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A Gay Savior: Reducing Anti-Gay Feelings with Gay Male Kindness Following Ostracism

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A Gay Savior:
Reducing Anti-Gay Feelings with Gay Male Kindness Following Ostracism

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
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College of Arts and Sciences
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Abstract

Social scientists have extensively examined ways of reducing negative feelings toward minority groups. However, no research has examined the ability for passive ostracism, the implicit exclusion of an individual by one's peers, to reduce such negative feelings despite evidence that such exclusion can yield similar positive benefits. The present study sought to address this deficit in the literature by exploring whether or not implicit ostracism by one's peers can cause a kind gesture by a stigmatized minority group member (gay men) to improve general perceptions of the associated group. A sample of 211 undergraduate students from the University of South Florida played a modified version of the online game *Cyberball* in which they were randomly assigned to be either included or excluded by ostensible partners. Subsequently, they were randomly assigned to play a second game in which they either cooperated with a gay male partner, cooperated with a straight male partner, or had no partner. Results indicated that, contrary to hypotheses, feelings toward gay men did not vary as a function of the Inclusion x Partner interaction. Exploratory results, however, suggest that ostracism may operate differently according to other individual difference variables. Suggestions for future research and limitations are discussed in light of these exploratory findings.

Introduction

In drawing attention to the need to reduce anti-gay prejudice and violence, one need only bring to mind the example of the case of Matthew Shepard, a gay student of the University of Wyoming. In 1998, Shepard accepted a seemingly benign offer of a ride home from two men at a bar. These men would brutally beat and rob Shepard before tying him to a fence in a remote field, leaving him to die from his injuries. He was found 18 hours after the assault by a neighbor who nearly mistook him for a scarecrow, and he died several days later. Activists later attributed his death to hatred and bigotry associated with anti-gay prejudice (MatthewShepard.org).

Although Matthew Shepard's case may seem extreme, gay men and women report continued victimization today in spite of historically attenuating prejudices (Treas, 2002; Pew Global Attitudes Project [PGAP], 2007). For this thesis, I will explore a potentially novel way of reducing the negative feelings that many express toward stigmatized groups (specifically gay men). I propose that exclusion by one's peers, through a theoretically increased need for social interaction, will bolster positive feelings towards gay men when an individual interacts with a kind gay man following his or her exclusion.

Contact Theory

Negative attitudes toward gays by heterosexuals has declined over time (Treas, 2002), but sexual minorities still often suffer from strong disapproval in the United States. For example, a recent national poll indicates that 41% of Americans do not believe that society should accept homosexual lifestyles (PGAP, 2007). Gallup polls

furthermore suggest that 48% of Americans find homosexuality morally wrong and 40% believe that consensual gay sex should be illegal (Saad, 2008). Finally, Lambda Legal (2005) reports that 39% of sexual minorities have experienced workplace discrimination due to their sexual orientation.

At the interpersonal level, surveys indicate that gay men and lesbians suffer from significant verbal and physical abuse and often fear for their safety (D'Augelli, 1989). For adolescents, these threats may result in a higher probability of receiving an inadequate education (Chase, 2001) or skipping school (Gibson, 1989). More disturbing, some estimate rates of suicide attempts for these adolescents to be triple the average for their heterosexual peers (Bart, 1998).

Gay men in particular have been found to be targets of victimization more often than lesbians (Herek, 2000a; Waldner-Haugrud & Berg, 2009; *Hate Crime Statistics*, 2006). In a survey of gay men and lesbians, Waldner-Haugrud and Berg (2009) report that gay men experience more physical assault, sexual assault, and property damage than lesbians. Moreover, they report that gay men generally “come out” sooner than women, potentially rendering them more vulnerable to such dangers. Given the victimization that gay men (and other stigmatized groups) often receive, social scientists have been working for decades to understand the motives underlying victimization and the mechanisms for its elimination. The theory that has received the most attention, the Contact Hypothesis (Allport, 1954), provides guidelines under which interactions between members of different groups can productively reduce prejudice. Allport argued that intergroup contact should involve members of equal status, cooperative activity, personal interaction, and sanctioning by a mutually acknowledged authority. In a meta-analysis of the Contact

Hypothesis, Pettigrew and Tropp (2006) note that these methods have effectively reduced prejudice among differences in race, ethnicity, religion, age, sexual orientation, physical disability, and mental health and disability.

Pettigrew and Tropp (2006) also concluded that there was mixed support for Allport's specific guidelines: While inclusion of these guidelines more closely approximates ideal contact and thus strengthens the effect size of reduced prejudice, not all guidelines are essential. In addition, other researchers have proposed novel recommendations for effective intergroup contact. Voci and Hewstone (2003) have shown that salience of group membership (i.e., the ability to identify one's group status in cases of ambiguity) combined with low anxiety result in more positive evaluations of the outgroup. Furthermore, contact should involve a stereotype balance: Group members should not perfectly match the stereotype of the group but should sufficiently represent the group to avoid miscategorization as an exception (Dixon, Durrheim, & Tredoux, 2005). Perceiving contact as important and personally relevant may also facilitate positive outgroup evaluations (Van Dick et al., 2004).

Ostracism

Although much research focuses on documenting the conditions ideal for contact to reduce prejudice, few studies have investigated the intuitively potent moderator of social inclusion or exclusion on reactions towards controversial groups. Baumeister and Leary (1995) argue that people have a fundamental need to form and maintain long-lasting attachments to others, form bonds quickly and easily, and are reluctant to dissolve those bonds once initially formed. Such social relationships are highly functional from an evolutionary perspective for the sharing of resources, and research demonstrates that

relationships are highly valued across cultures (Buss, 1991). In addition, there are strong rewards for having quality attachments to others, including positive emotion and the avoidance of aversive and pathological consequences (Baumeister & Leary, 1995). Social support derived from such quality attachments has also been implied as a moderator of physiological health and functioning (Uchino, Uno, & Holt-Lunstad, 1999). Indeed, social support has been shown to prolong the lives of cancer patients (Spiegel, Bloom, Kraemer, Gotthiel, 1989; Goodwin, Hunt, Key, and Samet, 1987), and a lack of social attachment may increase the risk of various forms of illness (Lynch, 1979) or reduce the functioning of the immune system (Kiecolt-Glaser, Garner, et al., 1984).

