



## W&M ScholarWorks

---

Dissertations, Theses, and Masters Projects

Theses, Dissertations, & Master Projects

---

2008

# Sharing Social Pain: Social Comparison and Affiliation After Social Exclusion

Richard Shepherd Pond  
*College of William & Mary - Arts & Sciences*

Follow this and additional works at: <https://scholarworks.wm.edu/etd>



Part of the [Social Psychology Commons](#)

---

### Recommended Citation

Pond, Richard Shepherd, "Sharing Social Pain: Social Comparison and Affiliation After Social Exclusion" (2008). *Dissertations, Theses, and Masters Projects*. Paper 1539626572.  
<https://dx.doi.org/doi:10.21220/s2-gk8g-b516>

This Thesis is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact [scholarworks@wm.edu](mailto:scholarworks@wm.edu).

Sharing Social Pain: Social Comparison and Affiliation After Social Exclusion

Richard Shepherd Pond, Jr.

Chesapeake, Virginia

Bachelor of Science, Virginia Commonwealth University, 2005

A Thesis presented to the Graduate Faculty  
of the College of William and Mary in Candidacy for the Degree of  
Master of Arts

Psychology Department

The College of William and Mary  
August, 2008

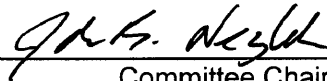
## APPROVAL PAGE

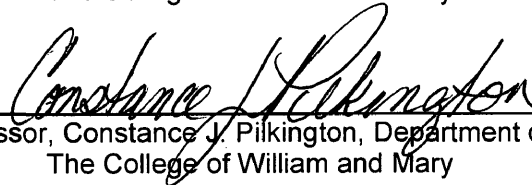
This Thesis is submitted in partial fulfillment of  
the requirements for the degree of


Master of Arts

  
Richard Shepherd Pond, Jr.

Approved by the Committee, July, 2008

  
Committee Chair  
Professor, John B. Nezelek, Department of Psychology  
The College of William and Mary

  
Associate Professor, Constance J. Pilkington, Department of Psychology  
The College of William and Mary

  
Assistant Professor, Todd M. Thrash, Department of Psychology  
The College of William and Mary

## ABSTRACT PAGE

The similarity – attraction link was explored among excluded individuals for affiliation and social comparison. Excluded people were expected to affiliate equally with excluded and neutral others. Yet they were expected to compare more with excluded-affiliates than accepted or neutral-affiliates. In a between-subjects experiment, 148 participants were either accepted or excluded. They then interacted with: an accepted-affiliate, an excluded-affiliate, or a neutral-affiliate. The interactions were recorded with a hidden camera. Tapes were coded for: total affiliation, affiliative temperament, cognitive clarity comparisons, emotional comparisons, total social comparisons, and miscellaneous affiliation. Excluded participants affiliated equally with accepted, excluded and neutral-affiliates, yet their temperament was most affiliative among excluded-affiliates. Excluded participants made more cognitive clarity and emotional comparisons with excluded-affiliates than other affiliates.

## TABLE OF CONTENTS

	Page
Acknowledgements	v
List of Tables	vi
List of Figures	vii
Introduction	1
Methods	11
Results	18
Discussion	23
Tables	31
Figures	33
Appendices	37
References	46
Vita	51

## Acknowledgements

I would like to take this opportunity to thank my advisor, Dr. John Nezlek, for his guidance over the past two years. I have learned very much from him, and I hold him in high regard. I would also like to thank Drs. Constance Pilkington and Todd Thrash for their helpful comments during the research process, including their comments on my video-coding rubric. I would like to acknowledge Vernon Liechti, John Dombrowski, Julia Smart, Katelyn Schrider, Jessica Taubman, and Alina Todor for all their hard work and dedication throughout the year. I am indebted for their help as confederates and video-coders. Finally, I would like to thank my family, friends, and classmates for their support and friendship, especially my loving wife who is always there for me. Thank you.

## List of Tables

Table	Page
1. Mean Total and Miscellaneous Affiliation (Number of Verbalizations per Minute) and Affiliative Temperament Score as a Function of Feedback and Affiliate Conditions	31
2. Mean Affiliation (Number of Verbalizations per Minute) for Cognitive Clarity and Emotional Comparisons as a Function of Feedback and Affiliate Conditions	32

## List of Figures

Figure	Page
1. Mean temperament (affiliative index scores) of participants as a function of social exclusion feedback and affiliate condition	33
2. Mean affiliation (verbalization per minute) for cognitive clarity as a function of social exclusion feedback and affiliate condition	34
3. Mean affiliation (verbalizations per minute) for emotional comparison as a function of social exclusion feedback and affiliate condition	35
4. Mean of total verbalizations (per minute) relevant to inclusion/exclusion as a function of social exclusion feedback and affiliate condition	36



## Sharing Social Pain: Social Comparison and Affiliation After Social Exclusion

Living in supportive groups is an important aspect of people's lives. Humans are fundamentally motivated to seek out and maintain positive social relationships (Baumeister & Leary, 1995). Such a notion is generally accepted among psychologists and called the "need to belong." The need to belong is deeply rooted in human evolutionary history, because early hunter-gatherers who were able to live in cohesive groups were better prepared for surviving and reproducing (Baumeister & Leary, 1995; Leary & Springer, 2001). Such value from communal living helped promote psychological mechanisms for maintaining a social life.

### *Effects of Social Exclusion*

Belongingness is a powerful motivator. As well, the breaking of social bonds by acts of social exclusion, rejection, or ostracism is often associated with severe psychological and physiological distress. People often experience a temporary state of cognitive "deconstruction" after social exclusion (Twenge, Catanese & Baumeister, 2003). Cognitive deconstruction is a defensive state experienced by people who suffer a personal failure (resembling the pre-suicidal mentality), and it is characterized by the rejection of meaningful thought and self-awareness (Baumeister, 1990). Socially excluded people often become emotionally numb, lethargic, unwilling to delay gratification, and even experience a distortion of time (Twenge, Catanese & Baumeister, 2003). Excluded individuals are also unwilling to perform on tests that require logical reasoning, yet their performance on simple tasks is not burdened (Baumeister, Twenge & Nuss, 2002). They are more self-defeating and unwilling to self-regulate (e.g., choose unhealthy over healthy behaviors, procrastinate instead of

study for a test, spend less time working an unsolvable puzzle), unless they are given an incentive to do so (e.g., money) (Baumeister, DeWall, Ciarocco & Twenge, 2005; Twenge, Catanese & Baumeister, 2002). And in addition to these psychological “ill effects,” lower feelings of belongingness are associated with high blood pressure and a decrease in levels of cardiac output with high levels of total peripheral resistance (Cacioppo et al., 2002; Hawkey, Burleson, Berntson & Cacioppo, 2003). Due to these harmful effects, it's imperative to maximize one's likelihood of being accepted into social groups.

#### *Pro-social vs. Anti-social Behaviors*

One way to increase the likelihood of being accepted by others is to act pro-socially, that is, act in ways that help or benefit others. Yet social exclusion is often associated with a decrease in pro-social behaviors (Twenge, Baumeister, DeWall, Ciarocco & Bartels, 2007). For example, in one study excluded participants donated less money to a student emergency fund, were less helpful after the experimenter experienced a mishap, and were even less willing to cooperate with another student during a prisoner's dilemma game compared to non-excluded participants (Twenge, Baumeister, et al., 2007). Excluded people also show less empathetic concern to the misfortunes of others (DeWall & Baumeister, 2006; Twenge, Baumeister, et al., 2007). Interestingly, empathy for others would seem critical for engaging in pro-social acts. It appears that the excluded individuals in these studies are acting irrationally. They should be acting in ways that promote, not hamper, future social acceptance. This decrease in pro-social behavior might be indicative of their deconstructed cognitive state and unwillingness to self-regulate.

Besides causing a decrease in pro-social behavior, a common finding among many labs is that exclusion, rejection, and ostracism are associated with increases in aggression (Buckley, Winkel & Leary, 2004; Kirkpatrick, Waugh, Valencia & Webster, 2002; Twenge, Baumeister, Tice & Stucke, 2001; Warbuton, Williams & Cairns, 2006). People who experience social exclusion often become significantly more aggressive than non-excluded people. When using a blast of aversive sound as a measure of aggression, Twenge and colleagues (2001) found that excluded participants blasted others with a more intense and prolonged noise compared to control groups. The excluded participants aggressed against others whether they were provoked or not. Socially rejected people even blast other rejected individuals with aversive noise, though not as severely as they blast other accepted individuals (Twenge, 2005). The only exception is that excluded participants do not show aggression towards those who are nice to them (Twenge et al., 2001).

