1

Rates of Social Connectedness, Social Sensitivity, Positive Emotions, and Gratitude in Panhellenic Women

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Abstract

The National Panhellenic Conference is made of 26 organizations that form social relationships through membership in sorority chapters which influence more than 4 million women. This study investigated well-being among Panhellenic sorority women and non-Panhellenic sorority women at a large south-eastern university. The study hypothesized that Panhellenic sorority women would have higher rates of social connectedness, social sensitivity, gratitude, and positive emotions than non-Panhellenic sorority women. Panhellenic sorority women (n=48) and non-Panhellenic sorority women (n=55) completed the Reading the Mind through the Eyes, a gratitude letter, and self-reported surveys that assessed their levels of social connectedness, social sensitivity, gratitude, and positive emotions. The findings suggest Panhellenic sorority women have higher rates of social sensitivity and feel more integrated to their environment than non-Panhellenic sorority women.

The National Panhellenic Conference was established in 1902 and now contains twenty six member organizations that influence more than four million current Panhellenic sorority women (*National Panhellenic Conference*, 2011). The University of North Carolina has admitted women since 1917 with the first sororities founded at UNC in 1923. In 2012, there are eleven Panhellenic chapters on campus at the University of North Carolina at Chapel Hill (*Office of Fraternity & Sorority Life*, 2009). While not all of the implications of joining a Greek organization are fully known, being part of a cohesive group has benefits to its members through the social relationships formed.

Social Sensitivity

To form social relationships, social information must be interpreted and understood for proper social responses to occur. Social sensitivity is the ability to decode social information cues that range from facial expressions, body posture, and hand gestures. Social cues are often brief and must be quickly perceived and understood. Social sensitivity is an important part of forming social connections and individuals with a high need for social connectedness are especially socially sensitive. People differ in their need for social connectedness due to differences in personalities and temperament (Pickett, 2004).

Social sensitivity is an important part of all social behavior. In every person, there is a social monitoring system that perceives and processes the social information in the environment so social information is understood (Pickett, 2004). This social monitoring system is an adaptation and critical for social relationships. Social sensitivity is linked to higher performance in groups more than overall intelligence due to the importance of relationships in groups and solving tasks. An evolutionary psychology perspective suggests that social sensitivity is a

fundamental social motive that makes people categorize others who would aide in achieving goals and without it, goals would be satisfied more slowly by having to voice emotions and constantly communicate (Kaschak & Maner, 2009). Research has found that avoiding threats is another important task to which social sensitivity contributes (Schaller & Park, 2011). Avoiding threats from an evolutionary stand point was very important, especially when language was not as developed as it is now. Without social sensitivity, needs of an overall group are left unmet and not communicated. If each individual pursues their own goals without the aid of others, they lose potential social support and a chance to feel socially connected (Wilson, Timmel, & Miller, 2004).

Social Connectedness

Social connectedness is an aspect of self that reflects a sense of closeness and togetherness with one's social environment (Lee & Robbins, 1995). Social connectedness is important for feeling as a member of an in-group. The need to belong is a fundamental human motivation according to Baumeister and Leary (1995). They found much of human social behavior has been determined by this need to belong. Without social connections and feeling a sense of belonging, many people can feel lonely and the isolation can cause psychological discomfort and has been linked to health complications (Baumeister & Leary, 1995). Social connectedness has been shown to increase self-protective motivations to keep bonds and keep outsiders outside the perceived group (Maner, Miller, Moss, Leo, & Plant, 2012). Feeling socially connected does not have to necessarily involve face to face social contact. Many people feel socially connected simply by being categorized as a member of a group, regardless of the basis for the categorization (Swaab, Postmes, van Beest, & Spears, 2007).

Social interaction among humans is necessary and something that occurs daily without thought. Feeling connected is important to encourage reciprocation between members of a social relationship and to prolong the social relationship (Baumeister & Leary, 1995). If someone does not feel that their social relationship is being reciprocated, the social relationship can die quite quickly. Social connectedness can alter emotional and physiological states between individuals and cause more shared emotions and physiological states (Cwir, Carr, Walton & Spencer, 2011). Cwir, Carr, Walton, and Spencer (2011) found that those physiological states that can be altered include the heart rate and breathing patterns of an individual, which can sync and follow the same rhythm. This connectedness is special in that it encourages not only physiological changes, but psychological ones as well including changes in well-being life satisfaction due to the connections people feel to others (Yoon, Lee, & Goh, 2008).