It naturally follows that people do not generally react positively to having their belongingness threatened by ostracism. Although some debate exists, ostracism most typically characterizes “being ignored and excluded, and it often occurs without excessive explanation or explicit negative attention” (Williams, 2007, 429). Typical experimental manipulations of ostracism include being ignored by other players in a cooperative game (Williams & Jarvis, 2006), receiving fictitious and pessimistic information about one’s prospects in later life for maintaining social relationships (Twenge et al., 2007), and being ignored or rejected within an actual group of participants in discussion (Molden et al, 2009). Ostracism most prominently results in lower feelings of belonging, control, self-esteem, and meaningful existence (Zadro, Williams, & Richardson, 2004). Moreover, ostracism physically manifests with activation of the dorsal anterior cingulate cortex, an area of the brain associated with affective distress (Eisenberger, Lieberman, Williams, 2003), and elevated blood pressure

and cortisol levels, implying a stressful and aroused response (Stroud, Tanofsky-Kraff, Wilfley, & Salovey, 2000).

Once ostracized, people may respond with aggression to the offending group (Twenge, Baumeister, Tice, & Stucke, 2001; Warburton, Williams, & Cairn, 2006; Twenge et al., 2007). However, the evidence is mixed regarding reactions to neutral others, or those unrelated to the ostracizing group. Twenge et al. (2001) had participants write an opinionated essay about abortion to be reviewed privately by ostensible group members. They learned that everybody wanted to work with them (acceptance) or that nobody wanted to work with them (rejection) before being asked to play a noise-blasting game with a confederate not part of the initial group. They found that participants aggressed more toward this neutral other when rejected previously.

In a follow-up study, however, Twenge et al. (2007) showed that aggression can be eliminated by an act of kindness from a neutral other. Following exclusion, participants who received a bag of candy and thanks from a novel experimenter after being debriefed aggressed less in the noise-blasting game than those fully debriefed. The researchers conclude that rejection jades our views of others but can be negated by subsequent positive interactions. Research by Bernstein, Sacco, Brown, Young, and Claypool (2010) supports this view: They found that ostracized participants subsequently chose to work with individuals whose photos displayed Duchenne (genuine) smiles rather than deceptive smiles, implying a sensitivity to reestablishing social ties.

Although many researchers do not distinguish between ostracism, social exclusion, and social rejection (Williams, 2007), Molden et al. (2009) argue that passive exclusion (i.e., being ignored and neglected) differs from active exclusion (i.e., rejection

and disparagement). These researchers had participants engage in an online chat about controversial issues with ostensibly human confederates (actually pre-programmed responses designed to either actively reject the participant using disparaging remarks or to more passively reject them by ignoring them during conversation). They found that actively rejected participants reported more agitation and thoughts of actions they should have avoided, while passively ignored participants reported more dejection and thoughts of actions they should have taken.

The Present Study

To summarize thus far, non-heterosexual individuals are among the most stigmatized groups within our society with gay men being more often and more harshly victimized than lesbians. The Contact Hypothesis predicts that positive contact between two individuals of different group memberships will ameliorate stereotypical attitudes under certain conditions. Ostracism research suggests that, regardless of an initial reaction, socially excluded individuals are sensitive to cues of positive interaction¹. Reestablishing social ties should facilitate a willingness to cooperate with a kind confederate, which in turn generates a positive social interaction ideal for the reduction of stereotypical attitudes through contact.

My research question naturally follows: What happens if socially ostracized people contact kind members of an outgroup? Ample research documents that, when outgroup members are considered, individual characteristics often generalize to the group to which an outgroup individual belongs (e.g., Batson et al., 1997; Turner, Crisp, & Lambert, 2007; Oveis, Horberg, & Keltner, 2010). I thus hypothesize that experiencing

¹ Although this effect is strongest when individuals are more passively ignored than actively rejected, even actively rejected participants initially aggressive have been shown to be calmed by a kind stranger (Twenge et al., 2007).

ostracism prior to cooperating with a kind gay confederate will result in more positive feelings towards gay men than the same cooperation without any initial ostracism.

Method

Participants

Two-hundred and eleven participants were drawn randomly from a pool of undergraduate psychology students at the University of South Florida. A power analysis anticipating a moderate effect size of $f = 0.25$ and using the standard criteria of $\alpha = .05$ and $1 - \beta = 0.80$ suggested recruitment of 30 participants per cell (six cells, thus yielding 180 participants). Extra participants were collected in anticipation of potential data loss due to screening.

Materials

Ostracism Manipulation. Participants played a modified version of *Cyberball* in order to induce ostracism (Williams & Jarvis, 2006). *Cyberball* involves a computer-based ball-toss game ostensibly involving other participants linked via a computer network. However, the in-game behaviors are merely pre-programmed responses that vary according to experimenters' specifications. In order to induce a feeling of social exclusion, participants minimally receive the ball while the remaining players toss the ball almost entirely between one another. While *Cyberball* functions best under the guise of networked play with real human beings, previous research shows that participants still report significantly lower scores on measures of well-being even when they know that the responses are pre-programmed (Zadro et al., 2004).

Feelings toward Gays. The dependent measure (see Appendix C) consisted of 7 items ($\alpha = .89$) adapted from the Index of Homophobia (IHP; Hudson & Ricketts, 1980).