Paradoxically, social exclusion does not elicit aggression or anti-social tendencies across all situations. This fact is apparent when one considers the finding that excluded people don't aggress against others whom are nice (Twenge et al., 2001). In fact, merely thinking about a past positive relationship is useful enough for lowering aggression in socially excluded people (Twenge, Zhang, et al., 2007). Other researchers have found that acts that threaten belongingness can even elicit an increase in pro-social behaviors (Maner, DeWall, Baumeister & Schaller, 2007; Williams, Cheung & Choi, 2000; Williams & Sommer, 1997). Williams and Sommer (1997) found that female (though not male) participants worked harder on a group task after an instance of ostracism. Perhaps the female participants wanted to work

harder on the task in order to become more favorable in the eyes of those whom ostracized them. Such behavior may lead to future social acceptance.

The idea that threats to belongingness increase the desire for social acceptance is called the “social reconnection hypothesis.” Because the need to belong is such a strong motivator, it is thought that an act of exclusion will stimulate one's desire to affiliate with others, thereby alleviating the distress of exclusion. That is, if the source of affiliation is realistic (Maner et al., 2007). In support of the reconnection hypothesis, Maner and colleagues (2007) shown that excluded people desired more participation in student services for making friends than accepted people. The excluded participants also desired to work in groups more than accepted participants, and even perceived others as nicer and friendlier. Yet the participants did keep a hostile perception towards their original source of exclusion (Maner et al., 2007). Lastly, the researchers found the anticipation of future social contact increased the likelihood that excluded participants would give novel partners rewards.

Anticipation for future social connection helps explain the discrepancy in the literature, as to whether socially excluded people become pro-social or anti-social. Maner and colleagues (2007) explain that the anti-social behaviors are usually directed towards unlikely candidates for “real social connection.” Either excluded participants do not expect to meet others face to face, as when asked to donate money to a charity (Twenge, Baumeister, et al., 2007), or they are meeting with others who provide no positive interaction, as in sources of recent insult or exclusion (Maner et al., 2007; Twenge et al., 2001).

Another reasonable explanation for the discrepancy in the literature is that

excluded people are not motivated just by the need to belong. Williams (2001) recently proposed a model of ostracism, in which four fundamental needs (i.e., the need to belong, the need for self-esteem, the need for control and the need for a meaningful existence) are differentially affected by social ostracism. The target of the ostracism will, therefore, be motivated to replenish each of the diminished needs. Additionally, people are motivated to ostracize others for different reasons, whether it is for punishment or for protection. Such motives vary in intensity and in which needs they primarily thwart. When deficits in relational needs (i.e., belongingness and self-esteem) are more pressing, targets will alleviate those deficits by acting pro-social. On the other hand, when deficits in the needs for control and recognition are pressing, the target may act aggressively to take back control or be noticed (Williams, 2001; Williams, 2007; Williams & Govan, 2005).

As should be noted, Williams' (2001) model is not incongruent with Maner and colleagues' (2007) explanation for the pro-social behavior. If an excluded person expects to meet an individual that can offer real connection, then replenishing the relational needs may be most pragmatic. Yet, if an excluded person is confronted with his/her source of exclusion, then there may not be a possibility for replenishing the relational needs. Therefore, the excluded person may act more in ways to take back control of the situation.

#### *Affiliating with Similar Others*

Research on reconnection indicates that, given the opportunity for real social connection, excluded people will not be anti-social but instead will desire to affiliate. Knowing that social exclusion does elicit the motivation for reconnection, it is

important to investigate who excluded people will reconnect with, if given the chance. Leary (2001) suggests that a person will form groups with others that are similar to him/herself, while excluding dissimilar others. In a recent set of studies, participants read scenarios of socially accepted and rejected target characters and predicted the future affiliate choice for each (Zyzniewski & Pond, 2006). The following choices were given: the source of acceptance/rejection, an accepted-affiliate, a rejected-affiliate, and a neutral-affiliate. Participants expected rejected targets to affiliate with rejected and neutral-affiliates, while accepted targets were expected to affiliate with the source of acceptance and the accepted-affiliate. A similar patterned appeared regardless of whether the motive for exclusion was intended to thwart relational needs or the needs for control and recognition (Pond & Nezlek, 2008). The findings show that people expect rejected individuals to affiliate with other rejected people, while accepted people are expected to affiliate with accepted others. Yet the findings do not offer much in explaining the possible underlying mechanism behind the pattern. It is unknown whether mere similarity is enough to affect affiliate-choice after social exclusion.

#### *Social Comparison as Underlying Mechanism*

Theorists have argued that a major determinant of affiliation is the process of social comparison. Classical comparison theory suggests that people have a basic need to compare abilities and opinions with others when no objective standard is available in the environment (Festinger, 1954; Suls & Wheeler, 2000). When people are unsure of themselves, they want to know how others are behaving. In ambiguous situations, people gather extra information from others around them and

systematically analyze and revise their opinions (Forsyth, 2000). As well, people prefer to compare themselves with others whom are similar in ability and opinions (Festinger, 1954; Kulik & Mahler, 2000; Suls & Wheeler, 2000). In fact, making upward social comparisons (i.e., comparing oneself with another who's performance is better) can often have detrimental effects for self-esteem, especially if the attributes being compared are important to one's self-definition (Forsyth, 2000). Similar others, on the other hand, provide an accurate source for comparing one's relative standing and offers the opportunity for uniform agreement (Kulik & Mahler, 2000; Suls & Wheeler, 2000).

Schachter (1959) extended social comparison theory to emotional states by showing that anxiety brings about an increase in the affiliative tendency. People who experience novel threats (e.g., threat of electric shock) affiliate more than those who do not. As well, Schachter (1959) found that people with increased levels of anxiety prefer the company of other anxious people. Specifically, they prefer people whom are experiencing the same novel threats. Novel threats provoke uncertainty in people. This uncertainty motivates people to compare their emotions with similarly threatened others, in order to gauge the "appropriateness" of their own emotional reactions (Kulik & Mahler, 2000). Describing such emotional comparison, Schachter stated that "misery doesn't love just any kind of company, it loves only miserable company" (Schachter, 1959, p.24).

Besides the need for emotional comparison, people affiliate with similarly threatened others for reasons of cognitive clarity (Kulik & Mahler, 2000). Cognitive clarity is the ability to, "reduce uncertainty regarding what to expect in the situation"

(Kulik & Mahler, 2000, p.317). When people seek cognitive clarity, they gather factual information (e.g., what happened?) relevant to the threat. When verbal communication is not restricted, it appears that people prefer to affiliate for cognitive clarity than emotional comparison (Kirkpatrick & Shaver, 1988; Kulik, Mahler & Earnest, 1994). Kirkpatrick and Shaver (1988) found that, when verbal communication was not restricted, people under high threat (i.e., imagined strong electric shock) preferred to affiliate with someone who ostensibly experienced the shock than someone similarly awaiting the shock. Because the partner who experienced the shock can give more information about the situation, it appears the participants were seeking cognitive clarity. Yet, when verbal communication was not allowed, high-threat participants desired to affiliate with partners ostensibly awaiting the shock (i.e., the emotionally similar affiliate). Similarly, Kulik and colleagues (1994) found that participants under high threat (i.e., waiting to place hands in painfully cold water) affiliated more than low-threat participants with threat-experienced rather than threat-inexperienced partners. Because threat-experienced partners have ostensibly experienced the cold water first-hand, they can offer more cognitive clarity about the situation than threat-inexperienced partners. As well, these participants asked more factual and evaluative questions about the threatening situation to experienced rather than inexperienced partners. These results support the notion that the distress increased affiliation both for reasons of cognitive clarity and emotional comparison. Additionally, cognitive clarity appeared to be more important in the threatening situation than emotional comparison.

Social comparison theory offers comparison processes as the underlying



mechanism behind affiliation under threat. Specifically, research supports the idea that threatened people like to affiliate with similarly threatened others to get first-hand information on what to expect (cognitive clarity) and to compare emotional states (emotional comparison). Social exclusion, by its very nature of depriving the need to belong, is a stressful event with many detrimental effects. To be consistent with Schachter's (1959) ideas of affiliation, one may predict that socially excluded people prefer to affiliate with other excluded people, given the similar circumstances. They would have the ability to offer each other cognitive clarity about the exclusion experience, as well as gauge the appropriateness of each other's emotional response to that exclusion. Additionally, excluded individuals can look past the disadvantageous qualities of other rejected individuals, in order to gain the social acceptance that they need. On the other hand, being part of the rejected in-group may not be desirable for excluded individuals, as it could possibly hamper future acceptance with others.

### *The Present Study*

The present investigation explored the affiliative tendencies of socially excluded individuals in a laboratory setting. Specifically, the purpose of the study was to explore the similarity – attraction link among excluded individuals in relation to general affiliation, as well as affiliation for cognitive clarity and emotional comparison.

*Primary hypotheses.* Research on the reconnection hypothesis indicates that, given opportunity for real social connectedness, excluded individuals will desire to affiliate with novel others to increase their need to belong (Maner et al., 2007).

