Sorority Recruitment and Women’s Well-Being: The Short and Long Term Impact of Positive and Negative Recruitment Experiences

Julie Martin
Why does rejection matter?

• Human beings have a fundamental need to belong
  o Low belonging associated with poorer mental and physical health (Baumeister & Leary, 1995)

• Rejection is a highly aversive interpersonal experience
  o Elicits anxiety and negative emotion (Leary, Tambor, Terdal & Downs, 1995; Slavich et al., 2007)
  o Activates same regions of the brain that are associated with physical pain (Williams, 2003)

• The sorority recruitment process offers a unique opportunity to study the effects of belonging and rejection on psychological well-being in a real and meaningful context
Primary Research
Question

How does having a positive versus negative sorority recruitment experience impact women’s well-being?

- In the short-term
- In the long-term
Study Outline

- Participants were first-year women participating in Panhellenic Sorority Recruitment

- Completed online survey at three time points:
  - Directly before Panhellenic Sorority Recruitment
  - Directly after Recruitment (after Bid Day)
  - 3 months later

- Primary Well-being Measures
  - Happiness
  - Depressive symptoms
  - Positive Mental Health
  - Belonging
Rejected Status
Classification

• Positive Experience
  o Completed recruitment and accepted a bid

• Negative Experience
  o Withdrew from recruitment at some point after receiving feedback
  o Completed recruitment but did not receive a bid
  o Completed recruitment, received a bid, and declined the bid

• Manipulation Checks:
  o How rejected did you feel during the recruitment process?

  o How many sororities were you asked back to after each round?
How rejected did you feel?

### How rejected did you feel during the recruitment process?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All Rejected</td>
<td></td>
</tr>
<tr>
<td>Slightly Rejected</td>
<td></td>
</tr>
<tr>
<td>Moderately Rejected</td>
<td></td>
</tr>
<tr>
<td>Very Rejected</td>
<td></td>
</tr>
<tr>
<td>Extremely Rejected</td>
<td></td>
</tr>
</tbody>
</table>

### F value and Means

<table>
<thead>
<tr>
<th>F value</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>$F(110)=16.13, p&lt;.001$</td>
<td>Accepted: 2.35</td>
</tr>
<tr>
<td></td>
<td>Rejected: 3.79</td>
</tr>
</tbody>
</table>
How many sororities were you asked back to after each round?

<table>
<thead>
<tr>
<th>Round</th>
<th>F value</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Round 1:</strong></td>
<td>$F(110)=16.13, p&lt;.001$</td>
<td>Accepted: 5.6</td>
</tr>
<tr>
<td>Up to 7</td>
<td></td>
<td>Rejected: 4.0</td>
</tr>
<tr>
<td><strong>Round 2:</strong></td>
<td>$F(102)=13.03, p&lt;.001$</td>
<td>Accepted: 4.0</td>
</tr>
<tr>
<td>Up to 5</td>
<td></td>
<td>Rejected: 2.9</td>
</tr>
<tr>
<td><strong>Round 3:</strong></td>
<td>$F(89)=16.24, p&lt;.001$</td>
<td>Accepted: 2.6</td>
</tr>
<tr>
<td>Up to 3</td>
<td></td>
<td>Rejected: 1.6</td>
</tr>
</tbody>
</table>
Descriptive Statistics

• High Retention rate (87%):  
  o 131 women completed the first survey  
  o 114 women completed all three surveys

• 83 White, 28 Asian, 3 Hispanic, 2 Black, 1 other (Indian)

• 73 women met acceptance criteria  
• 33 women met rejection criteria  
• (8 women withdrew from recruitment before receiving feedback)

• Obtaining the sample prior to recruitment decreases self-selection issues  
  o Eliminates concerns that only women with extremely negative experiences responded to the survey
Presentation of Results

- Repeated Measures ANOVA used to analyze data
  - Contrasts used to test between group effects at each time point
  - Pairwise comparisons used to examine change over time within groups

- Happiness
- Depressive Symptoms
- Positive Mental Health
- Belonging to Duke
- Non-rushers
• No significant difference in happiness between groups before recruitment \((F(104)=.866, p=.35)\)

• Accepted women significantly happier than rejected women directly after recruitment \((F(104)=59.59, p<.001)\)

• Accepted women significantly happier than rejected women 3 months after recruitment \((F(104)=4.85, p=.03)\)
Happiness

Within Group Effects

• Accepted Women
  o Happiness increases significantly from time 1 to time 2 ($p=.001$)
  o Happiness at time 3 is still significantly higher than time 1 happiness ($p=.01$)

• Rejected Women
  o Happiness decreases significantly from time 1 to time 2 ($p<.001$)
  o Happiness at time 3 has returned to baseline level ($p=.217$)
Happiness

In general these days, how happy are you?