These items are rated on a scale ranging from 1 (*Strongly Disagree*) to 9 (*Strongly Agree*) with high scores indicating more positive attitudes towards gay men. Items were selected for their emotional component; that is, rather than being strictly moral or legal beliefs deriving from more stable opinions, the selected items have face validity for measuring current comfort with various hypothetical scenarios.

Attitudes Toward Gay Men (ATG) Scale. Prior to participating in the study, all participants completed this 5-item scale measuring attitudes toward gay men ($\alpha = .95$). This scale demonstrates adequate reliability and validity both in original form and short-form (Herek, 1993). Items are rated from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) with higher scores indicating more positive attitudes toward gay men.

Design

I employed an ostracism (inclusion, exclusion) x partner information (gay male, straight male, or no partner) between-subjects factorial design. By comparing the feelings toward gays of socially excluded participants who cooperate with a gay male confederate to those of our various control conditions, we can ascertain the unique effect of the interaction between social exclusion, positive interaction, and subsequent feelings toward gay men.

Procedure

Participants were introduced individually into a lab setting and seated at a computer. As a cover story, participants learned that the particular research lab sponsoring the study investigates social interaction for simplistic, online multiplayer games. They further learned that their task involved rating elements that make these games enjoyable, akin to those available on social networking websites (e.g., Facebook or

MySpace). They were therefore invited to play these games and provide their subsequent feedback on them.

Prior to beginning the first game, participants entered some generic information about themselves ostensibly as part of their online gaming profile to be viewed by the two other players who agreed to participate at the same time (see Appendix A for a profile template). These fictional others supposedly completed the same task simultaneously in other rooms adjacent to the participant's own while the experimenter excused him- or herself to stage conversations with the ostensible confederates to reduce suspicion. Participants assigned to cooperate subsequent to the first game learned that they (player 3) and two others (players 1 and 2) were randomly selected to participate in the first game, as it is only a three-player game. The fourth participant (player 4) supposedly observed while waiting for the fourth game to begin. After the participant completed their profile they reviewed the other players' profiles.

Participants then randomly played an including or excluding version of *Cyberball*: Included participants received the ball an approximately equal number of times as the computer players, while excluded participants received the ball twice out of twenty throws. Following gameplay, the screen darkened and asked participants to complete their hard copy of questions pertaining to gameplay. These items served the dual purpose of confirming our manipulation and allowing participants to ruminate on their inclusion or exclusion.

After providing their ratings of the *Cyberball* game, the experimenter invited participants assigned to either of the cooperation conditions to play a second, two-player cooperative game. Experimenters told participants that "because Player 4 could not

participate in the first game, he received the option of choosing his partner for the second game. Because of what happened in the first game, Player 4 chose to work with you.” Participants then learned that players one and two from *Cyberball* would work together by default. With the participant’s consent, the second game began.

This game, *Balloon Pop*, required the player to repeatedly press spacebar to pump up balloons. Players with partners must pop their balloon at the same time as their team mate to score a point. The task thus forces the participant to cooperate with his or her team member, the newly joining fictional other, to earn as many points possible in 1 minute. Players without a partner in contrast merely attempted to pop as many balloons as possible by themselves.

Participants learned the sexual orientation of their fictional partner by reviewing their gaming profile prior to playing the game (see Appendix A for player four’s profile). Specifically, participants read the answer to one item on this profile (“Who referred you to this study?” answered as “My boyfriend [girlfriend]”). Participants not assigned to a cooperation condition (i.e., no-partner condition), competed against a timer requiring them to pop as many balloons as possible within 1 minute. All participants, regardless of their score or condition, learned that they (or their team) performed within the top 10% of all other participants who had completed the study.

Following the game, participants provided game-specific feedback identical to the feedback provided for the first game. They next completed a checklist containing a few brief manipulation-check items about the other players of the game (see Appendix D). The experimenter then notified them that the study was over, but that they have been randomly selected by the university to also be offered to participate in a brief, separate

survey. To discourage suspicion about the nature of the ostensibly separate survey, the items contained the adapted IHP tailored to multiple groups (see Appendix C). Finally, participants provided demographic questions not assessed by their gaming profiles (see Appendix E). Participants were then thanked, probed for suspicion, and thoroughly debriefed.

Results

Data Screening

The study's research assistants probed for specific areas of suspicion during the participant's debriefing and provided a numerical rating of the suspicion on a 1 (*not at all suspicious*) to 5 (*extremely suspicious*) scale. Due to high levels of suspicion at the onset of the study, I made several small methodological changes, including running participants in pairs when possible and instructing research assistants to more frequently stage conversations with the fictional confederates in adjacent rooms. Ultimately, I excluded participants with suspicion ratings ≥ 4 ($n = 27$) from analyses. Prior to these noted changes, 44% of participants ($n = 8$) were discarded for suspicion, but following these changes, only 7% ($n = 15$) were discarded. This left 194 potential participants for all subsequent analyses.

Prior to any hypothesis tests, data were first screened and corrected for typographical errors by examining the frequencies and ranges of each variable. Subsequently, all composite variables demonstrated skewness and kurtosis estimates $< \pm 1$, indicating adequately normal distributions for subsequent hypothesis tests. All hypothesis tests were conducted with the requisite assumptions of normality, homogeneity of error variances, and independence of observations.

Manipulation Checks

To examine the success of the ostracism manipulation, an ostracism (inclusion, exclusion) x partner information (gay, straight, or no Partner) factorial ANOVA was conducted with the single-item inclusion measure as the dependent measure. As expected, the main effect for sexual orientation and the ostracism by sexual orientation interaction were both not significant, both $F(2,185) \leq 2.32, ps \geq .10$, while the main effect for ostracism was, $F(2,185) = 299.56, p < .01$, indicating that excluded participants reported lower inclusion than included participants. Table 1 presents the descriptive statistics for each condition.