Research on social comparison theory shows that people in distressful situations will seek out others who have experienced similar duress (Kulik & Mahler, 2000; Kulik et al., 1994; Schachter, 1959). In line with the above literature, the following hypotheses were devised:

*Hypothesis 1:* Both excluded and neutral others should be realistic candidates for affiliation among excluded people, therefore total affiliation between excluded participants and excluded and neutral-affiliates should not differ. Though such affiliation should be significantly greater than the total affiliation between excluded participants and accepted-affiliates. An opposite pattern was expected concerning accepted participants.

*Hypothesis 2:* Socially excluded participants will identify and socially compare more with excluded-affiliates than neutral or accepted-affiliates. Therefore, they will give out more factual (cognitive clarity) information and evaluative (emotional comparison) information about their own exclusion experience, as well as make requests for such exclusion-related information from excluded-affiliates than neutral or accepted-affiliates. An opposite pattern was expected concerning accepted participants.

*Hypothesis 3:* Socially excluded participants will affiliate with neutral strangers merely to increase their need to belong. Therefore, they will give out more non-exclusion related information, as well as make more requests for such information with neutral-affiliates than from excluded or accepted-affiliates. On the other hand, it was expected that accepted participants would react the same way towards accepted-affiliates, rather than excluded or neutral-affiliates.

## Method

### *Participants*

The sample consisted of 148 undergraduates (76 women) over the age of 18 that were enrolled in one of three introductory psychology courses at the College of William & Mary during the fall and spring semesters. Institutional Review Board approval was obtained from the Human Subjects Research Committee at the College of William & Mary. Additionally, participants were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychological Association, 1992). Students received partial course credit for their participation. They were each randomly assigned to one of two levels of exclusion feedback (accepted or excluded) and to one of three levels of affiliate condition (accepted-affiliate, excluded-affiliate, or neutral-affiliate) ( $n = 24$  per neutral-affiliate conditions,  $n = 25$  for all other conditions). The same investigator conducted all experimental sessions.

### *Measures*

*Bogus questionnaires.* Three questionnaires were created for use to legitimize the cover story of the experimenter. The 10-item descriptive questionnaire asked participants to rate themselves on how extroverted, nice, friendly, shy, cheerful, helpful, selfish, and procrastinating they think they are. Two additional questions asked about how much they liked to work in groups and work alone. All but two (cheerful, helpful) were rated on a 1 (not at all) to 7 (very) scale. The other two were scored “yes” or “no.” This measure can be found in Appendix A.

The two other bogus 10-item questionnaires were used to ostensibly measure

how the participant perceived the essays, the confederate and him/herself during the confederate – participant interaction. Participants rated others and themselves on: liking, trust, sociableness, straightforwardness, pleasantness, intelligence, shyness, confidence, anger, and nervousness. Each was measured on a 1 (not at all) to 7 (extremely) scale. These measures can be found in Appendices B and C respectively.

*Manipulation check.* A 10-item questionnaire was designed to measure whether the experimental manipulations did, in fact, elicit different feelings of acceptance and rejection between accepted and rejected participants. Because the questionnaire was designed to look as if it measured mood, it included 9 questions that asked how much one felt: happy, angry, cheerful, relaxed, valuable, confident, and elated, as well as accepted and rejected. Each item was measured on a 1 (not at all) to 7 (extremely) scale. The last item asked whether the participant was assigned to work alone or in a group. The manipulation check can be found in Appendix D.

### *Procedure*

Students entered the laboratory in single-sex groups of three people to participate in a study ostensibly about “how people’s perceptions of others are affected by different mediums of interaction.” They each were separated into individual cubicles during the consent process to limit social interaction. Throughout the study, the investigator was only present to give instructions and to distribute or collect materials.

After obtaining informed consent, each participant was instructed to write a brief essay answering the question, “what does it mean to be me?,” after which they completed a bogus 10-item descriptive questionnaire. They were informed, prior to

starting the task, that the materials would be distributed to and rated by the other two participants. They were asked not to identify themselves by name within the essays.

After collecting each person's essay and questionnaire, the experimenter redistributed the materials to the other two participants, as per the cover story. Each person was then asked to rate the materials given to him or her using another bogus 10-item questionnaire. They were asked to base their ratings solely on their reading of those materials. After each participant had completed his/her two sets of ratings, the experimenter collected the materials.

The participants then read:

“We are interested in forming a 2-person group for the next task. This must be a group where both members feel that they will like and respect each other. Based on your previous observations, please indicate below with whom you would most like to work. Those individuals who mutually select each other get to work on the next task together. This, of course, will leave a single individual to work alone on the same task. We are interested in comparing the performance of the group with that of the individual. We want to know if group impressions of others differ from individual impressions of others.”

The participants were then given a choice of either Participant A or B, corresponding to the materials they rated.

After collecting the responses, the experimenter left the participant's room “in order to create the groups.” In reality, the experimenter was randomly assigning either social acceptance feedback or social exclusion feedback to each participant. Upon returning, the experimenter delivered the social acceptance/exclusion manipulation to

each participant, after which a manipulation check was given under the pretense that “it’s important to control mood influences on one’s impressions of others.”

After completing the manipulation check, the participant was escorted to a private room containing a table and three chairs (two on one side and one on the other). Each participant was escorted to the side of the table with two chairs, this was meant to reinforce the idea that some participants would be working in groups while others would not. The participants were then told that the next task involved making judgments on first impressions of others in a face-to-face context. They were asked to interview “another participant from a different group across the hall, who did the same thing, with the writing and rating of essays.” In reality, the “other participant” was a confederate of the experimenter. After this explanation, the experimenter escorted the confederate into the room with the participant.

Participants were given a set of questions to help guide the interaction with their confederates, though they were told that it was just a general guide, and that they did not have to use them if they would rather not. Confederates, on the other hand, were given a brief script to help guide the interaction, and which served as a prompt to inform the participant that the confederate has just been accepted/rejected by his/her previous group members. The only restriction of the interaction was that they could not exchange names, “for purposes of anonymity.” Due to time constraints throughout the study, participant – confederate interactions lasted between 3 and 6 minutes. All participant – confederate interactions were recorded with the use of a video camera hidden in the room, without the knowledge of the participant. The video camera was located in the corner opposite of the participant. Once the interaction was

completed, participants were asked to complete two final 10-item questionnaires, as per the cover story. The two questionnaires concerned how the confederate appeared to the participant, as well as how the participant thought he or she appeared to the confederate. After collecting the questionnaires, they were debriefed and asked for permission to use the recorded video.

### *Experimental Conditions*

*Exclusion feedback.* Regarding the feedback from the essay ratings, participants were randomly assigned to be either accepted or excluded by the group. Those in the social acceptance condition received the following feedback: “Unfortunately, I just noticed that I ran too many group conditions today. So we won’t be forming groups as usual. So even though everyone picked you to work with, you’ll be working alone on the next task.” On the other hand, individuals in the social exclusion condition were told: “Unfortunately, no one chose to work with you on the next task. So for the next task, you’ll be working alone.”

*Affiliate conditions.* Before interacting with confederates, participants were randomly assigned to one of three conditions (i.e., accepted-affiliate, excluded-affiliate, or neutral-affiliate). Six undergraduate research assistants (4 females) participated as confederates for the experimenter in exchange for independent research credit. All confederates were unaware of the experimental conditions and hypotheses. Additionally, all confederates matched participants on sex. Participants in the accepted-affiliate condition interacted with a confederate that was prompted to say: “on the last task, everyone picked me to work with.” Participants in the excluded-affiliate condition interacted with a confederate that was prompted to say:

“on the last task, no one picked to work with me.” And lastly, those in the neutral-affiliate condition interacted with a confederate that did not mention anything about being accepted or excluded. All other responses to each question on the participant's interview sheet were identical. A copy of the participants interview sheet, along with confederate responses, can be viewed in Appendix E.

### *Dependent Variables*

The following variables of interests were coded, with the help of six raters, from the videotaped interactions between participants and confederates: 1. total affiliation, 2. affiliation for cognitive clarity, 3. affiliation for emotional comparison, and 4. miscellaneous affiliation. The raters were undergraduate research assistants, participating for independent research credit. They were unaware of both, the experimental conditions and hypotheses, during the coding process. The coding form for the following variables can be accessed in Appendix F.

*Total affiliation.* To measure total affiliation, all verbalizations directed towards the confederate from the participant were tallied. The observational unit of each verbalization encompassed the expression of one item of thought. For example, “I didn’t like it, did you?” encompasses 2 items of thought: 1. The participant not liking something, 2. His/her curiousness as to whether the confederate does. As a secondary measure of total affiliation, raters responded to how friendly, unfriendly, sociable, shy, talkative and reserved the participant appeared to be towards the confederate. These ratings were single judgments rated on a 1 (not at all) to 7 (extremely) scale, corresponding to the overall temperament of the participant. Ratings for unfriendliness, shyness and reservation were reverse-scored. Each



question showed good internal consistency across raters (Cronbach's  $\alpha$ 's ranged from .86 and .92), therefore they were summed to form a general affiliative temperament index.

