THE EFFECTS OF SORORITY RECRUITMENT ON PSYCHOLOGICAL WELLBEING AND SOCIAL SUPPORT

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We explore the relation of deferred sorority recruitment and early membership to variables such as self-esteem, depressive and anxious symptoms, social support, and personality characteristics. Survey data were collected at four time points from 171 freshman women. Successful participants reported the highest levels of social support and wellbeing prior to recruitment. The recruitment process itself had negative effects on social support and mood, with all participants reporting an increase in anxiety during recruitment. The first few months of sorority membership did improve feelings of belonging, but this improvement was largely accessed by women who were already socially successful.

Over 100,000 undergraduate women participate in the Panhellenic sorority recruitment process annually, and over four million women have been involved in Panhellenic sororities throughout their histories (National Panhellenic Conference, 2013). Despite these numbers, very little empirical research has been conducted on the psychological effects of sorority recruitment and membership. The majority of studies focus on sorority members' increased levels of drinking and drug use, disordered eating, and sexual assault victimization as compared to undergraduate women not involved in sororities (e.g., Allison & Park, 2004; Capone, Wood, Borsari, & Laird, 2007; Minow & Einolf, 2009). However, women report that one of their primary goals for participating in sorority recruitment is to gain opportunities for friendship, social support, and feelings of belonging to a community (Fouts, 2010). It is therefore puzzling that very few prior studies have examined the impact of sorority recruitment and membership on these positive outcomes. Woodward, Rosenfeld, and May (1996) found that members of sororities reported that their sorority helped fulfill their desire for relationships with other students who could help them cope with daily stressors, and that their sorority provided them with a place to belong. However, this study did not include a comparison group of women who were not in sororities.

Social support is typically associated with better psychological adjustment, especially for women (Kendler, Myers, & Prescott, 2005). Therefore, it is reasonable to hypothesize that if sorority membership does indeed increase social support, it should also lead to lower levels of depression (Hefner & Eisenberg, 2009) and anxiety (Hawkins, 1995) and higher levels of self-esteem (Goodwin, Costa, & Adonu, 2004; Williams & Galliher, 2006). However, the few studies that examined these outcomes found that sorority membership was not associated with higher mean self-esteem (Saville & Johnson, 2007) or less depression (Ridgway, Tang, & Lester, 2014) as compared to non-membership. Thus, further longitudinal research is necessary to examine the potential benefits of acceptance into a sorority, especially with regard to social support, belonging, and psychological well-being.

Before women can join a sorority and gain any possible benefits, they must first successfully navigate the recruitment process. The National Panhellenic Conference reports that the recruitment process allows "85 to 95 percent of undergraduate women to be matched with the chapters they are most interested in joining" (National Panhellenic Conference; n.d.). However, these percentages do not take into account women who do complete all the rounds of recruitment. Many women withdraw early or are eliminated from the recruitment process altogether. This number is about 22% of the overall potential new member pool on average, and may be as high as 30%

or more on some campuses (Johnson & Martini, 2011; Moore, 2012). Moreover, the recruitment process exposes participants to the potential for social rejection, which could have negative effects on psychological well-being, including depression, anxiety, self-esteem, perceived social support, and sense of belonging, a hypothesis supported by some first person accounts (e.g. Brown, 2013).

Several empirical studies have examined the impact of successful versus unsuccessful recruitment experiences on psychological well-being, but they have found conflicting results. Chapman, Hirt, and Spruill (2008) found that unsuccessful recruitment participants experienced a significant decline in self-esteem from pre- to post-recruitment (a rejection penalty), while successful participants experienced a significant increase. On the other hand, Atlas and Morier (1994) reported that women who successfully joined a sorority experienced decreased depressive symptoms five months post-recruitment as compared to the beginning of the school year, while women rejected from recruitment experienced no change (no rejection penalty). Thus, further research is necessary to examine the impact of the recruitment process itself on psychological well-being.

Another important question to consider is what individual differences predict the decision to participate in sorority recruitment, as well as the outcome of recruitment participation. Past research has indicated that undergraduates self-select into recruitment participant and non-participant groups based on criteria such as family income, weight, physical attractiveness, and alcohol use. Similar criteria have also been shown to predict whether they will be successful or unsuccessful in the recruitment process (Basow, Foran, & Bookwala, 1997; Atlas & Morier, 1994). However, we found no studies that examine the baseline differences between participants and nonparticipants in terms of personality factors or psychological variables such as self-esteem and depressive or anxious symptoms.

The current study sought to fill several of these gaps in the existing literature. First, we wanted to focus on the potential *benefits* that might accrue with sorority membership, particularly in the domain of perceived social support and a sense of belonging. Thus, we hypothesized that women who successfully participated in recruitment would experience increases in perceived social support and belonging both during the recruitment process and thereafter, while unsuccessful participants would experience decreases and nonparticipants would remain at baseline. Second, we wanted to examine the impact of recruitment itself, particularly whether there might be a "rejection penalty" for unsuccessful participants. Thus, we hypothesized that women who successfully participated in recruitment would experience increases in self-esteem and decreases in depressive and anxious symptoms and negative affect, while unsuccessful participants would experience decreases in self-esteem and increases in depressive and anxious symptoms and negative affect and nonparticipants would remain at baseline. Third, we hypothesized that women who planned on participating in recruitment would exhibit lower levels of perceived social support at baseline, following the rationale that they would be more likely to desire the opportunity for social support that sororities purportedly offer. Finally, we wanted to examine how individual differences in personality and psychological well-being at baseline predicted both recruitment participation and success.