Every day people feel membership to groups in various ways. Ethnically, socially, religiously, financially, and many other aspects of life influence one's perception of their social connectedness in society and membership in groups (Yoon, Lee, & Goh, 2008). Group membership is an important part of one's identity and self-concept (Jans, Postmes, & Van der Zee, 2012). In-group members feel more socially powerful, internally motivated, and connected with the group of which they are a member. Out-group members often feel the opposite of how in-group members feel. They often feel less self-motivation, feelings of disempowerment, decreased self-worth, and dislike for the in-group (Halevy, Weisel & Bornstien, 2011).

Past Research

The past research on sororities, which are a collegiate in-group, has primarily focused on body image issues, binge drinking, sex, eating disorders, hazing, and self-esteem. The positive

aspects of joining a Panhellenic sorority have not been fully researched, though membership in student organizations has been linked to more satisfaction of the collegiate experience (Abrahamowicz, 1988). Panhellenic sororities are different than a typical student organization due to the type of group affiliation and strong in-group organization. The process of getting into a sorority requires the sorority to choose to accept a new member after going through the recruitment process which varies from organization to organization, but is generally regarded as strenuous. The feeling of acceptance to such an organization increases liking for the group.

Group affiliation has been found to make people feel better. Social support promotes health and according to the Social Baseline Theory, relationships are a necessary part of physiological functioning. With the transition to a new environment, social proximity and contact decreases the burden associated with a challenge in the new environment of college (Beckes, L.& Coan, J.A., 2011). The group affiliation of Panhellenic sororities includes social proximity and contact on a regular basis through pledging activities. The close group affiliation is solidified by building a strong in-group through activities, t-shirts, and rituals which help each individual identify as a member of the in-group and solidify their affiliation. Social approach has shown that behavior can occur within a social context and that behavior of individuals are influenced by others and their environment (Aronson, E., Wilson, T., & Akert, R., 2010). The power of the environment of feeling special and selected is important to altering the behavior of members academically, socially, and emotionally.

Positive Emotions

Positive emotions help build lasting psychological resources according to the broadenand-build theory (Fredrickson, B.L., 2001). Sorority membership is not only for college, but a lasting resource of support for members. The National Panhellenic Council has over 4,500 local alumnae chapters to continue sorority membership, friendship, and support as a life-long lasting resource for members (*National Panhellenic Conference*, 2011). The alumni chapters help members continue sisterhood through the events and contact with others. The positive emotions from Panhellenic sorority membership continue not only through college and are lasting resources for those involved in a Panhellenic chapter for life.

Positive emotions create more inclusive social groups, more flexible goals, and feelings of love and compassion (Fredrickson, Cohn, Coffey, Pek, and Finkel, 2008). The positive emotions experienced by new members as part of an in-group and feeling wanted can also help create positive changes in members. The positive emotions can create a change in ego resilience that can increase one's ability to have better interpersonal and intrapersonal adjustment. The ego resilience carries on to the future and continues to help one generate more positive emotions. When a stressful situation occurs, people high in ego resilience experience more positive emotions (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). People who experience more positive emotions are happier and respond to challenges better. They build resources to help deal with stressors. This allows for growth in ego resilience and increases in overall well-being.

Lack in social relationships have also been found to constitute a major risk factor for health. A meta-analysis by Holt-Lunstad, Smith, and Layton (2010) has found that those with stronger social relationships live 50% longer when controlling for other factors. This would show increased positive aspects for creating long-term social relationships and support systems. Social relationships provide self-esteem and sense of purpose to life (Cohen, 2004). With these positives for social relationships, group affiliation with strengthened social relationships would

increase health. Feeling socially integrated and needed is also a key predictor for health and well-being (Holt-Lunstad, Smith, & Layton, 2010).

Gratitude

Gratitude is another aspect of well-being. Gratitude includes becoming aware and thankful for something which also includes appreciation and the inclination to return kindness. Gratitude has the potential to build personal resources and increases happiness in individuals (Nelson, 2009). As a causal factor of well-being, gratitude is a stimulus for growth and a helps create more positive states (Nelson, 2009). This increase in positive states makes gratitude an important aspect of well-being. Gratitude includes giving and Panhellenic women engage in giving through philanthropy, which is an important part of sorority life with each sorority championing a cause to contribute to through financial support and volunteering of time. Showing of appreciation, giving to others, and gratitude are linked to well-being and increases in positive emotions (Nelson, 2009).

Gratitude is a positive emotion and brings people closer. Gratitude influences social relationship formation and maintenance and is a predictor for strengthened relationships (Algoe, Haidt, & Gable, 2008). The responsiveness to others' needs also factors into gratitude. By making one feel important and appreciated, relationships can grow. New Panhellenic sorority women have increased gratitude during a week of gift giving from older Panhellenic sorority women as the welcoming to the chapter which leads to new members feeling appreciated. As gratitude initiates the relationship-building cycle between the benefactor and the recipient, liking is increased and the integration and cooperation between the members also increases (Algoe, Haidt, & Gable, 2008). The outcome of a relationship can also be predicted by the amount of

gratitude demonstrated in a relationship. Gratitude has an important role in social life and relationships while also influencing one's overall well-being.

