finding include that the fact that leadership self-efficacy, general and ideological norms share a large amount of variance as indicated by large bivariate correlations (see Table 1). In other words, variance in leadership participation that is explained by these norms could also be explained by leadership self-efficacy, and when entered after efficacy, general and ideological norms are no longer accounting for a significant amount of unique variance in leadership participation. Another reason for this finding could be the lack of observability of these two dimensions of norms. Shulman and Levine (2011) argue that the reason their measure of descriptive norms did not relate to political participation is that the behaviors were private in nature. In other words, norms that are not easily observable may not be strong predictors of leadership participation. General and ideological norms are not as observable as behavioral norms because they are about attitudes and beliefs but not actual behaviors. Therefore, participants may have not been perceiving those norms correctly within their groups, which explains the null findings. Nonetheless, these findings suggest that setting-level factors are group-level motivators for behavior in a social setting. Therefore, it is important to examine group/context-level factors as promoters of leadership participation in sorority women.

Finally, this study expanded on previous research to examine how the relationship between leadership efficacy and leadership participation would differ at varying levels of setting-

level norms. The Social Cognitive Theory (Bandura, 1986) posits that individual behaviors are the reciprocal transactions and relationships between individual level factors (i.e., self-efficacy) and the context in which they exist (i.e., social settings as measured by norms). This study therefore, examined the moderating effect of setting-level leadership norms on the relationship between leadership self-efficacy and leadership participation. Findings indicate that only the interaction term between leadership efficacy and behavioral norms significantly predicted leadership participation among sorority women. Upon further examination (see Figure 2), we found that, contrary to our hypothesis, for participants who reported low levels of behavioral norms, there was a positive relationship between leadership efficacy and leadership participations. However, at high levels of norms, leadership efficacy no longer had a main effect on leadership participation. These findings suggest that the individual-level factor was no longer related to leadership participation when the setting-level factors (i.e., norms) are high. In other words, in contexts where leadership behaviors are more prevalent individuals do not have to look inward for motivation to participate in leadership activity. Whereas, in contexts where leadership behaviors are not as prevalent, individuals rely heavily on internal motivation, such as self-efficacy, to engage in leadership activities. These findings provide evidence to the importance of considering both individual-level and group-level factors, as well as their interaction, to understand what promotes leadership participation in sorority women. In line with Bandura (1997), taking an approach that considers all factors that impact behaviors is the best way to fully understand how we can increase targeted behaviors.

### ***5.2.1 Practical implication***

The present study has some important implications for intervention and programing efforts that focus on increasing leadership participation among women and seek to close the

leadership gap in politics and business. Based on the findings, organizations that aim to increase leadership participation among women should take a multi-level approach. First, it is important that organizations work to foster and increase women's self-efficacy in leadership. This goal can be attained through providing leadership training for women and increasing opportunities for leadership participation. Second, organizations should establish an environment in which women perceive participating in leadership as the norm. This goal may be met through increased visibility and representation of female leaders on campus or in the organization and a reinforcement of that engagement through acknowledgment and celebration of female leaders.

### **5.3 Limitations and Future Directions**

Although the present study has some important findings, it is not without limitations. The study used a cross-sectional design to test moderation hypotheses. Longitudinal studies are needed to better understand how the relationship between leadership self-efficacy and leadership participation changes over time as individuals are subjected to setting-level norms for longer. The current research found that leadership self-efficacy is important but that it is not always necessary as a source of motivation. Future studies should examine how other contexts affect leadership self-efficacy and its impact on leadership participation. These contexts can include all women colleges, or even mixed-gender fraternities such as honor fraternities. These contexts have different approaches to the relationships between their members and different group dynamics that may alter findings related to leadership participation. Further, the study found that only one of the three dimensions was related to leadership participation and functioned as a moderator. Future research should examine how observability of norms within a social setting affects the impact they have on behavioral outcomes. In addition, because we are interested in group-level variables, individual-level assessment such as perception of norms used in the

present study may not be adequate. In addition, multi-level analysis should be applied in the future to delineate the extent to which group-level norms are accounting for variability in behaviors beyond individual perception. Finally, research should examine how integrating programs to both increase self-efficacy and setting-level norms about leadership affect leadership participation in young women.

This study included a racially and ethnically diverse sample of sororities and sorority members. However, the inclusion of only college students and the sorority setting is limiting as they have more resources and opportunities to engage in leadership activities. Future research should examine how different types of sororities (i.e. Historically-White, Historically-Black, Multi-cultural, non-gender specific) change the way setting-level norms impact individuals' behaviors. Finally, the inclusion of women in sororities limits the generalizability of the present study as these women self-select to join sororities and are likely to have different attitudes toward leadership and participation than those who choose not to join sororities.