The study was designed as a longitudinal, self-reported study. We gathered baseline data on personality and expected recruitment plans, and repeated measures on perceived social support, belonging, self-esteem, depressive and anxious symptoms, and negative affect. The University of Pennsylvania, where the study was carried out, uses a deferred (spring) recruitment system, as do approximately 25% of colleges and universities that host Panhellenic sororities (National Panhellenic Conference, 2015). Thus, the first wave of data collection took place in November of the fall semester. The second wave of data was collected during the first week of the spring

semester, prior to the start of recruitment. The third wave of data was collected during the week immediately after recruitment ended. The final wave of data was collected in March of the spring semester, approximately 2 months after recruitment. The study was approved by the University's Institutional Review Board, and the first survey included an approved informed consent form.

Methods

Participants

Women of the freshman class at the University of Pennsylvania were surveyed. Of the 1,395 undergraduate freshmen women emailed, 355 responded to the first survey, 263 participants responded to the second survey, 203 responded to the third, and 207 to the fourth. 171 participants responded to all 4 surveys. Demographically, our baseline participants included American Indian or Alaska Native (0.5%), East Asian (21.3%), South Asian (6.3%), African American (8.7%), and White (54.8%) female students, and 12.9% of the participants identified as Hispanic or Latina. The demographics of the 207 women who responded to the fourth survey were somewhat similar, with 1.0% identifying as American Indian or Alaskan Native, 21.8% identifying as East Asian, 5.8% identifying as South Asian, 7.8% identifying as African American, 54.9% identifying as White, and 9.7% identifying as Hispanic or Latina.

Instruments

Interpersonal Support Evaluation List, College Version (ISEL; Cohen & Hoberman, 1983)

The ISEL assesses four areas of perceived social support: tangible support ("I know someone who could loan me $50 so I could go away for the weekend"); a sense of belonging ("People hang out in my room or apartment during the day or in the evening"); the appraisal of social support ("I know someone who I see or talk to often with whom I would feel perfectly comfortable talking about any problems I might have adjusting to college life"); and self-esteem ("Most people who know me well think highly of me"). Each subscale contains 12 items, and participants can respond in one of four ways: definitely true, probably true, probably false, and definitely false. We chose to use a measure of perceived social support because it has been shown that people's perceptions of social support are more highly related to psychological outcomes than more objective measures of support (Haber, Cohen, Lucas, & Baltes, 2007). In addition, we did not include the self-esteem subscale because we used a separate self-esteem measure. As a whole, the scale has an alpha of 0.77 and test-retest reliability coefficient of 0.70. Each scale has an alpha of between 0.71 and 0.77 and a test-retest reliability of between 0.67 and 0.84. In this study, the Cronbach's alpha was 0.93.

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965)

The RSE consists of 10 statements used to assess global self-esteem. Participants can respond in one of four ways: strongly disagree, disagree, agree, or strongly agree. The points are summed with scores ranging from 10-40, with higher scores reflecting higher self-esteem. Rosenberg (1965) reported internal consistency reliability ranging from 0.85 to 0.88 for college samples. In this study, the Cronbach's alpha was 0.90.

NEO Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992)

The NEO-FFI consists of 60 items measuring the five factors of personality (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness). These five areas are measured by separate subscales consisting of 12 items each. The NEO-FFI subscales are reported to have alpha ranging from 0.68 to 0.89 and test-retest reliability coefficients ranging from 0.75 to 0.83 in a college sample. We chose to exclude the neuroticism scale as we included measures of negative affect elsewhere. In this study, the Cronbach's alphas were 0.83, 0.67, 0.77, and 0.84 for extraversion, openness, agreeableness, and conscientiousness, respectively.

State-Trait Anxiety Inventory-State (STAI-S;

Spielberger & Vagg, 1984)

The STAI-S is the state anxiety subscale of the 40-item STAI, which assesses both trait anxiety and state anxiety. Participants can respond to the 20 items in one of four ways, ranging from 1 (not at all) to 4 (very much so). The Cronbach's alpha is reported to be 0.80. Test-retest reliability coefficients range from 0.65 to 0.75 (Spielberger, 1983). In this study, the Cronbach's alpha estimate was 0.93.

Beck Depression Inventory II (BDI-II; Beck, Steer, & Carbin, 1988).

The BDI-II contains 21 items assessing the severity of depression symptoms. It is rated on a four-point scale ranging from 0 (not endorsing symptom) to 3 (severe symptoms). The points are summed for a total score. The BDI-II has an alpha coefficient of 0.93 and a test-retest correlation of 0.93 for college students. In this study, the Cronbach's alpha estimate was 0.92.

Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988)

Six items from the PANAS Negative Affect subscale were used in this study – those that were deemed to represent independent emotions (e.g., hostile was not considered independent from angry). The items are rated on a 1-5 scale, 1 being "I feel this very slightly or not at all" and 5 being "I feel this extremely." The reported Cronbach's alpha coefficients range from 0.84 to 0.87, and the test-retest correlations range from 0.39 to 0.71. In this study, the Cronbach's alpha estimate was 0.85.