The potential positives of being in a Panhellenic sorority have not been fully investigated. Guided by the various literature discussing groups and these characteristics, this study has several hypotheses. In this study, I hypothesize that Panhellenic women feel more socially connected than non-Panhellenic women. Panhellenic women will have higher levels of sensitivity than non-Panhellenic women. The lasting resources from the Panhellenic sorority membership and group cohesiveness will result in higher rates of positive emotions. Lastly, due to philanthropy and giving back to the community, sorority members will have elevated gratitude levels as well. Through this, this study hopes to find a significant connection between Panhellenic sorority women and elevated rates of these characteristics.

Method

Participants

Participants were recruited through The University of North Carolina at Chapel Hill's Psychology Research Participant Pool. Participants were told they were recruited based on gender and unaware that recruitment was based off their membership in a Panhellenic sorority. A total of 103 women participants were recruited with 48 Panhellenic sorority women and 55 non-Panhellenic sorority women. The participants 62.1% were first year students, 26.2% were sophomores, 8.7% were juniors, and 2.9% were seniors. 71.8% of participants were Caucasian, 12.6% were African American, 5.8% were Asian American, 6.8% were Hispanic, and 2.9% were American Indian. Panhellenic sorority women were 70.8% Caucasian, 16.7% African American,

6.3% Asian American, 4.2% Hispanic, and 2.1% American Indian. Participants that were Panhellenic sorority women were 58.3% first year students, 27.1% sophomores, 8.3% juniors, and 6.3% seniors. Non-Panhellenic sorority women were 74.5% Caucasian, 9.1% were African American, 5.5% were Asian American, 7.3% were Hispanic, and 3.6% were American Indian. Participants that were non-Panhellenic sorority women were 64.8% first year students, 25.9% sophomores, and 9.3% were juniors with no senior participants. Each participant was compensated by receiving course credit for participation in the one hour study.

Measures

Reading the Mind through the Eyes test- Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001).- The Reading the Mind through the Eyes Test (RMET) is a series of 36 photographs of the eyes of faces and were asked to choose the correct word describing the mood on the face out of four possible options. The Reading the Mind through the Eyes Test measures social sensitivity (Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001).

Inclusion of Other in Self Scale Aron, Aron, & Smollan, 1992. (See Appendix A) The Inclusion of Other in Self Scale is a series of 7 circles ranging from not overlapping at all to almost completely overlapping. The participants were asked to rate their relationship with their peer group at UNC. Participants were then asked to rate how much they feel a part of the UNC community. The Inclusion of Other in Self Scale is a measure of closeness and self-other inclusion. The Inclusion of Other in Self Scale has internal validity with an alpha of .91.

Subjective Happiness Scale- Lymbomirsky, S. & Lepper, H.S.1999. (See Appendix B)

The Subjective Happiness Scale is a 4 item questionnaire that asks participants to rate themselves on their level of happiness and then rate how much the participants think that statements about

unhappy or happy individuals apply to them. The scale measures happiness and emotions. The Subjective Happiness Scale has internal validity with an alpha of .90.

Gratitude Questionnaire- McCullough, M. E., Emmons, R. A., & Tsang, J., 2002. (See Appendix C) The gratitude questionnaire contains six questions on a one to seven scale (1= strongly disagree, 8= strongly agree) with two items reverse scored. The Gratitude Questionnaire has internal validity with an alpha of .93.

Satisfaction with Life Scale- Diener, E., Emmons, R.A., Larson, R.J., & Griffin, S., 1985. (See Appendix D) The Satisfaction with Life Scale is a five item questionnaire where participants rate themselves on a one to seven scale (1= strongly disagree, 8= strongly agree). The scale was developed to assess satisfaction with overall life not reflecting in one specific domain (Diener, E., Emmons, R.A., Larson, R.J., & Griffin, S., 1985). The Satisfaction with Life Scale has internal validity with an alpha of .87.

Modified Differential Emotions Scale (mDES)- Fredrickson, Tugade, Waugh & Larkin, 2003. (See Appendix E) The mDES was a 20 item questionnaire for which participants rated themselves from not at all to extremely (5 options total) based on how the video made them feel. There are 20 different types of feelings the participants rank how much of each emotion (if any) they felt while watching the video that was meant to induce positive emotions.