*Cognitive clarity.* To measure affiliation for cognitive clarity, the following verbalizations were coded for the number of times per minute they occurred: 1. giving out factual information about being accepted or excluded (e.g., "No one picked me on the last task"), and 2. asking questions concerning factual accept/exclusion-related information from the confederate (e.g., "Did anyone pick you?"). All relevant verbalizations were tallied together, and because interactions varied in length, the score was divided by 6 to ensure a general proportion of affiliation relevant to cognitive clarity per minute. For a secondary measure of cognitive clarity, raters responded "yes" or "no" to whether participants mentioned being accepted or excluded at all, as well as how many times mentioned.

*Emotional comparison.* To measure affiliation for emotional comparison, the following verbalizations were coded for the number of times they occurred: 1. giving out evaluative/mood related information concerning the accept/exclusion experience (e.g., "I did not like picking group members"), and 2. asking evaluative/mood related questions concerning the confederate's accept/exclusion experience (e.g., "did you like it?"). All relevant verbalizations were tallied together, and, again, because interactions varied in length, the score was divided by 6 to ensure a general proportion of affiliation relevant to emotional comparison per minute.

*Miscellaneous affiliation.* Miscellaneous affiliation was coded for by the number of times any verbalizations not relevant to the accept/exclusion experience

occurred. Again, all relevant verbalizations were tallied together, and the score was divided by 6 to ensure a general proportion of miscellaneous affiliation per minute.

The coding reliability was checked in order to ensure agreement among the six coders. Intra-class correlation coefficients (ICC) were calculated for the six raters on each of the dependent variable categories. The coders showed high agreement with each other, with intra-class coefficients ranging between .91 and .95. Accordingly, ratings across coders were averaged for each dependent variable, creating one general score for: total affiliation, affiliative temperament, cognitive clarity-relevant affiliation, emotional comparison-relevant affiliation, total inclusion/exclusion-relevant affiliation, and miscellaneous affiliation.

## Results

### *Analysis Strategy*

A 2 (social acceptance feedback, social exclusion feedback) X 3 (accepted-affiliate, excluded-affiliate, or neutral-affiliate) between-groups design was utilized for the present study. Each condition was randomly assigned across participants to ensure that, as nearly as possible, an equal number of independent variable levels were represented ( $n = 24$  per neutral-affiliate group,  $n = 25$  per all other groups). Therefore each of the primary hypotheses was assessed separately using a 2 X 3 between-groups analysis of variance (ANOVA). A total of six ANOVA's were conducted: one with total affiliation as the dependent variable, one with affiliative temperament as the dependent variable, another with amount of cognitive clarity affiliation, one with amount of emotional comparisons made, one with total inclusion/exclusion-relevant affiliation, and lastly, one where miscellaneous

affiliation was the dependent variable. Partial eta squared's ( $\eta^2$ ) were calculated as a measure of effect size for each significant main effect. Simple effects were then calculated for each significant interaction. As well, post-hoc tests comparing the affiliate conditions with each other were conducted using the Tukey HSD (honestly significant difference) procedure. All means and standard deviations for each of the general affiliation variables are reported in Table 1. Means and standard deviations relevant to comparison of inclusion/exclusion experiences are reported in Table 2.

### *Preliminary Analyses*

*Manipulation checks.* Before the primary hypotheses can be tested, differences in feelings of acceptance and feelings of rejection between socially accepted participants and excluded participants must be verified. A between-groups *t*-test was used to assess these differences. As intended, participants who received social exclusion feedback felt less acceptance ( $M = 3.58, SD = 1.40$ ) than participants who received social acceptance feedback ( $M = 5.24, SD = 1.08$ ),  $t(146) = 8.06, p < .001, d = 1.34$ . Additionally, excluded participants felt significantly more rejected ( $M = 2.38, SD = 1.32$ ) than accepted participants ( $M = 1.04, SD = .20$ ),  $t(146) = -8.62, p < .001, d = 1.76$ . These analyses ensure that the exclusion feedback elicited feelings of rejection as intended and permit further examination of the effects of social exclusion.

*Gender effects.* Gender effects were also tested using between-groups *t*-tests. Only two significant effects were revealed. Women ( $M = 41.35, SD = 9.20$ ) talked significantly more than men ( $M = 34.40, SD = 9.29$ ) overall,  $t(146) = -4.57, p < .001, d = .76$ . As well, women ( $M = 6.89, SD = 1.66$ ) made more non-inclusion/exclusion-

relevant verbalizations (miscellaneous affiliation) than men ( $M = 5.69$ ,  $SD = 1.57$ ) during the videotaped interactions,  $t(146) = -4.48$ ,  $p < .001$ ,  $d = .75$ . Yet in supplemental 2 (male vs. female) X 2 (social acceptance feedback vs. social exclusion feedback) X 3 (accepted-affiliate, excluded-affiliate, or neutral-affiliate) ANOVAs, gender did not interact with the feedback or affiliate conditions on any of the dependent variables.

### *Testing of Hypotheses*

*Total affiliation.* A feedback (acceptance vs. exclusion) X affiliate condition (accepted-affiliate, excluded-affiliate, or neutral-affiliate) ANOVA was performed on the total number of verbalizations during the participant – confederate interactions. The results indicated no main effect for feedback,  $F(1, 142) < 1$ ,  $p > .05$ , or affiliate condition,  $F(2, 142) < 1$ ,  $p > .05$ , nor an interaction between the two,  $F(2, 142) = 1.15$ ,  $p > .05$ .

Another 2 X 3 ANOVA was conducted to examine the effects of feedback and affiliate condition on general affiliative temperament, as measured by the index created from the coders' ratings. The results indicated a main effect for feedback,  $F(1, 142) = 4.79$ ,  $p < .05$ , partial  $\eta^2 = .03$ , where excluded participants appeared more affiliative overall than accepted participants (see Table 1). There was not a main effect for affiliate condition,  $F(2, 142) < 1$ ,  $p > .05$ . Yet there was a significant interaction between feedback and affiliate condition on affiliative temperament,  $F(2, 142) = 3.39$ ,  $p < .05$ , partial  $\eta^2 = .05$  (see Figure 1). Simple effects analyses revealed that excluded participants appeared more affiliative towards excluded-affiliates than accepted participants,  $F(1, 48) = 11.50$ ,  $p < .01$ ,  $d = .95$  (see Table 1). There were no

other significant simple effects.

*Cognitive clarity.* A 2 X 3 ANOVA was then conducted to examine the effects of exclusion feedback and affiliate condition on how often participants made factual statements or asked factual questions about inclusion/exclusion (cognitive clarity). The results did not indicate a significant main effect for feedback,  $F(1, 142) = 2.03, p > .05$ , but did show significant variability among the affiliate conditions,  $F(2, 142) = 6.37, p < .01$ , partial  $\eta^2 = .08$ . Post-hoc Tukey HSD tests revealed that participants made more factual statements and asked more factual questions about inclusion/exclusion when their partner was an accepted-affiliate or an excluded-affiliate, and not when their partner was a neutral-affiliate ( $p < .05, p < .01$  respectively) (see Table 2). Cognitive clarity-relevant affiliation did not differ between accepted and excluded-affiliates. Yet there was also a significant interaction between the feedback and affiliate conditions,  $F(2, 142) = 5.49, p < .01$ , partial  $\eta^2 = .07$  (see Figure 2). Simple effects analyses revealed that excluded participants cognitively compared more with excluded-affiliates than accepted participants did,  $F(1, 48) = 9.73, p < .01, d = .83$  (see Table 2). Additionally, excluded participants cognitively compared more with excluded-affiliates than with accepted ( $p < .05$ ) or neutral-affiliates ( $p < .01$ ),  $F(2, 71) = 7.67, p < .01, d = 1.82$  (see Table 2).

*Emotional comparison.* There was no significant main effect detected for exclusion feedback on emotional comparisons made during the videotaped interactions,  $F(1, 142) = 2.67, p > .05$ . Yet significant variability was observed among the affiliate conditions,  $F(2, 142) = 4.96, p < .01$ , partial  $\eta^2 = .07$ . Tukey HSD tests indicated that participants made more emotional comparisons with excluded-affiliates

than neutral-affiliates ( $p < .01$ ) (see Table 2). Neither excluded nor neutral-affiliates differed from accepted-affiliates. Lastly, an interaction between the two factors was only marginally significant,  $F(2, 142) = 2.88, p = .059$ , partial  $\eta^2 = .04$  (see Figure 3). Further analyses showed that excluded participants emotionally compared more than accepted participants when with excluded-affiliates,  $F(1, 48) = 7.67, p < .01, d = .70$  (see Table 2). And excluded participants emotionally compared more with excluded-affiliates than neutral-affiliates, though not accepted-affiliates ( $p < .05$ ),  $F(2, 71) = 6.11, p < .01, d = 1.00$  (see Table 2).