Procedure

Participants were recruited to the study via emails, which invited them to participate in a study examining the effects of sorority involvement on social support. The emails contained a link to a survey that collected data on demographics, sorority involvement, perceived social support, self-esteem, depression, anxiety, negative affect, and personality. The participants were asked to provide their university email address at each time point in order to track individual responses over time.

The first survey ("baseline") was emailed to all female students in the class of 2017 on November 1, 2013. This survey introduced them to the study, provided an electronic consent form, collected demographic information, and collected responses to the college version of the ISEL, the NEO-FFI (excluding neuroticism), the RSE, STAI-S, BDI-II, and PANAS. The total survey took an average of 26 minutes to complete. Participants were given two weeks to respond. Reminder emails were sent to all possible participants and flyers about the study were posted throughout campus. Approximately a quarter of female freshman responded to and completed at least some portion of the survey, 355 women in total.

The three later surveys were sent only to those women for whom we had collected baseline data. The surveys included questions about the participants' plans for and experiences with recruitment and the ISEL, RSE, STAI-S, BDI-II, and PANAS. The second survey ("pre-recruitment") was sent to participants during early January, and they were able to complete it throughout the week immediately preceding recruitment. The third survey ("post-recruitment") was distributed at the end of January, and participants were able to complete it throughout the week immediately following recruitment. The final survey ("follow-up") was distributed at the end of March and participants were given two weeks to complete.

Statistical Analysis

Data were collected using Survey Monkey's secure servers and analyzed using SPSS version 21. Summary scores for each scale were calculated by reverse scoring appropriate items and summing. Because the overall percentage of missing items within otherwise completed scales was low, scores were not imputed for missing items. We first analyzed descriptive statistics of the data for outliers, but because all outliers seemed to accurately represent the population (for example, extreme scores on the BDI-II were due to severely depressed participants rather than

error), we decided not to remove or correct outliers. We compared demographic and sorority participation data for our sample to actual university data and analyzed dropout rates across groups using chi-squared tests. We ensured that scales we expected to be related, such as depressive symptoms and social support, were associated in the expected direction using Pearson's correlations. We compared baseline differences between participants using univariate ANOVAs and pairwise comparisons. We compared changes over time between groups using ANCOVAs with baseline data as a covariate as well as paired samples t-tests. We also calculated group differences in recruitment success rates using independent samples t-tests. We calculated effect sizes using Cohen's η^2 and *d* guidelines (1992). In addition, we analyzed participants' comments on the third survey about recruitment and social life by having two raters independently code each comment's emotional valance on a scale from -3 to 3. We calculated two-way mixed intra-class correlation coefficients to ensure inter-rater reliability. After all the comments were coded, the raters came to a consensus on codes that were disputed and descriptive statistics and independent samples t-tests were utilized. Final analyses were based on these consensus scores.

Results

Sample Characteristics

Our baseline sample was representative of the freshman class as a whole in terms of successful versus unsuccessful recruitment outcome as compared to historical data. However, our sample was not representative of the university's freshman class in terms of race. Chi-squared analyses revealed that there were significantly more Asian women than would be expected in the sample, χ^2 (1, N = 104) = 10.8, p = .001, and significantly fewer Caucasian women than would be expected, χ^2 (1, N = 164) = 4.4, p < .05, based on the estimated racial makeup of the university as a whole [0.3% American Indian/ Alaskan Native, 21.8% Asian, 8.0% Black/African-American, 10.3% Hispanic/Latino, 3.3% Multi-race (not Hispanic/Latino), 0.1% Native Hawaiian/ Pacific Islander, 51.2% White]. In addition, our sample included significantly fewer recruitment participants than would be expected based on historical data, χ^2 (1, N = 155) = 17.9, p < .001. Chi-squared analyses also revealed that race was a significant predictor of recruitment participation, χ^2 (18, N = 359) = 190.8, p < .001, with White women more likely to participate in recruitment as compared to other groups.

Although there was significant participant attrition across the time points, chi-squared tests demonstrated that dropout rates were equal across successful recruitment participants, unsuccessful recruitment participants, and non-participants, χ^2 (2, N = 352) = .102, p = .95, suggesting that these conclusions were unbiased. We also noted that baseline belongingness was a significant predictor of study dropout, with women who dropped out (M = 39.03, SD = 5.18) reporting higher levels of belongingness than women who did not drop out of the study (M = 27.52, SD = 6.19), t (353) = 2.12, p < .05. All measures were correlated in the expected direction (e.g., depressive symptoms were positively correlated with anxious symptoms and negatively correlated with social support).

Baseline Characteristics

Our first semester data revealed significant baseline differences between women who planned to participate in recruitment (n = 131), women who did not (n = 123), women who were unsure of their plans for the recruitment process (n = 87), and women who did not plan to participate because they hoped to become involved in another fraternity/sorority organization such as a Multicultural Greek Council sorority or a service fraternity (n = 14). Women's first semester "sorority plan" was significantly associated with baseline social support, F (3, 354) = 8.23, p <

.001, $\eta^2 = .07$, a small effect size. Contrary to our first hypothesis, women who planned on participating reported significantly higher levels of social support (M = 118, SD = 14.6) as compared to women who did not plan on participating (M = 111, SD = 15.6), $p < .05$, women who were unsure (M = 107, SD =19.3), $p < .05$, and women who planned on joining other fraternity/sorority organizations (M = 108, SD = 22), $p < .05$. Of those women not planning to participate in recruitment, the vast majority (89%) reported they had found community or a sense of belonging elsewhere at the university, such as a residential facility or a club. Because the group of women who planned on participating in another fraternity/sorority organization was small compared to the other groups and was not central to our hypotheses, most of our discussion and conclusions refer only to the three largest groups.