Social Provisions Scale- Cutrona, C., & Russel, D., 1987. (See Appendix F) The Social Provisions Scale is a 24 item questionnaire that social support. The subscales of the Social Provisions Scale measure attachment, social integration, reassurance of worth, guidance, and opportunity for nurturance. The participants rate themselves on a one to seven scale (1= strongly

disagree, 8= strongly agree) for each question. The Social Provisions Scale is a reliable measure with an alpha of .93.

Procedure

Participants first completed the Reading the Mind through the Eyes test (RMET). Then the participants answered a series of questionnaires including the Inclusion of Other in Self Scale, Subjective Happiness Scale, and Gratitude Questionnaire. Participants then wrote a gratitude letter to a friend, acquaintance, or family member about an event which they benefited from because of that person's kindness, helpfulness, or generosity. After completing the letter, participants were given the option to send the letter. After choosing to send or not send, participants completed the Satisfaction with Life Scale then watched a video to induce positive emotions. Lastly, participants completed the Differential Emotions Scale, Social Provisions Scale, and some closing questions. The closing questions asked if the participant was in a sorority and to check to make sure the information given on the participant prescreening was correct. Participants were then debriefed.

Results

Of the 103 women who participated in the study, 1 participant was excluded for failing to complete the study. Data was analyzed used SPSS.

Level of Social Connectedness

Using t-test, the Inclusion of Other in Self Scale tested the level of feeling included in ones peer group (M = 4.34, SD = 1.28). Panhellenic sorority women (M = 4.5, SD = 1.22) did not

have significantly feel more included in their peer group than non-Panhellenic sorority women (M = 4.17, SD = 1.34), t(100) = -1.306, p = .194. The Inclusion of Other in Self Scale tested ones feeling of being part of the community (M = 3.97, SD = 1.48). Panhellenic sorority women (M = 4.10, SD = 1.356) compared to non-Panhellenic sorority women (M = 3.83, SD = 1.61) did not feel significantly more part of the community as well t(100) = .912, p = .359.

The Social Provisions Scale measuring of social support compared Panhellenic women to non-Panhellenic women using t-tests. Panhellenic sorority women had significantly higher levels of social integration t(100) = -2.588, p = .011. There were not significant differences in the overall level of social support t(100) = -.936, p = .351; the level of attachment t(100) = -1.054, p = .294; reassurance of worth t(100) = -1.088, p = .279; reliable alliances t(100) = -.924, p = .987; guidance t(100) = -.385, p = .701; or opportunities for nurturance t(100) = .979, p = .330.

Level of Social Sensitivity

To test if Panhellenic sorority women had significantly higher rates of social sensitivity, a t-test was ran to compare Panhellenic (M = 27.65, SD = 2.921) and non-Panhellenic women's (M = 26.25, SD = 3.78) score on the Reading the Mind through the Eyes test. There was a significant difference with Panhellenic sorority women having higher scores, t(100) = -2.104, p = .038.

A two-way ANOVA was conducted to test the effect of the participants year in college (first year students to upperclassmen) and Panhellenic sorority membership on the level of social sensitivity in the Reading the Mind through the Eyes test. A main significant effect for Panhellenic sorority membership was found F(1, 101) = 4.168, p = .044. There was no significant main effect for year in college F(1, 101) = .387, p = .536. There was no significant

interaction between Panhellenic sorority membership and year in college F(1, 101) = .790, p = .376.

Level of Positive Emotions

Using the modified differential emotions scale, Panhellenic sorority women had significantly higher feelings of inspiration after the video manipulation, t(100) = -2.380, p = .017. The other positive emotions measured including amusement t(100) = 1.008, p = .316; awe t(100) = .875, p = .382; gratefulness t(100) = -.129, p = .897; hopefulness t(100) = -.517, p = .610; interest t(100) = .903, p = .369; joy t(100) = -.558, p = .578; love t(100) = -.955, p = .342; pride t(100) = -.760, p = .449; and peacefulness t(100) = .076, p = .940; were not significant.

In comparing the women using the Satisfaction with Life Scale showed that neither Panhellenic sorority women (M = 27.29, SD = 4.99) nor non-Panhellenic sorority women (M = 27.39, SD = 4.732) were significantly happier than the other group t(100) = .101, p = .920.

Comparing with a t-test on the results of the Subjective Happiness Scale, Panhellenic sorority women and non-Panhellenic sorority women were not significantly higher in levels of positive emotions t(100) = .061, p = .545.

Level of Gratitude

Neither Panhellenic sorority women (M = .23, SD = 425.) nor non-Panhellenic sorority women (M = .24, SD = .432) were more likely to send the gratitude letter (M = .24, SD = .429). 22.9% of Panhellenic sorority women chose to send and 21.8% of non-Panhellenic sorority women chose to send the gratitude letter. The result of the t-test comparing the likeliness was not found to be significant t(100) = .136, p = .892.