*Total inclusion/exclusion affiliation.* To examine whether feedback and affiliate condition had effects on how much participants talked about inclusion/exclusion overall, an additional 2 X 3 ANOVA was calculated. The results indicated a marginally significant effect for feedback,  $F(1, 142) = 3.42, p = .067$ , partial  $\eta^2 = .02$ , with excluded participants mentioning their exclusion more than accepted participants mentioned being accepted overall (see Table 2). Significant variability was observed among the affiliate conditions on amount of verbalizations concerning inclusion/exclusion,  $F(2, 142) = 6.74, p < .01$ , partial  $\eta^2 = .09$ . Tukey HSD tests showed that participants talked more about inclusion/exclusion with an excluded-affiliate than a neutral-affiliate ( $p < .001$ ) (see Table 2). Neither excluded nor neutral-affiliates differed from accepted-affiliates. As well, there was a significant interaction between feedback and affiliate condition on this dependent measure,  $F(2, 142) = 5.66, p < .01$ , partial  $\eta^2 = .07$  (see Figure 4). Simple effects analyses revealed that excluded participants talked more about exclusion than accepted participants talked about inclusion when with excluded participants,  $F(1, 48) = 12.71, p < .01, d =$

.95 (see Table 2). As well, excluded participants talked more about exclusion with excluded-affiliates than with accepted-affiliates ( $p < .05$ ) or neutral-affiliates ( $p < .01$ ),  $F(2, 71) = 8.87, p < .01, d = 1.97$  (see Table 2).

*Miscellaneous affiliation.* Lastly, a 2 X 3 ANOVA was used to examine the effect of feedback and affiliate condition on amount of non-inclusion/exclusion-relevant verbalizations made during the participant – confederate interactions. The results revealed no effects for feedback,  $F(1, 142) < 1, p > .05$ , or affiliate condition,  $F(2, 142) < 1, p > .05$ , nor an interaction between the two factors,  $F(2, 142) = 1.68, p > .05$ .

## Discussion

The purpose of the present study was to explore the affiliative tendencies of socially excluded people in a laboratory setting. Specifically, the objective was to explore affiliate-choice in relation to general affiliation, as well as affiliation relevant to social comparison. Important key findings were revealed during the data analyses. Firstly, excluded people appear more affiliative in general, and even more so towards other excluded individuals. As well, excluded people socially compare with other excluded individuals for, both, cognitive clarity and emotional comparison. In the following sections, the study hypotheses will be examined in light of the findings and subsequent implications will be highlighted.

### *Total Affiliation*

It was expected that excluded participants would desire reconnection, in order to ameliorate the deficits in their need to belong. This prediction was modeled after Maner et al.'s (2007) ideas on the “social reconnection hypothesis,” stating that social

exclusion promotes the desire for reconnection, so long as the source of belongingness is realistic. The data support the above prediction, in that excluded individuals appeared more affiliative overall, compared to accepted participants. And they were friendliest towards excluded-affiliates (see Figure 1). Excluded-affiliates were predicted to be realistic sources of affiliation, along with neutral-affiliates. The data gave further support to the reconnection hypothesis in that total affiliation did not significantly differ between excluded participants and excluded or neutral-affiliates. Excluded people affiliated with each similarly. Interestingly, excluded participants affiliated with accepted-affiliates as well. Yet it's possible that accepted-affiliates were good sources of reconnection for excluded participants. Firstly, these confederates were not directly associated with the participants' exclusion. And an accepted-affiliate might mean the chance of getting accepted back into a desirable in-group.

Unexpectedly, accepted participants showed a similar pattern. They affiliated with accepted-affiliates, excluded-affiliates, and neutral-affiliates equally. Such a pattern was unexpected, because excluded people were thought to be an undesirable partner to work with compared with the other two affiliates. Though accepted participants did appear least affiliative or friendly towards excluded-affiliates as expected. Still, it is unclear why accepted participants did converse with excluded-affiliates as much as the other partner conditions.

### *Social Comparison*

In addition to ameliorating the deficits of the need to belong, it was also expected that excluded participants would prefer to affiliate with other excluded



people for reasons of social comparison. The hypothesis was modeled after the work of Schachter (1959) and Kulik et al. (1994). Their research indicates that people in distress like to affiliate with others who have already or will soon experience similar duress. The reasoning is that anxious people can gain more information about the stressful situation (cognitive clarity) from people who have experienced the same situation. As well, people who are threatened can emotionally compare with similar others to gauge the appropriateness of their reactions.

Because losing social connectedness is undoubtedly a stressful situation, it was expected that excluded participants would affiliate with excluded-affiliates, in order to gain cognitive clarity and to emotionally compare. Such a prediction was strongly supported by the data. For example, it was already discussed that excluded participants generally appeared more affiliative towards excluded-affiliates. They also made more statements about their exclusionary status and asked more questions concerning such a status with excluded-affiliates than with accepted or neutral-affiliates (see Figure 2). As well, they discussed their related emotional states more with excluded-affiliates than with the other affiliate conditions (see Figure 3). The time spent discussing exclusion was relatively small compared to that devoted towards miscellaneous topics, yet excluded participants spent more time talking about their threatened belongingness when with an excluded-affiliate. Gaining reassurances about the situation was a priority for these participants. Additionally, the stressful state created by social exclusion appears to be more powerful than mere similarity. Though accepted participants did socially compare more with accepted-affiliates, as expected, they did not compare with them as much as excluded participants who

compared with excluded-affiliates (see Figure 4). With that, large effect sizes (often larger than .80) were associated with the social comparison of excluded participants. These findings exhibit the power of the exclusion experience.

### *Miscellaneous Affiliation*

The final prediction was that excluded participants would affiliate with neutral-affiliates merely to increase their need to belong. Therefore, it was expected that excluded participants would elicit more non-exclusion-relevant verbalizations during their interactions with neutral-affiliates. It was expected that these participants would want to look past the exclusion experience and focus on getting to know their interaction partner. Data analyses showed no support for this prediction. In fact, excluded and accepted participants did not differ in how they affiliated with any of the confederates. Of course, the lack of significant differences does not warrant disregard of the neutral-affiliate. Instead, it might imply that excluded and accepted participants viewed each affiliate as a realistic source for connection.

### *Implications Concerning Social Comparison*

The present study rests upon the conceptual foundation of social comparison theory. The findings support the idea that comparison is the underlying mechanism behind reconnection after exclusion. The hypotheses concerning comparison were supported, where excluded participants compared more with excluded-affiliates. Specifically, excluded participants cognitively and emotionally compared more with excluded-affiliates than other affiliates.

The present study also offers additional confirmation of the underpinnings of social comparison theory. Firstly, threat increases affiliation. As Schachter (1959)

found that anxiety increased affiliation, so too did exclusion increase overall comparison and affiliative temperament. As individuals under threat prefer to compare with similarly threatened others, so too did excluded individuals prefer to compare with excluded-affiliates. And as Kulik and colleagues (1994) observed that threatened-participants preferred to cognitively and emotionally compare more with threat-experienced partners, so too did excluded participants prefer to cognitively and emotionally compare with excluded-affiliates.

#### *Implications for Pro-social vs. Anti-social*

The present study also offers support to the reconnection hypothesis. Social exclusion was expected to promote affiliation. Though excluded participants did not differ in overall affiliation, compared to accepted participants, they did appear friendlier overall. Because the present study did not measure aggression, a conclusion cannot be made as to whether excluded individuals preferred affiliation over aggression. Yet, if participants desired to act aggressively, they likely would not have appeared as affiliative as was perceived by the coders.

In concern with Williams' (2001) model of ostracism, participants were most concerned with alleviating deficits in their relational needs (i.e., to belong and for self-esteem). Excluded participants affiliated equally with all affiliates. Such a finding implies that the participants were most concerned with alleviating distress due to decrements in the need to belong. Additionally, excluded participants socially compared more with excluded-affiliates than the other affiliates. Perhaps the cognitive comparison was an attempt at analyzing the exclusion experience and increasing self-esteem. Through cognitive clarity, one might find situational rather

than dispositional motives behind the exclusion experience. If the exclusion experience can be explained by situational factors, then the episode might be less damaging to self-esteem. Not much can be said in relation to the needs for control and recognition. It's possible that the exclusion manipulation was not strong enough to significantly hinder those needs. As well, simply expecting to have a face-to-face interaction might have been enough to restore some feelings of control and recognition. Again, because a measure of aggression was not taken, solid conclusions cannot be made as to whether participants would have tried to take control of the situation in that way.

#### *Limitations and Future Research*

The results of the present study should be interpreted with caution. These findings may not be generalizable to all instances of social exclusion, rejection or ostracism. Though our manipulation did elicit greater feelings of rejection and lesser feelings of acceptance, the ratings centered on the more neutral values of the scale. Most participants did not report extreme feelings of rejection. As well, the manipulation used was brief. Therefore, it's possible that someone who experiences extreme and/or repeated instances of ostracism may react differently than the study participants.