There were also significant baseline differences between the groups on personality variables. Sorority plan was significantly associated with extraversion, $F(3, 289) = 12.54$, $p < .001$, $\eta^2 = .12$, a small effect size. Pairwise comparisons revealed that women planning on participating in recruitment (M = 45, SD =6.3) were significantly more extraverted as compared to those not planning to participate (M = 40, SD =7.7), $p < .05$ and those unsure about participating (M = 41, SD = 6.3), $p < .05$. Interestingly, Levene's test for equality of variances was significant, with the group of women planning not to participate showing much more heterogeneity than the other two groups. Sorority plan was also significantly associated with agreeableness, $F(3, 288) = 3.11$, $p < .05$, $\eta^2 = .04$, a small effect size. Women planning on participating (M = 46, SD = 5.6) reported significantly higher agreeableness than those not planning on participating (M = 44, SD = 6.4), $p < .05$, those who were unsure (M = 44, SD = 6.0), $p < .05$, and those participating in another fraternity/sorority organization (M = 42, SD =5.1), $p < .05$.

In addition, sorority plan was significantly associated with depressive symptoms $F(3, 261) = 4.63$, $p = .01$, $\eta^2 = .12$, a small effect size. Women who were unsure about participating (M = 12, SD = 10.6) reported significantly more depressive symptoms than women who planned on participating (M = 8, SD = 6.9, $p < .01$) and women who did not (M = 9, SD = 7.7), $p < .05$. Sorority plan was also significantly associated with self-esteem at baseline $F(2, 277) = 3.22$, $p < .05$, with women who planned on participating (M = 31, SD = 4.9) reporting significantly higher levels of self-esteem as compared to women who were unsure (M = 29, SD = 4). Finally, while the overall ANOVA comparing state anxiety levels across sorority plan was not significant $F(2,266) = 2.08$, $p = .13$, planned comparisons revealed women who planned on participating (M = 40, SD = 10.9) reported significantly lower levels of anxious symptoms than women who were unsure (M = 44, SD = 12.7), $t(168) = -2.03$, $p < .05$. All baseline differences are summarized in Table 1.

Another way to consider baseline differences was women's eventual recruitment outcomes, using the categories of successful participant (any women who received an invitation for membership from a sorority, $n = 106$), unsuccessful participant (any women who were registered for the recruitment process but did not receive a membership invitation, $n = 47$), and nonparticipant ($n = 199$). Of particular interest were the baseline differences between women who went on to be successful and those who went on to be unsuccessful. Chi-squared analyses indicated that women who were unsure of their plan for recruitment at baseline were significantly less likely than women who were sure they would participate to complete the process successfully if they ultimately did decide to participate in recruitment $\chi^2 (205) = 115$, $p < .001$, $V=0.45$, a large effect size.

Independent samples *t*-tests revealed that women who went on to be successful participants (M = 31, SD = 5) reported significantly higher levels of baseline self-esteem as compared

to those who went on to be unsuccessful (M = 29, SD = 4.3), t (127) = 2.80, p = .01. In addition, women who went on to be successful (M = 38, SD = 10) reported significantly lower levels of baseline anxious symptoms as compared to unsuccessful participants (M = 43, SD = 12.4), t (119) = -2.38, p < .05. Successful women (M = 7, SD = 10.4) also reported lower levels of baseline depressive symptoms than unsuccessful women (M = 10, SD = 8), t (120) = -2.43, p <.05.

ANOVAs also revealed that recruitment outcome was significantly associated with openness, with nonparticipants (M = 46, SD = 5.7) reporting significantly higher openness as compared to successful participants (M = 44, SD = 5), p < .05, and unsuccessful participants falling in the middle. In addition, recruitment outcome was associated with conscientiousness, with successful participants (M = 46, SD = 5.9) reporting significantly higher conscientiousness as compared to nonparticipants (M = 43, SD = 7), p < .05, and unsuccessful participants again falling in the middle. Recruitment outcome was associated with extraversion, with successful participants (M = 46, SD = 6) reporting higher levels of extraversion as compared to both unsuccessful participants [(M = 44, SD = 6), p < .05] and nonparticipants (M =41, SD = 7.3), p <.05. Finally, recruitment outcome was significantly associated with agreeableness, with successful participants (M = 46, SD = 5.5) reporting higher levels of agreeableness as compared to nonparticipants (M = 44, SD = 6.2), p < .05.

Table 1
Baseline differences.