To examine the success of the manipulation of player four's sexual orientation, research assistants recorded whether or not participants reported during debriefing the specific information informing them of their partner's sexual orientation. Participants who were unsure or who overlooked that information ($n = 11$ in the Gay Partner condition) were then asked to make a guess about the partner's sexual orientation. Because all participants assumed their partner to have a heterosexual male identity, I added these participants to the Straight Partner condition (see Table 2 for sample sizes by condition and gender). All other participants correctly identified their partner's sexual orientation.

The Effects of Ostracism on Feelings toward Gays

The primary hypothesis of this thesis involves addressing whether or not passive ostracism, once alleviated by an individual explicitly of outgroup status, results in generalized positive evaluations of that outgroup. To test this hypothesis in the most straight-forward way possible, I submitted feelings towards gays to an ostracism

(inclusion, exclusion) x partner information (gay, straight, or no partner) factorial ANOVA. The main effect for ostracism was significant, $F(1,181) = 3.89, p = .05$, indicating that included participants reported more positive feelings towards gay men ($M = 6.92, SD = 1.74$) than did excluded participants ($M = 6.34, SD = 2.04$). However, the main effect for partner information, $F(2,181) = 0.51$, and the ostracism by partner information interaction, $F(2,181) = 1.02$, were both not significant ($ps > .36$).

Although the interaction effect was not significant, I decided to conduct exploratory simple effects tests for each level of the partner across levels of ostracism. For gay partners, feelings towards gays did not significantly differ as a function of ostracism condition, $F(1,69) = 2.43, p > .12, d = .38$. For straight partners, a significant difference did emerge, $F(1,56) = 4.03, p = .05, d = 0.55$, indicating that included participants reported more positive feelings toward gays ($M = 6.97, SD = 1.77$) than did excluded participants ($M = 5.94, SD = 2.00$). Finally, no significant difference emerged among participants with no partner between ostracism conditions, $F < 1$.

Interestingly, these results overall suggest a (non-significant) trend such that having *any* partner following ostracism, gay or straight, seems to result in more positive evaluations of gay men relative to having no partner. If interacting with a straight partner following ostracism generates more positive feelings toward gay men, one might posit that any interaction following ostracism could generally benefit outgroups surveyed during the study. To examine this, I conducted an ostracism x partner information MANOVA with feelings towards convicted felons, the hearing impaired, Atheists, and users of marijuana as dependent measures. Only the main effect for ostracism emerged as significant, Wilks' $\Lambda = .95, F(4,175) = 2.47, p < .05$, whereas the tests for the main effect

for partner information and the ostracism by sexual orientation partner condition emerged as non-significant, both $F(8,350) \leq 1.16$, $ps > .32$. Univariate results indicate that the main effect for ostracism is only significant for feelings toward the hearing impaired, $F(1,178) = 4.12$, $p < .05$, $d = .32$, indicating that included participants reported more positive feelings toward the hearing impaired ($M = 7.21$, $SD = 1.12$) than did excluded participants ($M = 6.83$, $SD = 1.26$). Feelings toward Atheists, convicted felons, and users of marijuana did not differ significantly as a function of ostracism, both $F(1,178) \leq 3.75$, $ps > .05$. Thus, with the current sample of outgroups, this alternative hypothesis did not receive overall support.

Moderators of Alleviated Ostracism on Feelings towards Gays

Political Ideation. Given the empirical relationship between political conservatism and more negative feelings towards gays (Herek & Capitano, 1996), I examined a regression analysis using ostracism, political ideation, and the interaction term to predict feelings towards gays strictly when participants interacted with a fictional gay partner, $F(3,55) = 6.26$, $p < .01$, $R^2 = 0.26$. In this model, ostracism did not emerge as a significant predictor, $b = -.57$, $t(55) = -1.20$, $p > .23$. However, political ideation did, $b = -1.04(.27)$, $t(55) = -3.73$, $p < .01$, indicating that attitudes towards gays are positively associated with more liberal political attitudes. This trend was qualified, however, by a marginally significant interaction trend, $b = .63 (.39)$, $t(55) = 1.63$, $p = .11$, depicted in Figure 1. Simple slopes analyses reveal no relationship between ostracism and feelings towards gays when one is excluded, $b = -.41(.27)$, $t(55) = -1.49$, $p > .14$, whereas when one is included, positive attitudes tend to be associated with more liberal beliefs (simple slope reported in main model). This same model is not significant when participants

interacted with a fictional straight confederate, $F(3,47) = 2.05, p > .15$, all predictor $ps > .13$.

Liking of Fictional Partner. Amidst the distracter items for the second game were two items gauging the participant's liking of their partner ("I enjoyed interacting with the other players during the game," I felt included by the other players during the game," composite $\alpha = .78$). As a second moderator, I explored the logical possibility that greater liking of the fictional gay partner, but not the straight fictional partners, should yield more positive gay attitudes. To do so, I conducted two separate moderation analyses across partner conditions using a model containing ostracism, liking of the fictional partner (continuous), and the ostracism by liking of partner interaction terms as predictors. However, this model did not generate significant results in either condition, both $ps > .26$, indicating no evidence that any observed effect differed by liking of the target.

Gender. Third, I explored potential gender differences by submitting feelings toward gays to the aforementioned ostracism x partner information ANOVA while adding gender as a third factor (thus making the design a $2 \times 3 \times 2$ between-subjects analysis). Replicating previous research, women generally reported more positive feelings toward gay men ($M = 6.93, SD = 1.74$) than men did ($M = 5.97, SD = 1.98$), $F(1,169) = 19.87, p < .01, d = .52$. However, no other findings emerged as significant (all $ps > .07$).