Additionally, there are a number of limitations that were encountered during the investigation that might open up avenues for future research. Firstly, excluded participants may have reacted to accepted and neutral-affiliates similarly because the accepted-affiliate condition was not threatening enough. It was expected that accepted-affiliates would remind excluded participants of the social exclusion

experience. Perhaps that did not happen. A simple fix would be to add an additional affiliate condition, where a confederate acts as the source of exclusion for the participant. With the inclusion of such a condition, one could examine differences between the accepted other and the source of exclusion, as well as comparisons with the neutral-affiliate.

For the present study coders only rated the videotapes for verbal affiliation. This limitation opens up the possibility that excluded participants could explicitly behave affiliatively by conversing, yet, all the while, eliciting uninviting body language and/or facial expressions. Additional research should include the analyses of non-verbal affiliation.

Another area of further research that might prove beneficial is the examination of variables that moderate the effect of social exclusion on affiliation for social comparison reasons. There are several dispositional characteristics that effect how we seek and use social comparison information. For example, people of low self-worth (low self-esteem, depressed) generally make more social comparisons than those high in self-worth (Wheeler, 2000). Interestingly, self-esteem and depression are also variables that moderate how strongly people react to social rejection (Nezlek, Kowalski, Leary, Blevins & Holgate, 1997). Another possible moderating variable might be social comparison orientation. People high in social comparison orientation seek out more social comparison information, whether they are making upward or downward comparisons (Van der Zee, Oldersma, Buunk & Bos, 1998). Individual difference variables will be important to examine in future research.

*Conclusion*

The present study presented support that people who suffer social exclusion will seek out social comparison information from other excluded individuals. This finding gives insight into the often-referenced stereotype of high school outcasts who stick together. Not only are they sources of realistic connection for each other, but they can serve as sources of reassurance that perhaps the ostracism was misguided. Additional findings from the present study support several observations from past research. People in threatening situations like to compare themselves with similar others for reasons of cognitive clarity and emotional comparison (Kulik et al., 1994; Schachter, 1959). As well, excluded individuals appeared more affiliative than accepted participants, supporting the “social reconnection hypothesis” (Maner et al., 2007). Socially excluded people don’t react aggressively across all situations!

Since group living is such a significant part of human existence, it’s important to understand how threats to belongingness affect people. Yet it’s also important to understand how people rebound from a social exclusion experience. How do they work to find new connections? The study of exclusion is a young area of social psychology, and a lot more progress needs to be made.

Table 1

*Mean Total and Miscellaneous Affiliation (Number of Verbalizations per Minute) and Affiliative Temperament Score as a Function of Feedback and Affiliate Conditions*

	Accepted-affiliate	Excluded-affiliate	Neutral-affiliate
Feedback	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Total affiliation			
Acceptance	37.19 ( 8.87)	37.89 (10.31)	39.15 (9.54)
Exclusion	39.04 (8.71)	39.09 (7.19)	35.41 (13.82)
Miscellaneous			
Acceptance	6.09 (1.46)	6.31 (1.70)	6.61 (1.61)
Exclusion	6.61 (1.80)	6.37 (1.34)	5.85 (2.32)
Temperament			
Acceptance	33.04 (4.94)	29.30 (6.44)	32.15 (5.36)
Exclusion	33.08 (4.99)	34.18 (3.53)	32.73 (4.86)

Note. Higher means indicate greater affiliation.

Table 2

*Mean Affiliation (Number of Verbalizations per Minute) for Cognitive Clarity and Emotional Comparisons as a Function of Feedback and Affiliate Conditions*

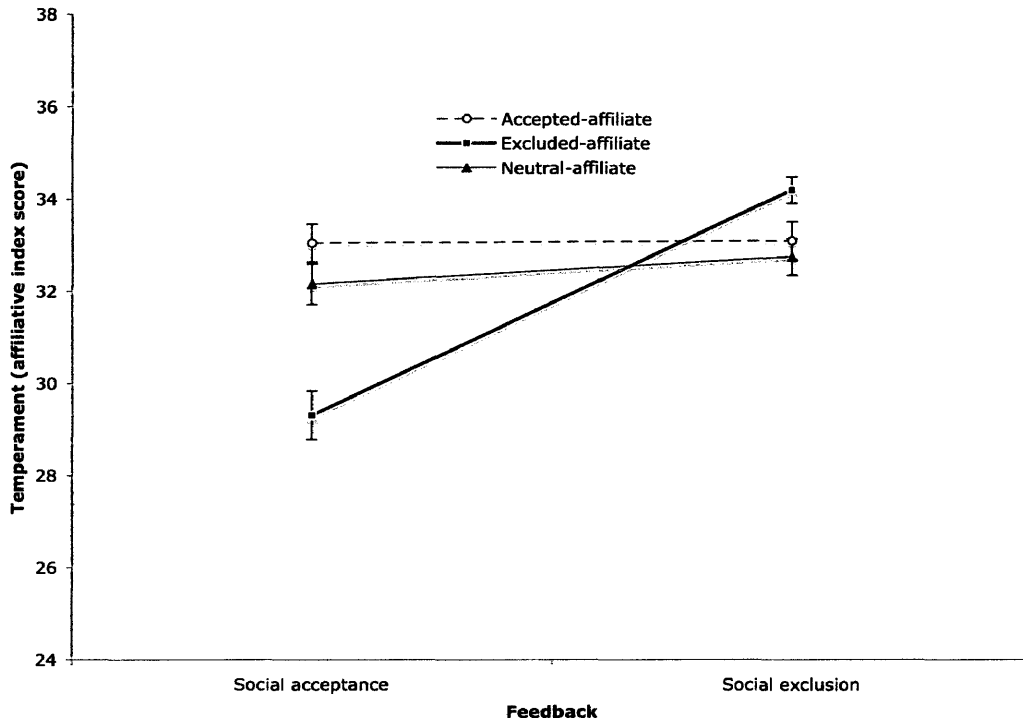
	Accepted-affiliate	Excluded-affiliate	Neutral-affiliate
Feedback	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Cognitive clarity			
Acceptance	.10 (.14)	.05 (.10)	.00 (.00)
Exclusion	.05 (.08)	.16 (.19)	.03 (.13)
Emotional comparison			
Acceptance	.04 (.10)	.03 (.04)	.00 (.00)
Exclusion	.03 (.08)	.10 (.18)	.01 (.04)
Total comparisons			
Acceptance	.86 (1.21)	.39 (.74)	.00 (.00)
Exclusion	.48 (.89)	1.54 (2.01)	.27 (.89)

Note. Higher means indicate greater affiliation.

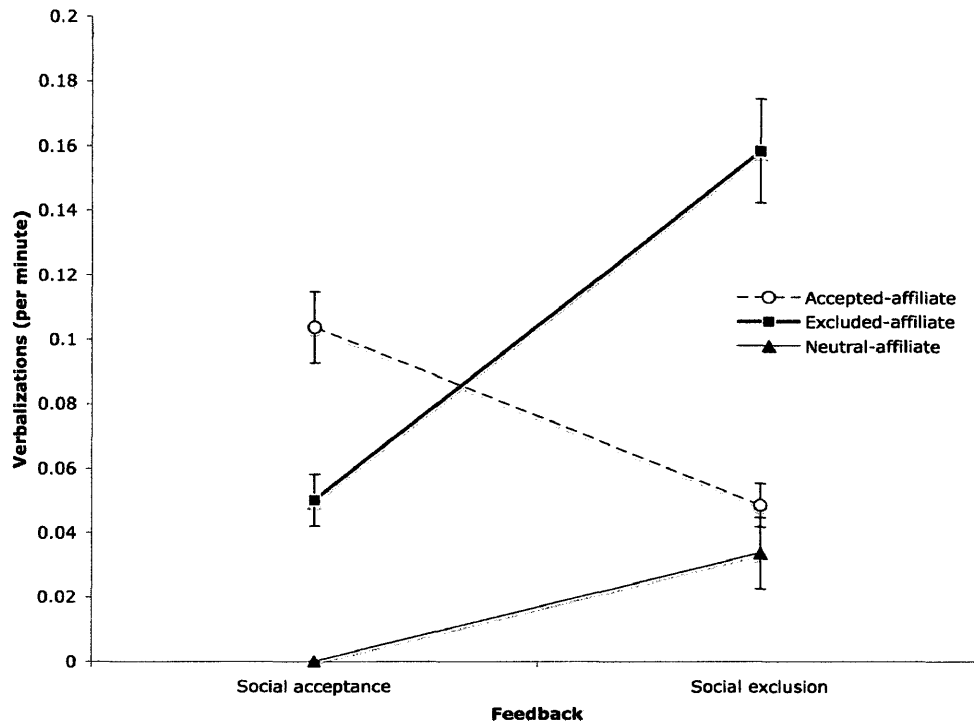


Figure 1. Mean temperament (affiliative index scores) of participants as a function of social exclusion feedback and affiliate condition. Interaction significant at  $p < .05$ .

Error bars represent *SE*.



*Figure 2.* Mean affiliation (verbalization per minute) for cognitive clarity as a function of social exclusion feedback and affiliate condition. Interaction significant at  $p < .01$ . Error bars represent *SE*.