	Planned to participate ("yes") (n = 131)	Unsure ("unsure") (n = 87)	Did not plan to participate ("no") (n = 123)	Significance	Effect Size of overall model
Extraversion	45.4 (6.3)	41.4 (6.3)*	39.9 (7.7)*	Yes significantly more extraverted than unsure and no	η^2 = .12
Agreeableness	46.9 (5.6)	43.9 (6.0)*	44.3 (6.4)*	Yes significantly more agreeable than unsure and no	η^2 = .04
Perceived social support	117.5 (14.6)	106.7 (19.3)*	111.2 (15.6)*	Yes significantly more socially supported than unsure and no	η^2 = .07
Anxiety	39.92 (10.9)*	43.7 (12.7)		Unsure significantly more anxious than yes	
Depression	8.1 (6.9)**	12.0 (4.6)	8.8 (7.7)*	Unsure significantly more depressed than yes and no	η^2 = .12
Self-esteem	30.6 (4.9)	28.5 (5.0)*		Yes report significantly higher self-esteem than unsure	η^2 = .02

Notes: Data denote Mean (SD); ** = p < .01, *= p < .05.

Change over Time Prior to Recruitment

Interestingly, the entire sample experienced modest improvements in distress and perceived social support from baseline to pre-recruitment. Total perceived social support, self-esteem, anxiety, negative affect, and depression all incrementally improved for the whole sample [all t(215) > 2.89, all p < .01]. This is certainly related to deferred recruitment and the amount of time that passed between baseline and pre-recruitment testing (approximately 2 months). However, there were some group differences in degree of

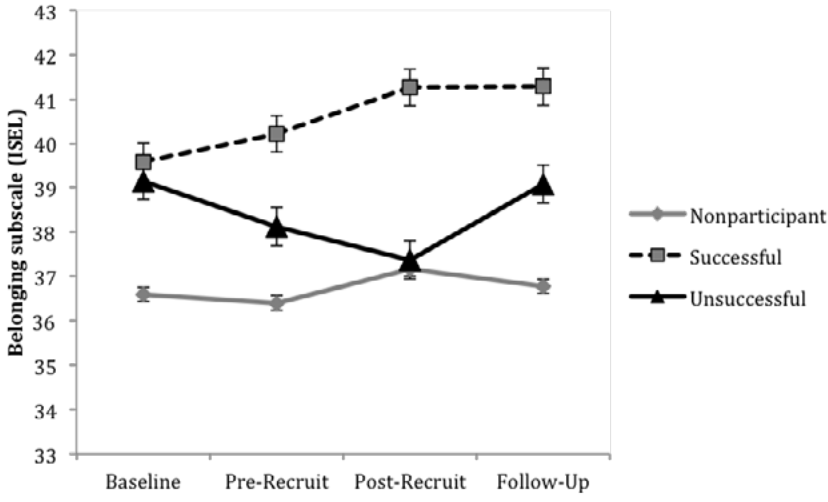
improvement. Controlling for baseline, women who ultimately went on to successfully participate in recruitment reported significantly higher perceived social support and belonging at pre-recruitment (M = 120, SD = 14.2, and M = 40, SD = 5.9, respectively) as compared to nonparticipants [(M = 110, SD = 17 and M = 36, SD = 6, respectively), $p < .05$], and slightly lower levels of negative affect [Successful (M = 7.7, SD = 2.3), Nonparticipant (M = 8.9, SD = 3.60), $p < .05$], with unsuccessful participants falling in the middle.

Acute Recruitment Effects

Using the categories of successful participant, unsuccessful participant, and nonparticipant, we were able to examine how the two weeks of recruitment acutely affected distress and perceived social support. None of the ANCOVAs predicting post-recruitment self-reported variables controlling for pre-recruitment levels based on recruitment outcome were significant. However, planned comparisons revealed two effects. Unsuccessful participants (M = 37, SD = 6) reported lower levels of perceived belongingness than did nonparticipants [(M = 37, SD = 6), $p = .05$] *controlling for pre-recruitment*, but not less than successful participants (M = 41, SD = 6). Unsuccessful participants also reported the highest level of negative affect controlling for pre-recruitment (M = 10, SD = 4) and were significantly more distressed than nonparticipants (M = 9, SD = 4), $p < .05$, with successful participants falling in the middle (M = 8, SD = 3).

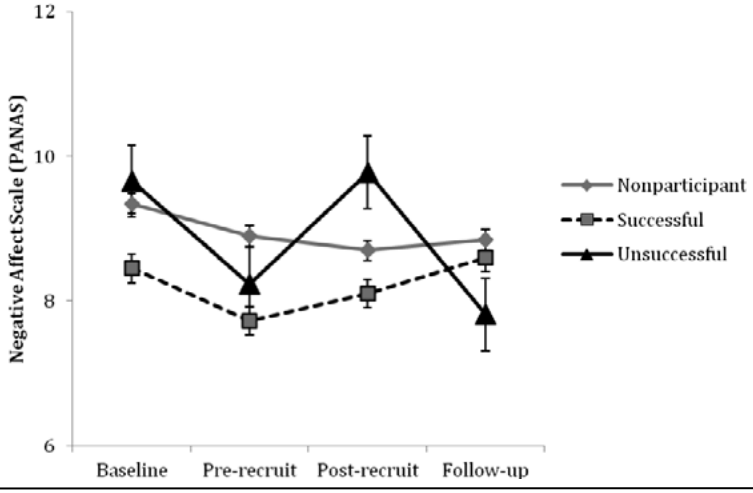
We also explored change over time within each group using paired samples t-tests. Nonparticipants experienced significant improvement in perceived social support and belonging [both $t(106) > 3.37$, both $p \leq .001$] over the course of the recruitment process. They also experienced a marginally significant increase in self-esteem, $t(103) = 1.87$, $p = .065$. Successful participants experienced a significant increase in state anxiety over the course of recruitment, $t(47) = 2.51$, $p < .05$, $d=0.51$, a medium effect size. Unsuccessful participants experienced significant increases in both state anxiety and negative affect [both $t(20\text{-}22) > 2.29$, both $p < .05$, both $d > 0.68$, both medium effect sizes]. See Figures 1-3.