<table>
<thead>
<tr>
<th>Very Unhappy</th>
<th>Unhappy</th>
<th>Somewhat Unhappy</th>
<th>Neither Happy nor Unhappy</th>
<th>Somewhat Happy</th>
<th>Happy</th>
<th>Very Happy</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mean Happiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4.5</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

- Accepted
- Rejected
Depressive Symptoms

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

<table>
<thead>
<tr>
<th>I was bothered by things that usually don't bother me.</th>
<th>Rarely or none of the time (less than 1 day)</th>
<th>Some or a little of the time (1-2 days)</th>
<th>Occasionally or a moderate amount of time (3-4 days)</th>
<th>Most or all of the time (5-7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had trouble keeping mind on what I was doing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt depressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt that everything I did was an effort.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt hopeful about the future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt fearful.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My sleep was restless.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was happy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt lonely.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could not get &quot;going.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Depressive Symptoms

Between Group Effects

• No significant difference in depressive symptoms between groups before recruitment ($F(100) = .402, p = .53$)

• Rejected women significantly more depressed than accepted women directly after recruitment ($F(100) = 6.39, p = .013$)

• Rejected Women marginally more depressed than accepted women 3 months after recruitment ($F(100) = 3.57, p = .062$)
Depressive Symptoms

Within Group Effects

• Accepted Women
  o Depressive symptoms increase significantly from time 1 to time 2 (p<.001)
  o Depressive symptoms at time 3 have returned to baseline (p=.394)

• Rejected Women
  o Depressive symptoms increase significantly from time 1 to time 2 (p<.001)
  o Depressive symptoms at time 3 are significantly higher than time 1 (p<.001)
Depressive Symptoms

Mean Depressive Symptoms

- Accepted
- Rejected

Time 1 | Time 2 | Time 3
---|---|---
## Positive Mental Health

(Tennant et al., 2007)

<table>
<thead>
<tr>
<th>Statement</th>
<th>None of the time</th>
<th>Rarely</th>
<th>Some of the Time</th>
<th>Often</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I've been feeling optimistic about the future.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling useful.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling relaxed.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling interested in other people.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've had energy to spare.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been dealing with problems well.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been thinking clearly.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling good about myself.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling close to other people.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling confident.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been able to make up my own mind about things.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling loved.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been interested in new things.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I've been feeling cheerful.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Positive Mental Health

Between Group Effects

• No significant difference in positive mental health between groups before recruitment ($F(100)=1.272, p=.262$)

• Accepted women had significantly higher positive mental health than rejected women directly after recruitment ($F(100)=8.96, p=.003$)

• No significant difference in positive mental health between groups 3 months later ($F(100)=1.77, p=.186$)
Positive Mental Health

Within Group Effects

• Accepted Women
  o Positive Mental Health decreases significantly from time 1 to time 2 ($p=.03$)
  o Positive Mental Health at time 3 has returned to baseline ($p=.347$)

• Rejected Women
  o Positive Mental Health decrease significantly from time 1 to time 2 ($p<.001$)
  o Positive Mental Health at time 3 is significantly lower than time 1 ($p<.001$)
Positive Mental Health

Mean Positive Mental Health

Time 1 | Time 2 | Time 3

Accepted | Rejected

Graph showing the mean positive mental health over time for accepted and rejected groups.
Belonging to Duke

(Asher & Weeks)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I belong at this school (Duke).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It's hard for me to fit in here.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel connected to this school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel welcome at this school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This is definitely the right school for me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I'm glad I came to this school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Belonging to Duke

Between Group Effects

• No significant difference in belonging to Duke between groups before recruitment $(F(100)=.378, p=.54)$

• Accepted women significantly higher on belonging to Duke than rejected women directly after recruitment $(F(100)=4.63, p=.03)$

• Accepted women marginally higher on belonging to Duke than rejected women 3 months after recruitment $(F(100)=3.02, p=.085)$
Belonging to Duke

Within Group Effects

• Accepted Women
  o No change in belonging to Duke over time ($p’$s > .59)

• Rejected Women
  o Belonging to Duke decreases significantly from time 1 to time 2 ($p < .001$)
  o Belonging to Duke at time 3 is significantly lower than time 1 ($p = .001$)
Belonging to Duke

Mean Belonging to Duke

- Accepted
- Rejected

Time 1 | Time 2 | Time 3

3.5 | 3.6 | 3.7

3.7 | 3.8 | 3.9

4.0 | 4.1 | 4.2
Are these decreases a normal part of the first-year?