*Figure 3.* Mean affiliation (verbalizations per minute) for emotional comparison as a function of social exclusion feedback and affiliate condition. Interaction significant at  $p < .06$ . Error bars represent *SE*.

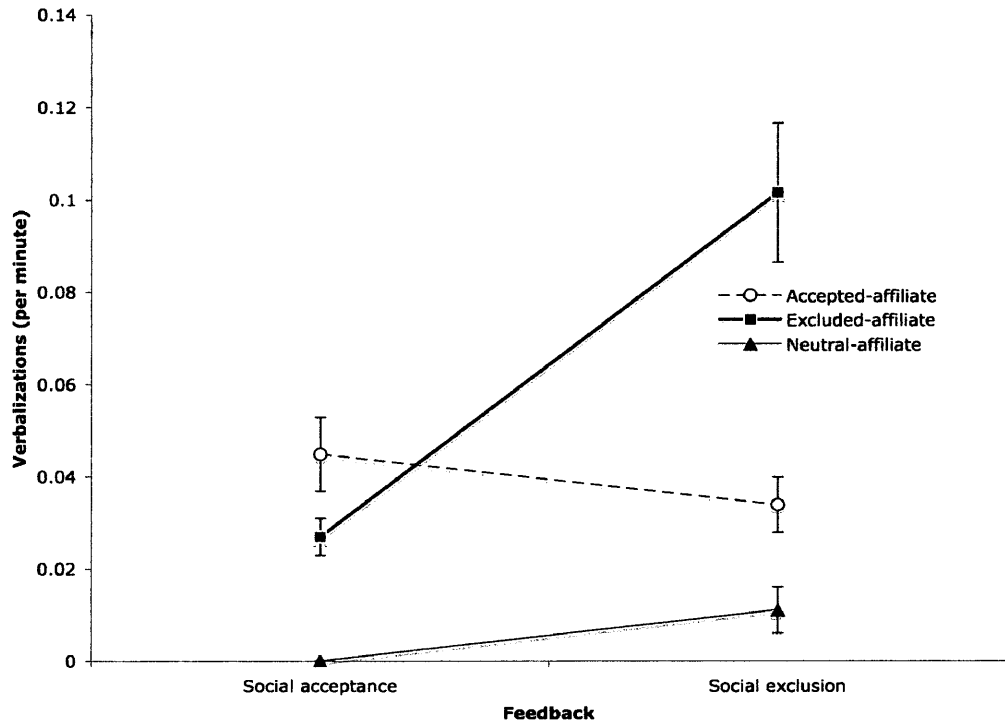
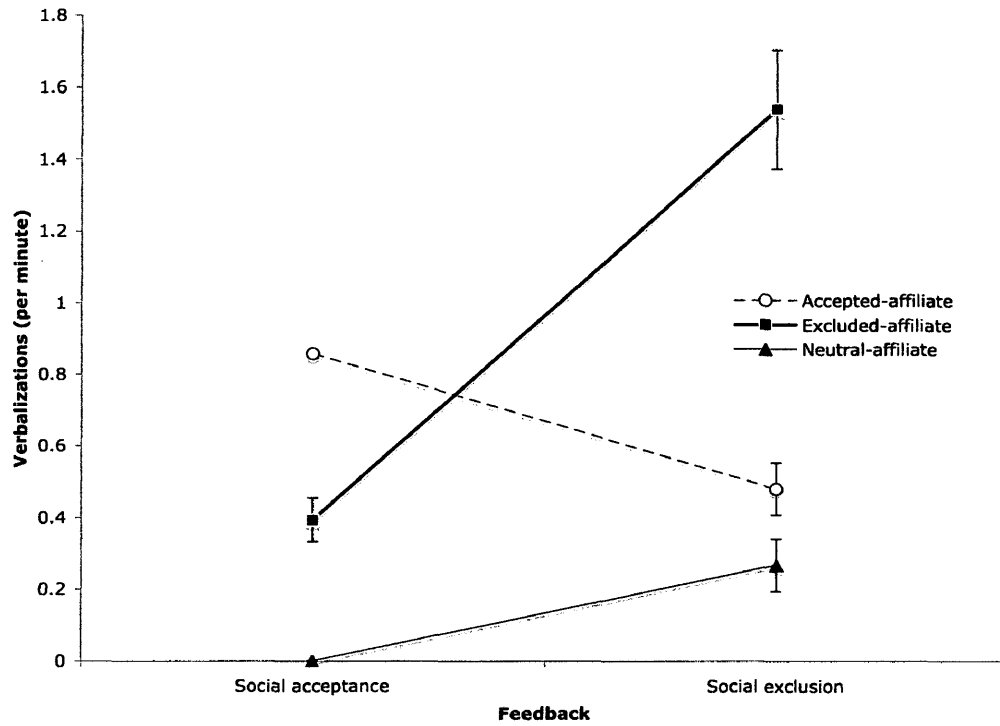


Figure 4. Mean of total verbalizations (per minute) relevant to inclusion/exclusion as a function of social exclusion feedback and affiliate condition. Interaction significant at  $p < .01$ . Error bars represent *SE*.





## Appendix B

**Please answer the following questions based on the previous essay (interview).  
Choose the best possible choice.**

- 1 = not at all**
- 2 = a little**
- 3 = somewhat**
- 4 = moderately**
- 5 = quite**
- 6 = very**
- 7 = extremely**

1. How much do you like this person? \_\_\_\_\_
2. How much do you trust this person? \_\_\_\_\_
3. How sociable did this person seem? \_\_\_\_\_
4. Did this person seem straightforward? \_\_\_\_\_
5. How pleasant did this person seem? \_\_\_\_\_
6. Did this person seem intelligent? \_\_\_\_\_
7. How shy was this person? \_\_\_\_\_
8. How much do you feel that this person was confident? \_\_\_\_\_
9. How much were you angered by this person? \_\_\_\_\_
10. How nervous was this person? \_\_\_\_\_

## Appendix C

**Please answer the following questions based on the previous interview. Choose the best possible choice.**

- 1 = not at all**
- 2 = a little**
- 3 = somewhat**
- 4 = moderately**
- 5 = quite**
- 6 = very**
- 7 = extremely**

1. How much do you think the other person liked you? \_\_\_\_\_
2. How much do you think the other person trusted you? \_\_\_\_\_
3. How sociable did you seem to the other person? \_\_\_\_\_
4. Do you think that you seemed straightforward to the other person? \_\_\_\_\_
5. How pleasant did you seem to the other person? \_\_\_\_\_
6. Does this person think that you are intelligent? \_\_\_\_\_
7. How shy were you to this person? \_\_\_\_\_
8. How much did you seem confident to the other person? \_\_\_\_\_
9. How much did you anger this person? \_\_\_\_\_
10. How nervous were you to this person? \_\_\_\_\_

## Appendix D

**Please answer the following questions as best as possible:**

- 1 = not at all**
- 2 = a little**
- 3 = somewhat**
- 4 = moderately**
- 5 = quite**
- 6 = very**
- 7 = extremely**

1. How happy do you feel? \_\_\_\_\_
2. How relaxed do you feel? \_\_\_\_\_
3. How accepted do you feel? \_\_\_\_\_
4. How angry do you feel? \_\_\_\_\_
5. How cheerful do you feel? \_\_\_\_\_
6. How rejected do you feel? \_\_\_\_\_
7. How valuable do you feel? \_\_\_\_\_
8. How confident do you feel? \_\_\_\_\_
9. How elated do you feel? \_\_\_\_\_
10. Were you assigned to work alone or in a group?  
Alone \_\_\_\_\_  
Group \_\_\_\_\_



## Appendix E

## Interaction Questions:

1. What would you say are your strengths?
2. What would you say are your weaknesses?
3. What's your major?
4. What are your long-term goals in life?
5. What are your short-term goals?
6. What are your interests?