Figure 1
Changes in belongingness over time.



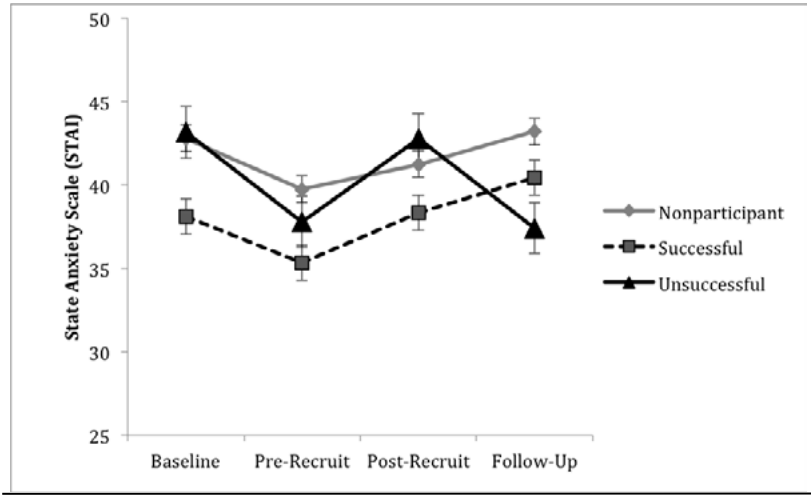
Note: Error bars represent the standard error of the mean.

Figure 2
Changes in negative affect over time.



Note: Error bars represent the standard error of the mean.

Figure 3
Changes in anxiety over time.



Note: Error bars represent the standard error of the mean.

Qualitative Descriptions of Recruitment

In addition to the quantitative results summarized above, we found important qualitative trends through respondent comments. Inter-rater reliability for comment scoring was excellent, as the intraclass correlation coefficient (ICC) for average measures was .91 with $p < .001$ for the social support comment ("Feel free to share any thoughts, feelings, or observations you have about social life and social support at Penn") and .96 with $p < .001$ for the recruitment comment ("Feel free to elaborate on your experiences with

Panhellenic recruitment and explain your decisions above. In particular, if you withdrew from recruitment, please indicate your reasons for doing so"). Descriptive analyses revealed both comments were rated on the full range of possible values, with a minimum of -3 and a maximum of 3. The mean for the social support comment was .14 with a standard deviation of 1.65. The mean for the recruitment comment was -.73, with a standard deviation of 1.49. Pearson's correlations revealed that the two comments were strongly related, $r = .53$, $p < .001$. In addition, paired samples t-tests revealed that social support comments were significantly more positive than recruitment comments (Mean difference = .71, SD = 1.63), t (44) = 2.92, $p = .01$.

Independent samples *t*-tests revealed no significant mean differences between successful participants, unsuccessful participants, and nonparticipants in terms of the social support comment. However, unsuccessful participants (M = -1.35, SD = 1.22) were rated as having significantly lower scores on the recruitment comment than successful participants (M = .00, SD = 2.04), $t(29) = 2.29$, $p < .05$] and nonparticipants (M = -.48, SD = 1.01), t (42) = -2.56, $p = .01$. In addition, when the mean recruitment comment score for each group was imputed for every member of that group, the average recruitment rating for the overall sample was -.45. Representative comments are reproduced in Table 2.

Post-Recruitment Effects

In addition to the acute effects of the recruitment process, ANCOVA analyses revealed a significant effect of the first few months of sorority membership on respondents' social support. Even controlling for post-recruitment level of belongingness, women who were members of a Panhellenic sorority at follow-up (M = 41, SD = 5.5) reported significantly higher belongingness at follow-up than women who were not members of a sorority (M = 37, SD = 6.1), $p < .05$, with women who had joined other fraternal organizations falling in the middle. Women who joined a Panhellenic sorority reported this increase in belongingness whether they joined their sorority through the formal or informal recruitment process. In addition, it is important to note that women who were unsuccessful in the recruitment process largely recovered from the decrease in belongingness associated with unsuccessful recruitment participation; at follow-up, their scores were not significantly different than their scores at baseline or pre-recruitment.

Discussion

Our first hypothesis was that sorority membership would have benefits, particularly in the domain of perceived social support. Thus, we hypothesized that women who successfully participated in recruitment would experience increased feelings of belonging both during the recruitment process and thereafter, while unsuccessful participants would experience decreases and nonparticipants would remain at baseline. These hypotheses were partially supported. Sorority membership (though not participation in recruitment) was associated with increased feelings of belonging at follow-up for the women who successfully completed recruitment. Unsuccessful participants experienced a temporary decrease in feelings of belonging during the recruitment process, but recovered to baseline two months later. Nonparticipants' feelings of belonging remained at baseline.