- Surveyed first-year women who did not participate in sorority recruitment at time 1 and at time 3

- No changes in any of the measures from the beginning of the semester to the end of the semester.
  - **Happiness** $F(18) = 1.54$, $p = .230$ (M=5.1, 5.4)
  - **Depressive Symptoms** $F(18) = .630$, $p = .438$ (M=1.8, 1.9)
  - **Positive Mental Health** $F(18) = .006$, $p = .94$, (M=3.39, 3.38)
  - **Belonging** $F(18) = .026$, $p = .87$, (M=3.98, 4.0)
  - **Social Support** $F(18) = .306$, $p = .59$ (M=5.84, 5.74)
Summary

• Both accepted and rejected women displayed lower mental well-being and high depressive symptoms directly after recruitment, although the effect was much stronger for rejected women.

• Rejected women experienced a decrease in all well-being indicators directly after recruitment, and did not return to baseline on depressive symptoms, positive mental health or belonging to Duke 3 months later.

• Accepted women returned to baseline on all measures 3 months later, with the exception of happiness, which increased from baseline.
Why did women withdraw/single preference/decline bids?

Most common response to stigma question was 5 (very much so)
Mean response was 4.43
Chose to be independent rather than take on a stigma
The Role of Race

- Minority women were significantly more likely to fall into the rejected status category than white women
  - $F(108)=10.46$, $p=.002$

<table>
<thead>
<tr>
<th></th>
<th>Accepted</th>
<th>Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>62</td>
<td>18</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

- Many felt that their status as a racial minority decreased their chances of getting asked back to sororities

- Are these beliefs justified?
Race and Number of Sorority Invites

- Minority women received significantly fewer invites to sororities after the first round and second round of recruitment than white women in this sample.

<table>
<thead>
<tr>
<th>Round 1</th>
<th>F value</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F(108)=4.21, p=.043$</td>
<td>White= 5.36, Nonwhite=4.50</td>
</tr>
<tr>
<td>Round 2</td>
<td>$F(100)=4.44, p=.038$</td>
<td>White= 3.935, Nonwhite= 3.240</td>
</tr>
</tbody>
</table>

- By the final round, most minority women in the sample who had a negative recruitment experience had withdrawn, so no race effect was observed ($F(89)=.539, p=.465$).
Women’s Comments

Accepted

The system does work. I found the sorority I belong in. It's just a rude awakening and a tough process to get there.

Rejected

I've largely gotten over the negative emotions I've experienced since recruitment, but I'd be lying if I said that recruitment never bothered me anymore. I know that the recruitment process is flawed and that some girls always come out with the short end of the stick, but it's hard not to look at my friends who are in the sororities that I wanted to be in (and almost all of them are) and constantly wonder what makes them "better" than me, or why these sororities didn't want me… my experiences from recruitment have only heightened insecurities about my personality, appearance, and race. I hope that there'll be a way for me to join my friends in their sororities, but I am not optimistic. If that doesn't work out, I will just remain independent because I would never want to go through formal recruitment ever again.
Women’s Comments

Accepted

While I am currently in a sorority, I still hold the same opinions on the formal recruitment process I went through in January. I think it lets really great people slip through the cracks and you don't really get to know anyone because most of the conversations you are having don't allow you to really get to know a person.

Rejected

This process seems arbitrary and at times can be very cruel. It is wonderful for those who ultimately do find the sorority that they were looking to be in, but for few girls who were unfortunately dropped by all but their last choice sorority, it can be devastating. The ramifications of this process are that girls who were dropped feel less than and insecure because after presenting their inherent qualities (personality, looks, etc.) they were judged to be insufficient, and less than.
Women’s Comments

Accepted
Rush and bid day are very hard, much harder than I expected. I got asked back to all of the one's I liked, and had good luck and a great process. However, that didn't mean that the decision was[n’t] extremely difficult, emotionally challenging and scary.

Rejected
It's gotten better. Recruitment and post-recruitment was terrible. It revealed to me the social system here at Duke, which I did not expect prior to coming here. I will probably end up joining some sorority through informal in the future in order to fully experience some sort of social life here. Sad but partially true.
Implications

• To relieve short-term distress, women should be informed prior to the start of recruitment about what to realistically expect
  o Receive information about how recruitment may affect them/statistics about outcomes from the previous year
• Should be encouraged to seek help from the counseling center
• Facebook group for women who have had a negative experience

• To relieve long-term distress, women should again be encouraged to speak with counseling center professionals
• Should be encouraged to seek social support, avoid self-blame and rumination, minimize social comparison
• The college needs to make the “independent” experience more attractive
Thank you!

Dr. David Jamieson-Drake
Dr. Stephanie Helms Pickett
Cole Taylor
Dr. Gary Glass
The Richman Lab and Dr. Laura Richman
Dr. Steven Asher and Dr. Molly Stroud Weeks
The Duke Panhellenic Association
Experiment Crowdfunding Donors
The Interdisciplinary Behavioral Research Center
The Kenan Institute for Ethics

Thank you!