In comparing Panhellenic sorority women and Panhellenic sorority women, there was not a significance in levels of gratitude experienced reported by the Gratitude Questionnaire t(100) = -.834, p = .406.

Discussion

This study hypothesized that Panhellenic women feel more socially connected than non-Panhellenic women. Panhellenic women will have higher levels of sensitivity than non-Panhellenic women. The lasting resources from the Panhellenic sorority membership and group cohesiveness will result in higher rates of positive emotions. Lastly, events like gift-giving week and giving to philanthropies, sorority members will have elevated gratitude levels as well. Through this, I hope to find a significant connection between Panhellenic sorority women and elevated rates of these characteristics.

Social Connectedness

I hypothesized that Panhellenic sorority women would feel more socially connected than non-Panhellenic sorority women. However, Panhellenic women did not feel significantly more socially connected than non-Panhellenic women. It was found that Panhellenic women felt more socially integrated into their environment. This could be for a variety of reasons. Being at a large university with 62.1% of participants being first year students, many participants may not have felt adjusted to their new social environment leading to feeling less socially connected. This study was conducted in the fall semester, as the semester progressed the women could have felt more connected just from adjusting to the university. Panhellenic sorority women rush in the fall semester and with members just joining, the Panhellenic women could possibly not have been as

connected to their sorority if they were a new member. Since social connectedness reflects a sense of closeness and togetherness with one's social environment (Lee & Robbins, 1995) the length of time that the participants had been in their environment could have contributed to their lack of feeling socially connected.

It was found that Panhellenic sorority women felt more integrated into their environment. Sorority members may feel more integrated due to the close group affiliation from their first day of joining. The sorority affiliation is solidified by building a strong in-group through activities, t-shirts, and rituals which help each individual identify as a member of the in-group. With the participants being an average of one and a half semesters into their college careers, the Panhellenic sorority women may already feel integrated during their first semester due to their close bonds, while non-Panhellenic sorority women may not have such a definite in-group. By members participating in sorority activities, the women may feel important to the group and feel integrated faster. Panhellenic sorority women also felt more attached and while the data was not significant, the increase in attachment may come from the increase in integration. The level of feeling a part of their community was also slightly in Panhellenic sorority women, which could also be accounted for by their level of integration.

Social Sensitivity

It was hypothesized that Panhellenic sorority women would have higher rates of social sensitivity than non-Panhellenic sorority women. It was found that they do have significantly higher rates of social sensitivity. Panhellenic sorority women may have higher levels of social sensitivity due to the large amount of group interaction where women cooperate, share, and interact. During the formal recruitment process, Panhellenic sorority members must decide if a

potential new member would be a good fit in the chapter. This process requires social sensitivity which would have allowed Panhellenic sorority women to have practice in detecting social cues. Also in the weeks leading up to formal recruitment members are briefed on detecting social cues, from anxiety to boredom, to make sure that they can make a girl feel welcome and give the best chance for a successful recruitment. With this training and practice, this could lead to higher rates of social sensitivity.

It was found that there was no significant interaction between length of time in college (first year students vs. upperclassmen) and Panhellenic sorority membership on the level of social sensitivity shown by the Reading the Mind through the Eyes Test. Though many of the participants were first year students, who had not been trained as a full member of a Panhellenic sorority would be in detecting social cues, in preparation for rush the women may have practiced or prepared also leading to higher rates of social sensitivity which could explain why the length of time in college did not have a significant effect on the level of social sensitivity. Panhellenic sorority women could have higher rates of social sensitivity before they join a sorority and be more likely to select to join Panhellenic sorority possibly due to their high level of social sensitivity. Social sensitivity is an important part of forming social connections and individuals with a high need for social connectedness are especially socially sensitive (Pickett, 2004). This could possibly explain why those with high levels of social sensitivity could be more likely to join a group like a Panhellenic sorority. If the women had a high need for social connectedness and potential a sorority could provide the needed social closeness, it could lead to women with higher levels of social sensitivity selecting to join a sorority.

Positive Emotions

It was hypothesized that Panhellenic sorority women would have higher rates of positive emotions. It was not found that Panhellenic women had higher rates of positive emotions overall, though it was found that sorority women had higher feelings of inspiration after a video manipulation. Positive emotions create more inclusive social groups, more flexible goals, and feelings of love and compassion (Fredrickson, Cohn, Coffey, Pek, and Finkel, 2008). Though this study did measure positive emotions, positive emotions could potentially be higher if it was brought up that they were members of a Panhellenic sorority. Bringing up Panhellenic sorority membership could lead to potentially more positive emotions, though it could alter responses if members thought they were representing their sorority.