Attitudes Toward Gay Men. Finally, I tested the predicted moderation analysis that the relationship between ostracism and positive feelings toward gay men would be strongest among those with initially low attitudes toward gay men. To test this, I

conducted three regressions (one per level of partner information) regressing feelings towards gay men onto ostracism, ATG scores (continuous), and the ATG by ostracism interaction term. For gay partners, the overall model was significant, $F(3,60) = 18.35, p < .01, R^2 = 0.48$. Neither ostracism nor the interaction term emerged as significant, both $t(60) < 1$, but attitudes toward gay men did emerge as a significant predictor, $b = 1.32, t(60) = 5.02, p < .01$, indicating that positive attitudes towards gay men were associated with positive feelings towards gay men. A similar pattern emerged for straight partners, model $F(3,60) = 14.68, p < .01, R^2 = 0.42$. Attitudes toward gay men again positively predicted feelings toward gay men, $b = 1.40, t(60) = 4.03, p < .01$, and a marginally significant trend was observed for ostracism, $b = -.66, t(60) = -1.80, p < .08$, suggesting that inclusion resulted in stronger positive feelings toward gay men than exclusion. However, the interaction term was not significant, $b = -.46, t(60) = -1.14, p = .26$.

For the condition with no partner, however, a slightly different pattern emerged, $F(3,48) = 23.49, p < .01, R^2 = 0.60$. Like the gay condition, ostracism did not emerge as a significant predictor, $b = -.42, t(48) = -1.15, p = .26$, and ATG scores positively predicted positive feelings towards gay men, $b = .75, t(48) = 3.23, p < .01$. However, an interaction effect was observed, $b = .66, t(48) = 2.24, p = .03$. Simple effects tests of ostracism for participants with low ATG scores (-1SD) suggest that excluded participants reported more positive attitudes toward gays than included participants, $b = -1.27, t(48) = -2.47, p < .02$, whereas excluded and included participants did not differ when participants had high ATG scores, $t(60) < 1^2$. These results are depicted in Figure 2.

² While these results seem promising, they should be interpreted cautiously given the unadjusted p -values reported.

Discussion

Limitations

Previous research guiding this project has demonstrated that the negative impact of ostracism can be alleviated through a stranger's act of kindness (Twenge et al., 2007). In an expansion of this work, I sought to examine the potential for the positive feelings felt toward a kind stranger to engender positive feelings towards that stranger's salient group status. In this study, some participants received a random act of kindness, being chosen as a game partner, following circumstances in which they were excluded or included by their peers. I expected participants who discovered that their kind friend was a gay male to generalize their positive feelings toward all gay men, but I found limited and questionable support at best for these findings given the current sample.

The most optimistic explanation for this finding is simply a lack of statistical power due to a weak experimental manipulation: A single interaction with another individual may not suffice to modify one's firmly-rooted feelings towards that individual's entire social group, particularly given the impersonal nature of this interaction via the internet. Indeed, research on contact theory (Pettigrew & Trope, 2006) shows that people may simply classify stereotype-inconsistent others as rare exceptions to the stereotype rather than revise their schemas of the outgroup. Thus, kindness following ostracism from an outgroup member may require groups for which participants have little or no initial exposure to engage the process of stereotype formation rather than of stereotype revision. Alternatively, future research could examine chronic and repeated exposure to outgroup members found to be ideal for contact effects (Pettigrew & Trope, 2006).

Not surprisingly, the most consistent finding to emerge from the current research is the replication of the negative impact of ostracism on evaluations of others: In this study, participants who were excluded by their peers felt less positively toward gays than those included by their peers regardless of whether or not they received a kind gesture. These findings mirror previous conditions where participants do not receive a kind gesture (Twenge et al., 2007); Given the non-significant interaction, I suspect that the kind gesture was not perceived as kindness but instead a more plausible alternative (e.g., an obligated sympathy for an observed injustice). To address this possibility in future research, I recommend making the kind display explicit and more powerful to prevent participants, particularly in their vulnerable state following exclusion, from rationalizing the kindness as one of these alternatives.

Future Research

I hypothesized that the relationship between kindness following exclusion and participant's evaluations of an outgroup would be dependent upon the kind other's identity, but this hypothesis may have been too simplistic: Moderation analyses actually suggest the interesting possibility that this relationship may differ instead as a function of the participant's initial attitudes. In the current study, I found preliminary evidence that the beneficial effect of ostracism on group evaluations may occur for those with initially negative attitudes and strictly for those who do not subsequently interact with others. Specifically, among participants without partners, those with more negative attitudes toward gay men (notably those who would ideally benefit from this paradigm) reported more positive attitudes toward gay men when excluded and relative to when included. One way of refuting this hypothesis involves replicating these two conditions using

various groups: If this finding only uniquely functions for the social group of gay men, or if this finding resulted from too lenient of rejection criteria, we would not expect to find the same pattern among other groups. Because this study focused on gay men as the target group, no data were collected regarding participants' general feelings for the other distracter groups surveyed (e.g., Atheists). However, future research should attempt to replicate this finding with alternative groups to generalize this phenomenon with hopes of discovering the conditions that generate positive and negative benefits of ostracism.

Furthermore, the present findings may draw attention to the need to assess more general individual differences associated with reactions to social exclusion. Specifically, the difference between liberal and conservative participants' feelings toward gays only emerged in the inclusion, gay partner condition but disappeared in the exclusion, gay partner condition. This interaction was only marginally significant, but the model effect size ($R^2 = .26$) suggests that this relationship may become significant if further data are collected. Baumeister et al. (2002) argue that social exclusion depletes self-regulation and, by extension, various forms of intelligent thought. Moreover, Williams (2007) suggests that other higher cognitive processes may be suppressed following ostracism. Under this assumption, social exclusion may prevent suppression of the processes associated with inhibiting automatic prejudices (Devine, 1989). Future research should examine the implicit *and* explicit attitudes toward other groups following social exclusion.