#### **5.4 Conclusions**

The current study found that leadership self-efficacy is related to leadership participation and that behavioral norms are related to participation. In addition, this study found that setting-level behavioral norms moderated the relationship between leadership self-efficacy and leadership participation. More specifically, we found that leadership self-efficacy is not related to leadership participation at high levels of leadership norms; Whereas, leadership self-efficacy is positively related to leadership participation at low levels of norms. Increasing the representation of women in leadership roles is important to promoting equality and equity between the two genders and to making policy that echoes the voices and needs of both men and women. Social settings, through setting-level norms, can promote leadership participation in sorority women.

Constructing social setting with norms promoting leadership and increasing women's self-efficacy are two ways through which we can empower more women to. Both individual and group factors should be incorporated in leadership development programs for women to account for impact by individual characteristics and context in which they live and thrive.

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## APPENDICES

### Appendix A

#### 5.5 Leadership Self-Efficacy

Read the following statements and rate how true they are for you:

*1 = absolutely false - 7 = absolutely true*

1. I am able to set a new direction for a group, if the one currently taken doesn't seem correct to me.
2. I can usually change the attitudes and behaviors of group members if they don't meet group objectives.
3. I am able to change things in a group members if they are not completely under my control.
4. I am confident in my ability to choose group members in order to build up an effective and efficient team.
5. I am able to optimally share out the work between the members of a group to get the best results.
6. I would be able to delegate the task of accomplishing specific goals to other group members.
7. I am usually able to understand to whom, within a group, it is better to delegate specific tasks.
8. Usually, I can establish very good relationships with the people I work with.
9. I am sure I can communicate with others, going straight to the heart of the matter
10. I can successfully manage relationships with all the members of a group.
11. I can identify my strengths and weaknesses.

12. I am confident in my ability to get things done
13. I always know how to get the best out of the situations I find myself in.
14. With my experience and competence I can help group members to reach the group's targets.
15. As a leader, I am sure I can motivate the members of a group.
16. With my example, I am sure I can motivate the members of a group.
17. I can usually motivate group members and arouse their enthusiasm when I start a new project.
18. I am able to motivate and give opportunities to any group member in the exercise of his/her tasks or functions.
19. I can usually make the people I work with appreciate me.
20. I am sure I can gain the consensus of group members.
21. I can usually lead a group with the consensus of all members.

## 5.6 Leadership Experience:

Report whether you have participated in the following list of leadership activities.

*0 = No, 1 = Yes*

1. Attended some formal leadership training since joining the sorority?
2. Completed formal leadership training since joining the sorority?
3. Served as an executive board member of a campus organization (including your sorority) since joining the sorority?
4. Have run or been elected to the student government association since joining the sorority?
5. Plan on running or seeking election to the student government association during their membership of the sorority?
6. Led the charge to set up and plan a sorority or university related event?
7. Have completed a volunteer project?
8. Have led the planning of a volunteer opportunity?

## 5.7 General Norms Scale

Consider your experiences in your sorority and rate the following statements:

1 = *very low* to 7 = *very high*

1. In comparison to other sororities, how would you rate the level of your sorority members' interest in serving in leadership positions beyond college life?
2. In comparison to other sororities, how would you rate the level of your sorority members' interest in serving in leadership positions while in college?
3. How would you rate your sorority's interest in volunteering?
4. In comparison to other sororities, how would you rate the level of your sorority's access to leadership positions for new members (less than one year)?
5. In comparison to other sororities, how would you rate the level of your sorority's access to leadership positions for old members (more than one year)?
6. How would you rate the percentage of sorority members who are interested in leadership?

## 5.8 Ideological Norms

Consider your sorority's values and ideology, then rate the following statements:

1. How supportive is your organization of women as leaders?
2. How supportive is your organization of increasing the number of female leaders in all fields?
3. How supportive is your organization of the idea that both women and men are equally capable of effectively serving in all leadership positions?

*1 = not Supportive to 7 = very supportive*

## 5.9 Behavioral Norms

Report the percentage of typical sorority members you think have participated in the following list of leadership behaviors.

1 = 0% to 10 = 100%

What is the percentage of typical sorority members in your sorority that you think

9. Have attended some formal leadership training since joining the sorority?
10. Have completed formal leadership training since joining the sorority?
11. Served as an executive board member of a campus organization (including your sorority) since joining the sorority?
12. What is the percentage of members of your sorority who have ran or been elected to the student government association since joining the sorority?
13. What is the percentage of members of your sorority who plan on running or seeking election to the student government association during their membership of the sorority?
14. Led the charge to set up and plan a sorority or university related event?
15. Have completed a volunteer project?
16. Have led the planning of a volunteer opportunity?