## Accepted Script:

1. What would you say are your strengths? **(I'm not sure. That's a hard question for anyone to answer. I can tell you this, on the last task, everyone picked me to work with)**
2. What are your weaknesses? **(I'm not as careful and conscientious as I should be. How about you?)**
3. What's your major? **(Psychology)**
4. What are your long-term goals in life? **(That's another hard question. Maybe a doctor? I don't know. I take it day to day.)**
5. What are your short-term goals? **(Getting an A in this course).**
6. What are your interests? **(Reading, Movies, Music, normal stuff.)**

## Rejected Script:

1. What are your weaknesses? (**I'm not sure. That's a hard question for anyone to answer. I can tell you this, on the last task, no one picked to work with me.**)
2. What would you say are your strengths? (**I guess I'm a pretty careful and conscientious person**)
3. What's your major? (**Psychology**)
4. What are your long-term goals in life? (**That's another hard question. Maybe a doctor? I don't know. I take it day to day.**)
5. What are your short-term goals? (**Getting an A in this course.**)
6. What are your interests? (**Reading, Movies, Music, normal stuff.**)

## Neutral Script:

1. What would you say are your strengths? (**I'm not sure. That's a hard question for anyone to answer.**)
2. What are your weaknesses? (**I'm not as careful and conscientious as I should be. How about you?**)
3. What's your major? (**Psychology**)
4. What are your long-term goals in life? (**That's another hard question. Maybe a doctor? I don't know. I take it day to day.**)
5. What are your short-term goals? (**Getting an A in this course.**)
6. What are your interests? (**Reading, Movies, Music, normal stuff.**)

## Appendix F

Name: \_\_\_\_\_

**Coding Rubric for Participant – Confederate Interactions**

Participant #: \_\_\_\_\_

Confederate Condition: \_\_\_\_\_

Number of Times:      Min. 1      Min. 2      Min. 3      Min. 4      Min. 5      Min. 6

Gives Accept/Reject Relevant Information						
Asks for Accept/Reject Relevant Information						
Discusses Mood or Evaluates Accept/Reject Experience						
Asks about Mood or Evaluation of Accept/Reject Experience						

(Turn to next page→)

Gives non- Accept/Reject Relevant Information						
Asks for non- Accept/Reject Relevant Information						
Discusses Mood or Evaluates Non- Accept/Reject Relevant Information						
Asks about Mood or Evaluation of Non-Accept/Reject Relevant Information						

(Turn to next page →)

Total # of Statements: \_\_\_\_\_

1. Did the participant initiate the conversation?

Yes No

For the next questions, use the following scale:

- 1 = not at all**
- 2 = a little**
- 3 = somewhat**
- 4 = moderately**
- 5 = quite**
- 6 = very**
- 7 = extremely**

2. In your judgment, how friendly was the participant? \_\_\_\_\_

3. In your judgment, how unfriendly was the participant? \_\_\_\_\_

4. In your judgment, how sociable was the participant? \_\_\_\_\_

5. In your judgment, how shy was the participant? \_\_\_\_\_

6. In your judgment, how talkative was the participant? \_\_\_\_\_

7. In your judgment, how reserved was the participant? \_\_\_\_\_

8. Did the participant mention being accepted or rejected at all? Yes No

How many times? \_\_\_\_\_

9. In your judgment, did the participant seem suspicious? Yes No

## References

- American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. *American Psychologist, 47*, 1597 – 1611.
- Baumeister, R. F. (1990). Suicide as escape from the self. *Psychological Review, 97*, 90-113.
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology, 88*, 589-604.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529.
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology, 83*, 817–827.
- Buckley, K. E., Winkel, R. E., & Leary, M. R. (2004). Reactions to acceptance and rejection: Effects of level and sequence of relational evaluation. *Journal of Experimental Social Psychology, 40*, 14-28.
- Cacioppo, J. T., Hawkley, L. C., Crawford, L. E., Ernst, J. M., Burleson, M. H., Kowaleski, R., et al. (2002). Loneliness and health: Potential mechanisms. *Psychosomatic Medicine, 64*, 407–417.
- DeWall, C. N., & Baumeister, R. F. (2006). Alone but feeling no pain: Effects of social exclusion on physical pain tolerance and pain threshold, affective forecasting, and interpersonal empathetic concern. *Journal of Personality and*

*Social Psychology*, 91, 1 – 15.

- Festinger, L. A. (1954). A theory of social comparison processes. *Human Relations*, 7, 117 – 140.
- Forsyth, D. R. (2000). Social comparison and influence in groups. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison* (pp. 295 – 320). New York: Kluwer Academic.
- Hawkley, L. C., Burleson, M. H., Berntson, G. G., & Cacioppo, J. T. (2003). Loneliness in everyday life: Cardiovascular activity, psychosocial context, and health behaviors. *Journal of Personality and Social Psychology*, 85, 105–120.
- Kirkpatrick, L. A., & Shaver, P. (1988). Fear and affiliation reconsidered from a stress and coping perspective: The importance of cognitive clarity and fear reduction. *Journal of Social and Clinical Psychology*, 7, 214 – 233.
- Kirkpatrick, L. A., Waugh, C. E., Valencia, A., & Webster, G. D. (2002). The functional domain specificity of self-esteem and the differential prediction of aggression. *Journal of Personality and Social Psychology*, 82, 756–767.
- Kulik, J. & Mahler, H. (2000). Social comparison, affiliation and emotional contagion under threat. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison* (pp. 295 – 320). New York: Kluwer Academic.
- Kulik, J., Mahler, H., & Earnest, A. (1994). Social comparison and affiliation under threat: Going beyond the affiliate-choice paradigm. *Journal of Personality and Social Psychology*, 66, 301 – 309.
- Leary, M. R. (2001). Toward a conceptualization of interpersonal rejection. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 3–20). New York: Oxford University

Press.

- Leary, M. R., & Springer, C. A. (2001). Hurt feelings: The neglected emotion. In R. M. Kowalski (Ed.), *Behaving badly: Aversive behaviors in interpersonal relationships* (pp.151 – 175). Washington, DC: American Psychological Association.
- Maner, J., DeWall, C, Baumeister, R. & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the “porcupine problem.” *Journal of Personality and Social Psychology*, 92, 42 – 55.
- Nezlek, J. B., Kowalski, R. M., Leary, M. R., Blevins, T., & Holgate, S. (1997). Personality moderators of reactions to interpersonal rejection: depression and trait self-esteem. *Personality and Social Psychology Bulletin*, 23, 1235 – 1244.
- Pond, R. S., Jr., & Nezlek, J. B. (2008, February). *The effect of ostracism motive on perceptions of affiliation*. Poster presented at the 9<sup>th</sup> annual conference of the Society for Personality and Social Psychology, Albuquerque, NM.
- Schachter, S. (1959). *The psychology of affiliation*. Stanford, CA: Stanford University Press.
- Suls, J., & Wheeler, L. (2000). A selective history of classic and neo-social comparison theory. In J. Suls, & L. Wheeler (Eds.), *Handbook of social comparison* (pp.3 – 19). New York: Kluwer Academic.
- Twenge, J., Baumeister, R., DeWall, C., Ciarocco, N., & Bartels, J. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology*, 92, 56 – 66.



- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology, 81*, 1058–1069.
- Twenge, J.M., Catanese, K.R., & Baumeister, R. F. (2002). Social exclusion causes self-defeating behavior. *Journal of Personality and Social Psychology, 83*, 606–615.
- Twenge, J.M., Catanese, K.R., & Baumeister, R. F. (2003). Social exclusion and the deconstructed state: Time perception, meaninglessness, lethargy, lack of emotion, & self-awareness. *Journal of Personality and Social Psychology, 85*, 409–423.
- Twenge, J. M., Zhang, L., Catanese, K. R., Dolan-Pascoe, B., Lyche, L. F., & Baumeister, R. F. (2007). Replenishing connectedness: Reminders of social activity reduce aggression after social exclusion. *British Journal of Social Psychology, 46*, 205 – 224.
- Van der Zee, K., Oldersma, F., Buunk, B., & Bos, D. (1998). Social comparison preferences among cancer patients as related to neuroticism and social comparison orientation. *Journal of Personality and Social Psychology, 75*, 801 – 810.
- Warburton, W. A., Williams, K. D., & Cairns, D. R. (2006). When ostracism leads to aggression: The moderating effects of control deprivation. *Journal of Experimental Social Psychology, 42*, 213-220.
- Wheeler, L. (2000). Individual differences in social comparison. In J. Suls & L. Wheeler (Eds.), *Handbook of social comparison* (pp. 295 – 320). New York:

Kluwer Academic.

Williams, K. D. (2001). *Ostracism: The power of silence*. New York: Guilford Press.

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425 – 452.

Williams, K. K., Cheung, C. K. T., & Choi, W. (2000). CyberOstracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, 79, 748-762.

Williams, K. D., & Govan, C. L. (2005). Reacting to ostracism: Retaliation or reconciliation? In D. Abrams, M. Hogg, & J. Marques (Eds.), *The social psychology of inclusion and exclusion* (pp. 47 – 62). New York: Psychology Press.

Williams, K. D., & Sommer, K. L. (1997). Social ostracism by coworkers: Does rejection lead to social loafing or compensation. *Personality and Social Psychology Bulletin*, 23, 693 -706.

Zyzniewski, L. E., & Pond, R. S., Jr. (2006, May). *Perceptions of the socially accepted and rejected*. Poster presented at the 18<sup>th</sup> annual convention of the Association for Psychological Science, New York, NY.

## Vita

Richard S. Pond, Jr. was born in Norfolk, Virginia on May 20, 1983. He graduated Magna Cum Laude from Virginia Commonwealth University in Richmond, Virginia in May, 2005. He received a Bachelor of Science degree in Psychology, with honors in Psychology and a secondary major of Sociology. He entered the College of William & Mary in August, 2006 to pursue a Master of Arts degree in Experimental Psychology. Richard defended his thesis in July, 2008 and graduated in August, 2008. Richard is currently living with his wife in Lexington, Kentucky, while pursuing a doctorate degree in Experimental Social Psychology at the University of Kentucky.