While numerous individual differences have been identified purely regarding affective reactions to ostracism (Williams, 2007), no research has systematically examined one's own identity with regard to the identity of the excluding party nor the

identity of the subsequent including party. For example, although ostracism may reduce general empathy (Twenge et al., 2007), group-specific empathy may emerge as a function of re-establishing social ties with those who share one's characteristics (i.e., powerlessness) while antipathy, anger, and antisocial behavior simultaneously or alternatively emerges against those responsible for the ostracism (i.e., the powerful; Chow, Tiedens, & Govan, 2007). Future research should examine these relationships with the ultimate goal of elucidating the positive and negative influences of ostracism on the individual.

Conclusions

Researchers continue to investigate new and creative ways to reduce negative feelings, disparaging attitudes, and outright prejudice toward outgroups. In previous research and in the current study, however, ostracism seems to often decrease positive feelings towards others, but this finding may obscure individual-differences that moderate the hypothesized relationship. While this study does not provide direct evidence for the ability of kindness following ostracism to reduce anti-gay feelings, the moderation analyses presented provide promise for future research examining conditions, both internal and external to the individual, under which ostracism may become generally insidious.

References Cited

- Allport, G.W. (1954). *The nature of prejudice*. Addison-Wesley: Oxford, England.
- 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.
- Bernstein, M.J., Sacco, D.F., Brown, C.M., Young, S.G., & Claypool, H.M. (2010). A preference for genuine smiles following social exclusion. *Journal of Experimental Social Psychology*, 46(1), 196-199.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendy, Amelie, . . . Leyens, J. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, 96, 843-856.
- Buss, D.M. (1991). Evolutionary personality psychology. *Annual Review of Psychology*, 42, 459-491.
- Chase, A. (2001). Violent reaction: What do teen killers have in common? *In These Times*, 25(16). Retrieved November 24, 2009, from http://surge.ods.org/idle_other/violent_reactions.htm.
- D'Augelli, A.R. (1989). Lesbian's and gay men's experiences of discrimination and harassment in a university community. *American Journal of Community Psychology*, 17, 317-321.

- Dixon, J., Durrheim, K., & Tredoux, C. (2005). Beyond the Optimal Contact Strategy. *American Psychologist, 60*, 697-711.
- Eisenberger, N.I., Lieberman, M.D., & Williams, K.D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science, 302*, 290-292.
- Federal Bureau of Investigations (2007). *Hate Crimes Statistics, 2006*. Retrieved from <http://www.fbi.gov/ucr/hc2006/index.html>
- Goodwin, J. S., Hunt, W. C, Key, C. R., & Samet, J. M. (1987). The effect of marital status on stage, treatment, and survival of cancer patients. *Journal of the American Medical Association, 258*, 3125-3130.
- Hays, WL. (1994). *Statistics* (5th ed.). Fort Worth, TX: Harcourt Brace.
- Herek, G.M. (1987). Can functions be measured? A new perspective on the functional approach to attitudes. *Social Psychology Quarterly, 50*, 285-303.
- Herek, G. (2000). The psychology of sexual prejudice. *Current Directions in Psychological Science, 9*, 19-22.
- Herek, G. M., & Capitano, J. P. (1996). 'Some of my best friends': Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin, 22*, 412-424.
- Herek, G.M., & Glunt, E.K. (1993). Interpersonal contact and heterosexuals' attitudes toward gay men: Results from a national survey. *Journal of Sex Research, 30*, 239-244.
- Kiecolt-Glaser, J. K., Garner, W., Speicher, C., Penn, G. M., Holliday, J., & Glaser, R. (1984). Psychosocial modifiers of immunocompetence in medical students. *Psychosomatic Medicine, 46*, 7-14.

- Lambda Legal (2006). 2005 Workplace Fairness Survey. Retrieved from <http://data.lambdalegal.org/pdf/641.pdf>.
- Lynch, J. J. (1979). *The broken heart: The medical consequences of loneliness*. New York: Basic Books
- Matthew Shepard Foundation. (2006). Retrieved November 24, 2009, from <http://www.matthewshepard.org/>
- Molden, D.C., Lucas, G.M., Gardner, W.L., Dean, K., & Knowles, M.L. (2009). Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored. *Journal of Personality and Social Psychology*, 96, 415-431.
- Pettigrew, T.F., & Tropp, L.R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783.
- Pew Global Attitudes Project (2007). World publics welcome global trade – but not immigration. Retrieved from <http://pewglobal.org/files/pdf/258.pdf>.
- Saad, L. (2008). Americans evenly divided on morality of homosexuality. Retrieved from <http://www.gallup.com/poll/108115/Americans-Evenly-Divided-Morality-Homosexuality.aspx>.
- Spiegel, D., Bloom, J.R., Kraemer, H.C., & Gotthiel, E. (1994). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. In A. Steptoe & J. Wardle (Eds.), *Psychosocial processes and health: A reader*. (pp. 468-477). New York, NY: Cambridge University Press.
- Stroud, L.R, Tanofsky-Kraff, M., Wilfley, D.E., & Salovey, P. (2000). The Yale Interpersonal Stressor (YIPS): affective, physiological, and behavioral responses

to a novel interpersonal rejection paradigm. *Annals of Behavioral Medicine*, 22, 204-213.

Swann, W. B., Jr. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (pp. 33-66). Hillsdale, NJ: Erlbaum.

Treas, J. (2002). How cohorts, education, and ideology shaped a new sexual revolution on American attitudes toward nonmarital sex, 1972-1998. *Sociological Perspectives*, 45, 267-283 [Electronic version].