Gratitude

It was hypothesized that Panhellenic sorority women would have higher levels of gratitude than non-Panhellenic sorority women. It was not found that there were higher levels of gratitude in Panhellenic sorority women. Gratitude includes becoming aware and thankful for something which also includes appreciation and the inclination to return kindness. Gratitude has been shown to be increased in Panhellenic sorority women during a week of gift giving to new Panhellenic sorority women from older Panhellenic sorority women (Algoe, Haidt, & Gable, 2008). While gratitude in Panhellenic sorority women did not have higher levels in this study, during the gift giving week rates could have been higher. With many participants being first year students they may not have experienced this week. Also, first year Panhellenic sorority women may have not been able to yet participate in giving through philanthropy, which is an important part of sorority life.

One limitation was that the participants were recruited through a participant pool with participants receiving class credit. More Panhellenic sorority volunteers should be included in a future study. This study was conducted at one large southern university, but Panhellenic sorority chapters are at more than 655 colleges and universities of various sizes (*National Panhellenic Conference*, 2011). A larger sample size of more students at more colleges and universities of various sizes with Panhellenic sorority chapters is needed.

Another limitation to the study was that many of the measures were self-report which could result in misrepresentative findings. With more behavioral measurers and less self-report, this study could be more comprehensive. Future directions could include the differences between new and established Panhellenic members. It is difficult to determine if the differences result from the Panhellenic experience or if the women who join a Panhellenic sorority have differences before they choose to join. A future study could also include studying women after they get accepted to a university and before they get to campus, after they choose to join a Panhellenic sorority and at the end of their collegiate career to see if the participants change over time which could be possible due to their Panhellenic sorority membership.

There are many directions for research on Panhellenic sorority membership since past research has emphasized alcohol, drugs, eating disorders, sexual behavior, and self-esteem. The positive aspects of Panhellenic sorority membership have not been fully investigated and need more research in this collegiate in-group affecting over four million sorority women (*National Panhellenic Conference*, 2011).

References

- Abrahamowicz, D. (1988). College involvement, perceptions, and satisfaction: A study of membership in student organizations. Journal of College Student Development, 29, 233-238.
- Algoe, S. B., Haidt, J., & Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion*, 8(3), 425-429. doi:10.1037/1528-3542.8.3.425
- Aron, A., Aron E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596-612.
- Aronson, E., Wilson, T., & Akert, R. (2010). *Social psychology*. (7th ed.). Upper Saddle Rive, NJ: Pearson Education, Inc.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The "Reading the Mind in the Eyes" Test Revised Version: A Study with Normal Adults, and Adults with Asperger Syndrome or High-functioning Autism. *Journal of Child Psychology*, 42, 2, 241-251.
- Beckes, L. & Coan, J. A. (2011). Social baseline theory: The role of social proximity in emotion and economy of action. *Social and Personality Psychology Compass*, 5, 976-988.
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009).

 Happiness Unpacked: Positive emotions increase life satisfaction by building resilience.

 Emotion, 9, 361-368.
- Cohen S (2004) Social relationships and health. American Psychologist 59: 676–684.

- Cutrona, C. E. and Russell, D. (1987). The provisions of social relationships and adaptation to stress. In W. H. Jones & D. Perlman (Eds.) <u>Advances in personal relationships</u> (Vol. 1, pp. 37-67). Greenwich, CT: JAI Press.
- Cwir, D., Carr, P. B., Walton, G. M., & Spencer, S. J. (2011). Your heart makes my heart move: Cues of social connectedness cause shared emotions and physiological states among strangers. *Journal Of Experimental Social Psychology*, 47(3), 661-664. doi:10.1016/j.jesp.2011.01.009
- DeBard, R., & Sacks, C. (2010). Fraternity/sorority membership: Good news about first-year impact. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 5(1), 12-23
- Diener, E., Emmons, R.A., Larson, R.J., & Griffin, S. (1985). The satisfaction with life scale.