Our second concern was whether there might be a "rejection penalty" for unsuccessful participants. Thus, we hypothesized that women who successfully participated in recruitment would experience increases in self-esteem and decreases in negative affect and anxious and depressive symptoms during the recruitment process, while unsuccessful participants would experience decreases in self-esteem and increases in negative affect and anxious and depressive symptoms and nonparticipants would remain at baseline. Contrary to our expectations, neither successful nor unsuccessful participants reported a change

Table 2

Selected comments about the sorority recruitment process.

	Negative Comments	Positive Comments
Successful Participants	- Recruitment was a little depressing having gotten invited back to so few sororities the first round. It made me second guess my personality and character. However, I am more than relieved to have been accepted to the sorority I am currently in. (-1) - Absolute worst experience of my life. Panhellenic recruitment was a nightmare. I have never felt so ashamed of myself. I felt constantly rejected. (-3)	- It was an exhausting process but I think being a part of a sorority will be worth it. (1) - I had an amazing time during recruitment. I feel as though I met some amazing women and have been inspired by many to do things from study abroad to community outreach to trying out minors/majors. [My sorority] was the best fit for me, the girls made me feel incredibly welcome and wanted- and they remembered me which was amazing. (3)
Unsuccessful Participants	- At times the process felt superficial and unfair, but in the end I don't think being in a sorority matters that much in the end. (-1) - I am hurt, humiliated, and have gone back into the depression that I was in for much of the first semester. I am extremely disillusioned with the Greek system at Penn. (-3)	- I withdrew from recruitment because I don't think sorority life is for me, recruitment was fun. (1)
Nonparticipants	- I did not participate. I heard from those who did that it was a lot of mindless socializing. The whole process was nerve-wracking but honestly not that dramatic. (-1) - I was not interested in having to get dressed up and mingle only to be judged by a room full of girls. (-2)	- After seeing some friends go through the rush process, I kind of wish I did also so that I would have those experiences. Sisterhood seemed more appealing now, more than ever. (2)

Note: Comments were chosen based on their representativeness. The number in parentheses indicates the valence score given to the comment.

in self-esteem during the recruitment process. However, there was a significant anxiety penalty for both successful and unsuccessful recruitment participants, both of whom reported increases in state anxiety during the recruitment process. That is, simply participating in recruitment, regardless of the outcome, led to significant increases in anxiety, whereas non-participation was not associated with any increase in anxiety over the same time period. There was also a significant rejection penalty for unsuccessful participants who experienced an increase in negative, dysphoric affect over the course of recruitment. However, this rejection penalty was fairly short-lived; most unsuccessful participants returned to pre-recruitment baseline levels of anxiety and dysphoria two months later.

Our third question related to what, if any, baseline differences would predict both the decision to participate in recruitment and the eventual outcome of recruitment. Thus, we hypothesized that women who planned on participating in recruitment would exhibit lower levels of perceived social support at baseline, following the rationale that they would be more likely to desire the increased social support sororities purportedly offer. Contrary to our expectations, we found the opposite. In fact, women who planned from the outset to participate in recruitment were a surprisingly uniform group, reporting high rates of perceived social support at baseline, as well as high levels of extraversion, agreeableness, self-esteem, and psychological well-being. Thus, the data demonstrated that the typical woman planning to participate in recruitment was already socially successful prior to the

recruitment process, and was likely less daunted by the process than other women who did not plan to participate in the recruitment process due to their high levels of extraversion and agreeableness.

In contrast, women who were unsure of their plans for recruitment in the fall were the most distressed group, and the most likely to report low levels of belonging and well-being. Specifically, women who were unsure about participating were significantly more depressed than the other two groups. They also reported lower self-esteem, lower levels of social support, and higher anxiety as compared to the women who definitely planned to participate and women who definitely did not want to participate falling in the middle. These findings have led us to speculate that unsure women had not yet found their community at the university. This situation is in contrast to women who definitely did not want to participate in recruitment, almost 90% of whom stated that they felt that they had found a community. The fact that such a high percentage of women felt that they had found a community is likely unique to the deferred recruitment system used at the University of Pennsylvania (and about 25% of other institutions). On campuses where recruitment takes place in the fall, most women have not yet had the opportunity to find other social communities and sources of support, but the deferred system allows women a chance to do so during the fall semester. Unsure women, on the other hand, may have looked to the sorority recruitment process to find their niche, and yet they may not have felt that they had attributes of the "typical" extraverted sorority woman.

Moreover, baseline differences in personality and psychological well-being also predicted recruitment outcomes for the women who eventually participated in recruitment. Women who reported higher levels of extraversion and self-esteem and lower levels of anxious and depressive symptoms at baseline were more likely to obtain a membership offer. In addition, women who were unsure about participating in recruitment at baseline were significantly less likely than other women to complete it successfully.

Taken together, these results indicate that the most distressed women, who are unsure about the recruitment process and whose distress and low levels of extraversion are associated with a decreased success rate if they do decide to participate, are the least likely to be able to enjoy the social benefits of joining a sorority. In short, the sorority recruitment process is unlikely to benefit those it could help most. Instead, it caters to a distinct group of women who already report high levels of social support and psychological well-being.