Twenge, J.M., Baumeister, R.F., DeWall, C.N., Ciarocco, N.J., & Bartels, J.M. (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: The effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, 81, 1058-1069.

Uchino, B.N., Uno, D., & Holt-Lunstad, J. (1999). Social support, physiological processes, and health. *Current Directions in Psychological Science*, 8, 144-148.

Van Dick, R., Wagner, U., Pettigrew, T.F., Christ, O., Wolf, C., Petzel, T., . . . Jackson, J.S. (2004). Role of perceived importance in intergroup contact. *Journal of Personality and Social Psychology*, 87, 211-227.

Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes & Intergroup Relations*, 6, 37-54.

- Waldner-Haugrud, L. K. & Berg, J. K. (2004, August) *Predictors of Hate Crime Victimization for Lesbians and Gay Men. Paper presented at the annual meeting of the American Sociological Association, San Francisco, CA*, Retrieved from http://www.allacademic.com/meta/p110334_index.html
- 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.
- Williams, K.D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425-452.
- Williams, K.D., & Jarvis, B. (2006). Cyberball: A program for use in research on interpersonal ostracism and acceptance. *Behavior Research Methods*, 36, 174-180.
- Zadro, L., Williams, K.D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40, 560-567.

Table 1. Mean Feelings of Inclusion as a Function of Experimental Condition.

	Excluded		Included	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Gay Partner	1.76	1.68	6.00	2.65
Straight Partner	1.78	1.40	7.42	2.06
No Partner	1.74	1.32	6.64	2.31

Table 2. Sample Sizes and Proportions of Male Participants Relative to Female Participants within each Condition.

	Excluded	Included
Gay Partner	40 (38%)	33 (30%)
Straight Partner	33 (33%)	23 (21%)
No Partner	29 (28%)	28 (21%)

Table 3. Mean Feelings Toward Gay Men as a Function of Experimental Condition.

	Excluded		Included	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Gay Partner	6.41	1.92	7.20	1.92
Straight Partner	6.00	1.99	6.92	1.64
No Partner	6.68	2.24	6.66	1.70

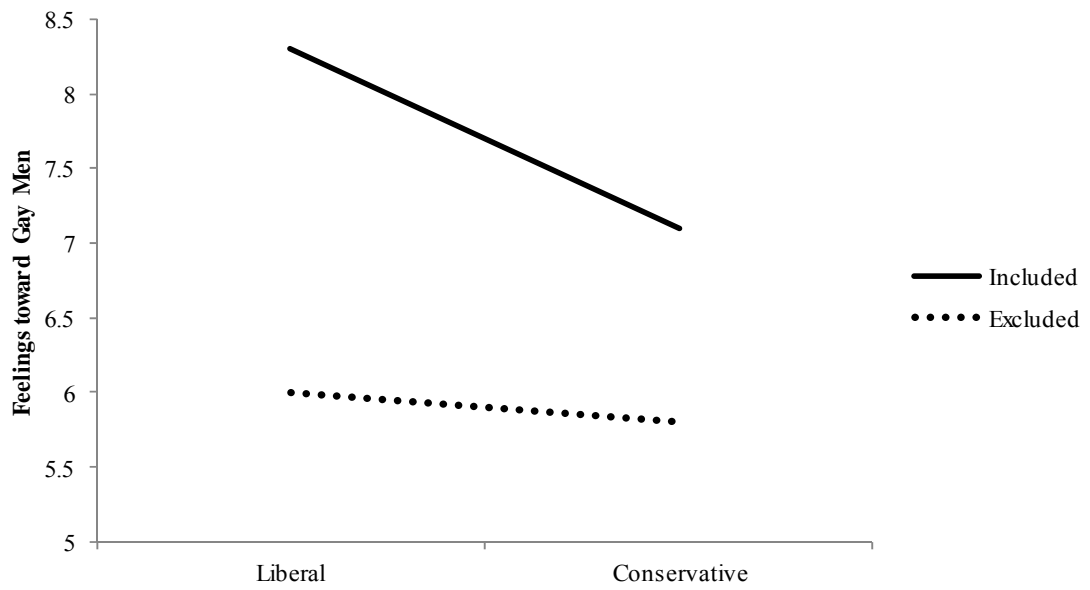


Figure 1. Feelings toward Gay Men as a Function of Political Ideation and Ostracism Condition.

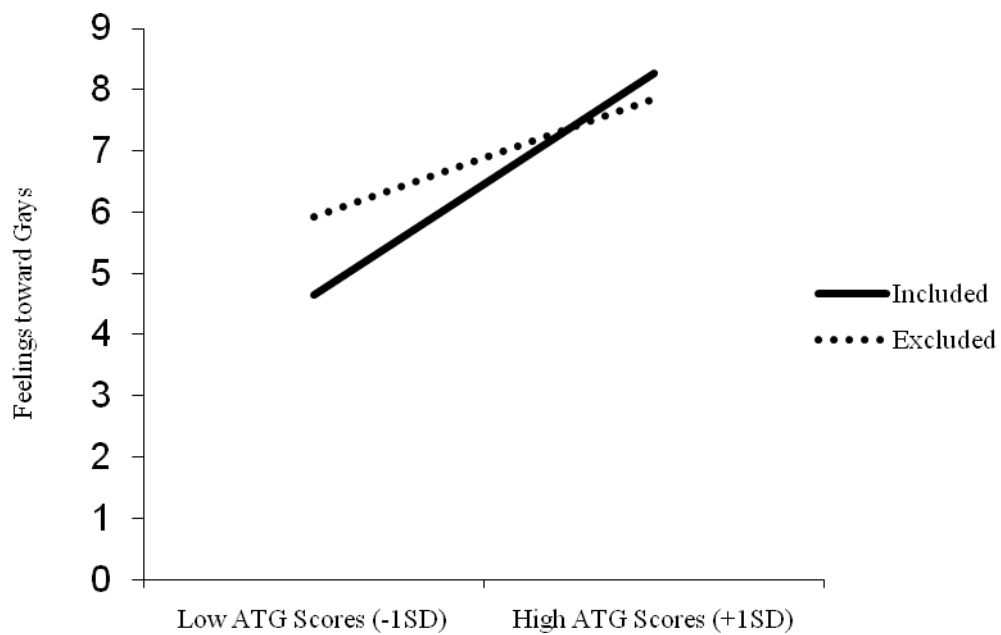


Figure 2. Feelings Toward Gay Men as a Function of Initial Attitudes Toward Gays and Ostracism.