 Journal of Personality Assessment, 49, 71-75.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Fredrickson, B. L. (2001). <u>The role of positive emotions in positive psychology: The broadenand-build theory of positive emotions.</u> *American Psychologist*, *56*, 218-226.
- Fredrickson, B. L., Cohn, M. A., Coffey, K., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95, 1045–1062.
- Fredrickson, B.L., Tugade, M.M., Waugh, C.E., & Karkin, G.R. (2003) What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist

- attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, 84(2), 365-376. doi: 10.1037/0022-3514.84.2.365
- Halevy, N., Weisel, O., & Bornstein, G. (2012). 'In-group love' and 'out-group hate' in repeated interaction between groups. *Journal Of Behavioral Decision Making*, 25(2), 188-195. doi:10.1002/bdm.726
- Jans, L., Postmes, T., & Van der Zee, K. I. (2012). Sharing differences: The inductive route to social identity formation. *Journal Of Experimental Social Psychology*, doi:10.1016/j.jesp.2012.04.013
- Kaschak, M. P., & Maner, J. K. (2009). Embodiment, evolution, and social cognition: An integrative framework. *European Journal of Social Psychology*, 39, 1236–1244. doi:10.1002/ejsp.664
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, 42, 232–241.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. Social Indicators Research, 46, 137-155.
- Maner, J. K., Miller, S. L., Moss, J. H., Leo, J. L., & Plant, E. (2012). Motivated social categorization: Fundamental motives enhance people's sensitivity to basic social categories. *Journal Of Personality And Social Psychology*, 103(1), 70-83. doi:10.1037/a0028172
- McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The Grateful Disposition: A conceptual and Empirical Topography. Journal of Personality and Social Psychology, 82, 112-127.
- National Panhellenic Conference. (2011). Retrieved April 20, 2012, from https://www.npcwomen.org/about.aspx

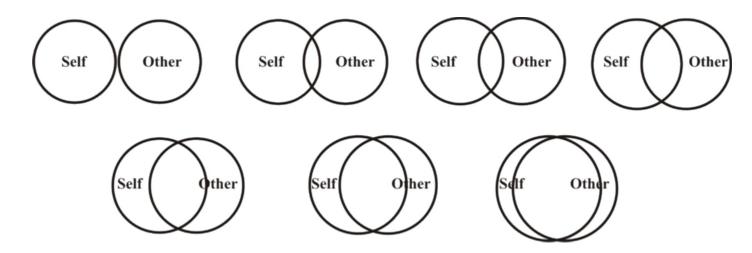
- Nelson, C. (2009). Appreciating gratitude: Can gratitude be used as a psychological intervention to improve individual well-being?. *Counselling Psychology Review*, 24(3-4), 38-50.
- Office of Fraternity & Sorority Life and Community Involvement at the University of North

 Carolina at Chapel Hill. (2012). Retrieved April 20, 2011, from http://greeks.unc.edu/
- Pickett, Cynthia L. (2004). Getting a cue: The need to belong and enhanced sensitivity to social cues. Personality & Social Psychology Bulletin, *30*(9), 1095.
- Schaller, M., & Park, J. H. (2011). The behavioral immune system (and why it matters). *Current Directions in Psychological Science*, 20, 99 103. doi:10.1177/0963721411402596
- Swaab, R. I., Postmes, T., van Beest, I., & Spears, R. (2007). Shared cognition as a product of, and precursor to, shared identity in negotiations. Personality and Social Psychology Bulletin, 33(2), 187–199, http://dx.doi.org/10.1177/0146167206294788.
- Wilson, D., Timmel, J. J., & Miller, R. R. (2004). Cognitive Cooperation: when the going gets tough, think as a group. *Human Nature*, 15(3), 225-250. doi:10.1007/s12110-004-1007-7
- Yoon, E., Lee, R. M., & Goh, M. (2008). Acculturation, social connectedness, and subjective well-being. *Cultural Diversity And Ethnic Minority Psychology*, *14*(3), 246-255. doi:10.1037/1099-9809.14.3.246

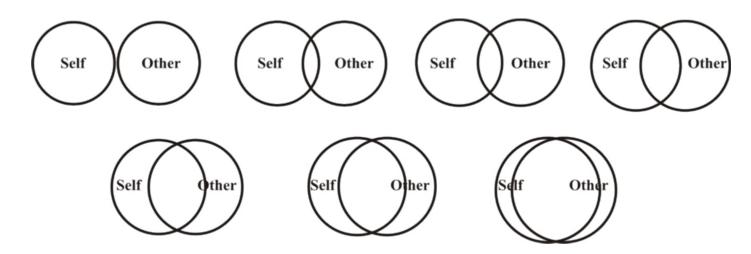
Appendix A

The Inclusion of Other in the Self Scale (IOS)

Please choose the letter corresponding with the picture that best describes how you feel about your relationship with the UNC community.



Please choose the letter corresponding with the picture that best describes how you feel about your relationship with your peer group at UNC.



Appendix B

Subjective Happiness Scale

For each of these questions, please select the answer that you feel is most appropriate in describing you.