These results indicate that recruitment may be more difficult for unsuccessful participants than for successful participants. However, most of the results demonstrate that recruitment is a difficult process for all participants, regardless of outcome. While nonparticipants experienced "natural" increases in self-esteem, belongingness, and social support from pre-recruitment to post-recruitment that followed the overall trend for improved psychological health throughout the year, neither successful nor unsuccessful recruitment participants experienced these increases. Furthermore, both successful and unsuccessful participants experienced significant increases in anxiety from pre- to post-recruitment, which nonparticipants did not experience. Thus, the data demonstrated that many participants, regardless of eventual success, found the recruitment process distressing. Recruitment may be perceived as involving the judgment of candidates primarily on the basis of their personalities, likely leading unsuccessful candidates to feel rejected on the basis of core, unchangeable attributes about themselves. Furthermore, it is possible that even some successful candidates may go through one or more rejections before completing the process.

The distressing nature of recruitment is supported by our qualitative analysis of respondents' comments. Unsuccessful participants described

the process very negatively, indicating that, for many women, the decision to drop out is the result of a negative experience or rejection as opposed to a simple lack of interest. Nonparticipants also professed a negative view of the recruitment process, suggesting negative perceptions of the recruitment process in the nonfraternity/sorority community. Even successful participants experienced the process as neutral, on average, indicating that a positive recruitment experience is not simply a matter of receiving a membership offer.

Although the recruitment process itself does not seem to offer any social benefits, our results support the widespread belief that sorority membership increases the availability of social support and belongingness for those women who successfully join (Fouts, 2010). Even accounting for the fact that women who eventually join sororities report higher levels of social support at baseline, the first few months of sorority membership did have a measurable positive impact of members' feelings of belonging. This increase is likely the result of the heightened atmosphere of community, friendship, and "sisterhood" emphasized by sororities. As is noted above, however, this positive outcome is most likely to be available to those women who are already well-adjusted and socially successful. The case of women who are unsuccessful in the formal recruitment process and then successful in the later informal process is particularly interesting, as their later success alters their course from a downward trend in social support to an upward trend. These cases suggest that sorority membership can have a positive social impact on those who are able to access it.

Limitations

Because this study was conducted at a large, urban, competitive research university with an approximately 30% sorority participation rate and a deferred recruitment system, our results can only be generalized to similar institutions. It is unclear how well these results would translate to an institution with a different sorority participation rate or to an institution using a primary (fall) recruitment system. Another limitation of the study is that our sample consisted of significantly higher proportions of Asian students and recruitment nonparticipants than would be expected. In addition, we treated unsuccessful recruitment participants as a monolithic group in the interest of simplicity and statistical power, so we were not able to tease apart differences between women who withdrew due to lack of interest and those who withdrew because they had a negative experience or were eliminated from the process. However, our data from participant comments indicated the recruitment process was a very negative experience for those participants we considered "unsuccessful." Finally, we recognize that comment data are subject to response bias and therefore may indicate more extreme trends than would otherwise be observed.

Future Directions

Most importantly, the results of this study need to be replicated at different institutions with both primary and deferred recruitment systems. However, we believe that the preliminary results of this study reveal a need for change within the current recruitment system. Sorority membership did appear to confer benefits; women who had joined sororities experienced a significant increase in belonging during the first few months of membership as compared to nonmembers. However, the new sorority members were typically women who were the least distressed and already the most socially supported. Thus, the women who needed the boost of sorority membership the least were those who largely experienced it. Ironically, the women who were most distressed and felt least socially supported, and who could therefore benefit most from joining a sorority, were the least likely to be offered membership. University administrators and fraternity/sorority governing bodies should consider making changes to the recruitment pro-

cess to make it more accessible to all interested women, particularly if our findings about the social benefits of membership are replicated.

Additionally, the process of recruitment itself was largely experienced as negative (or neutral at best) by participants, with one successful participant calling Panhellenic recruitment "the absolute worst experience of my life." Both successful and unsuccessful recruitment participants experienced significant increases in anxiety during the recruitment process, and unsuccessful participants experienced increases in negative affect. More research is needed to determine exactly what factors make recruitment a distressing process for the majority of participants, how to improve the process, and how to offer effective emotional support to all participants.

Based on the results of this study, the authors propose two specific changes that could have a positive impact on the way women experience the recruitment process:

1. Current national protocols for recruitment require every potential new member to visit every sorority at her university during the first round of recruitment. This policy logically increases the likelihood of multiple rejections. We suggest that potential new members be allowed to visit only those sororities that interest them during the first round of recruitment, allowing naturally occurring self-selection to take its course. Recruitment participants could select into those sororities that are the best fit for them, decreasing the amount of needless, but emotionally damaging, rejections they receive from sororities that do not fit their interests and personalities in the first place. On the other hand, such a system might lead to women visiting only a few high-profile chapters that would not select them, which would unintentionally increase the rejection rate. Much more research is needed to determine how such a system would operate logistically and what its impact would be. Furthermore, this proposal might be more effective at deferred system institutions, where women would already be familiar with the reputation of each group by the time that recruitment occurs in the spring.
2. It would also beneficial if campuses had enough new member slots to accommodate all the women who are interested in joining a sorority. This suggestion could be achieved by either increasing the number of sororities or increasing the size of new member classes. Doing so has the potential to make the process less competitive and increase potential new members' chances of success. Again, more research is needed to determine the plausibility and effectiveness of such a change.

While more research is needed to assess the usefulness of these suggestions and to determine other ways in which recruitment can be improved, it is clear that some changes are needed to make recruitment less aversive and to make the benefits of sorority membership available to all those who desire them.

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