1. In general, I consider myself:

(one to seven scale with 1 being not a very happy person and 7 being a very happy person)

2. Compared to most of my peers, I consider myself:

(one to seven scale with 1 being significantly less happy and 7 being significantly more happy)

- 3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you? (one to seven scale with 1 This definitely not at all describes me and 7 being This definitely describes me)
- 4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you? (one to seven scale with 1 This definitely not at all describes me and 7 being This definitely describes me)

Appendix C

Gratitude Questionnaire

Using the 1-7 scale, please indicate how much you agree with the statement.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = neutral

5 =slightly agree

6 = agree

7 =strongly agree

- 1. I have so much in life to be thankful for.
- 2. If I had to list everything that I felt grateful for, it would be a very long list.
- 3. When I look at the world, I don't see much to be grateful for.*
- 4. I am grateful to a wide variety of people.
- 5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.
- 6. Long amounts of time can go by before I feel grateful to something or someone.

Appendix D

Satisfaction with Life Scale

DIRECTIONS: Using the 1-7 scale below, please select your agreement with each item

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree or Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 =Strongly Agree
- 1. In most ways my life is close to my ideal.
- 2. The conditions of my life are excellent.
- 3. I am satisfied with life.
- 4. So far I have gotten the important things I want in life.
- 5. If I could live my life over, I would change almost nothing.

Appendix E

Modified Differential Emotions Scale

How did you feel <u>watching the video</u> ? Use a measure of 0-7 scale below to indicate the <u>greatest</u>
amount that you've experienced each of the following feelings.
1. What is the most <i>amused</i> , <i>fun-loving</i> , <i>silly</i> you felt?
2. What is the most <i>angry</i> , <i>irritated</i> , <i>or annoyed</i> you felt?
3. What is the most ashamed, humiliated, or disgraced you felt?
4. What is the most awe, wonder, or amazement you felt?
5. What is the most <i>contemptuous</i> , <i>scornful</i> , <i>or disdainful</i> you felt?
6. What is the most <i>disgust</i> , <i>distaste</i> , <i>or revulsion</i> you felt?
7. What is the most <i>embarrassed</i> , <i>self-conscious</i> , <i>or blushing</i> you felt?
8. What is the most grateful, appreciative, or thankful you felt?
9. What is the most guilty, repentant, or blameworthy you felt?
10. What is the most <i>hate</i> , <i>distrust</i> , <i>or suspicion</i> you felt?
11. What is the most <i>hopeful</i> , <i>optimistic</i> , <i>or encouraged</i> you felt?
12. What is the most <i>inspired</i> , <i>uplifted</i> , <i>or elevated</i> you felt?
13. What is the most <i>interested</i> , <i>alert</i> , <i>or curious</i> you felt?
14. What is the most <i>joyful</i> , <i>glad</i> , <i>or happy</i> you felt?
15. What is the most <i>love, closeness, or trust</i> you felt?
16. What is the most <i>proud</i> , <i>confident</i> , <i>or self-assured</i> you felt?
17. What is the most <i>sad</i> , <i>downhearted</i> , <i>or unhappy</i> you felt?

- **18.** What is the most *scared*, *fearful*, *or afraid* you felt? _____
- **19.** What is the most *serene*, *content*, *or peaceful* you felt? _____
- 20. What is the most stressed, nervous, or overwhelmed you felt? ____

Appendix F

Social Provisions Scale

For the following questions read and decide which choice indicates how you feel.

- 1. There are people I can depend on to help me if I really need it.
- 2. I feel that I do not have close personal relationships with other people.
- 3. There is no one I can turn to for guidance in times of stress.
- 4. There are people who depend on me for help.
- 5. There are people who enjoy the same social activities I do.
- 6. Other people do not view me as competent.
- 7. I feel personally responsible for the well-being of another person.
- 8. I feel part of a group of people who share my attitudes and beliefs.
- 9. I do not think other people respect my skills and abilities.
- 10. If something went wrong, no one would come to my assistance.
- 11. I have close relationships that provide me with a sense of emotional security and well-being.
- 12. There is someone I could talk to about important decisions in my life.
- 13. I have relationships where my competence and skills are recognized.
- 14. There is no one who shares my interests and concerns.
- 15. There is no one who really relies on me for their well-being.
- 16. There is a trustworthy person I could turn to for advice if I were having problems.
- 17. I feel a strong emotional bond with at least one other person.
- 18. There is no one I can depend on for aid if I really need it.

- 19. There is no one I feel comfortable talking about problems with.
- 20. There are people who admire my talents and abilities.
- 21. I lack a feeling of intimacy with another person.
- 22. There is no one who likes to do the things I do.
- 23. There are people I can count on in an emergency.
- 24. No one needs me to care for them.