Appendices

Appendix A: Profile Template for Participant and Fictional Confederates³

Page 1

Alias: JoggerGuy
(Rather than enter your real name, **enter an alias** to be used for online play; do NOT use your real name.)

Age: 20

Gender (circle one): (Male) Female

Year in College (circle one): 1 2 (3) 4 5 6+

Major: Psychology

What is your first hobby?

Jogging

What is your second hobby?

Music

What is your third hobby?

Television

Favorite Color: Green

Favorite Food: Cookies

Page 2

Do you play any other multiplayer games online (i.e. World of Warcraft, Facebook or MySpace games)? If so, what is your favorite game? (If not, simply enter "NA" here)

Bejeweled

What is your favorite class this semester?

Abnormal Psych

³ Answer fields were blank for participants; the answers presented are the fictional confederate's profile answers.

Who recommended this study to you if anyone?⁴

My girlfriend [boyfriend]

Page 1

Alias:

musicgirl

(Rather than enter your real name, **enter an alias** to be used for online play; do NOT use your real name.)

Age:

19

Gender (circle one):

Male

(Female)

Year in College (circle one):

(1)

2

3

4

5

6+

Major:

Sociology

What is your first hobby?

Reading

What is your second hobby?

Dancing

What is your third hobby?

Friends

Favorite Color:

Red

Favorite Food:

Subway

Page 2

Do you play any other multiplayer games online (i.e. World of Warcraft, Facebook or MySpace games)? If so, what is your favorite game? (If not, simply enter "NA" here)

Facebook

What is your favorite class this semester?

Intro Psych

Who recommended this study to you if anyone?

⁴ This item varied in placement: it was on page 1 for early-disclosure participants and page 2 for late-disclosure participants.

____SONA_____

Page 1

Alias: _____CoffeeLover_____
(Rather than enter your real name, **enter an alias** to be used for online play; do NOT use your real name.)

Age: _____22_____

Gender (circle one): Male (Female)

Year in College (circle one): 1 2 3 (4) 5 6+

Major: _____Psychology_____

What is your first hobby?

____Video games_____

What is your second hobby?

____Music_____

What is your third hobby?

____Parties_____

Favorite Color: _____Red_____

Favorite Food: _____Chicken_____

Page 2

Do you play any other multiplayer games online (i.e. World of Warcraft, Facebook or MySpace games)? If so, what is your favorite game? (If not, simply enter "NA" here)

____Gears of War_____

What is your favorite class this semester?

____Social Psychology_____

Who recommended this study to you if anyone?

____SONA_____

Appendix B: Questions Following the Games\

Now that you have had the chance to play *Cyberball [Balloon Pop]*, we are interested in what you thought of the game. Please use the following scale to answer the questions below about the *Cyberball [Balloon Pop]* game.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
I Totally Disagree	I Mostly Disagree	I Moderately Disagree	I Slightly Disagree	Neutral: I Do Not Agree Nor Disagree	I Slightly Agree	I Moderately Agree	I Mostly Agree	I Totally Agree

- 1) _____ Overall, I enjoyed playing the game.
- 2) _____ I enjoyed the music that played during the game.
- 3) _____ More depth should be added to the music that played during the game.
- 4) _____ I enjoyed the graphics that were shown during the game.
- 5) _____ More depth should be added to the graphics that were shown during the game.
- 6) _____ I felt that the game was challenging.
- 7) _____ The instructions for the game were difficult to understand.
- 8) _____ I feel that more should be added to gameplay to make the game interesting.
- 9) _____ I enjoyed interacting with the other players during the game.
- 10) _____ I felt included by the other players during the game.*
- 11) _____ Reading information about the other players contributed to my enjoyment of the game.
- 12) _____ I would play this game again with my friends on a social networking website (e.g., Facebook or MySpace).

* denotes item serving as manipulation check items for the inclusion / exclusion condition.

Appendix C: Mixed Questionnaire Containing the In-Study Feelings Measure*



UNIVERSITY OF
SOUTH FLORIDA

University of South Florida Public Opinion Survey

Thank you for taking part in this brief public opinion survey. The opinions of USF students are invaluable for guiding administrative decisions, and we are grateful that you have decided to take the time to answer these questions for us.

The following statements are to address your personal attitudes. There are no right or wrong answers, and we are only interested in how the students at USF feel about the following issues. For the following statements, please use the scale below to indicate whether or not you agree, disagree, or are in the middle about the statement.

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>
I Totally Disagree	I Mostly Disagree	I Moderately Disagree	I Slightly Disagree	Neutral: I Do Not Agree Nor Disagree	I Slightly Agree	I Moderately Agree	I Mostly Agree	I Totally Agree

Sexual Minorities

- 1) ___ I would feel comfortable working closely with a gay man or lesbian woman.
- 2) ___ I would feel nervous being in a group with gay men and lesbian women.
- 3) ___ I would feel at ease talking with a gay man or lesbian woman at a party.
- 4) ___ I would feel uncomfortable if I learned that my neighbor was gay or lesbian.
- 5) ___ I would be upset if I learned that my sibling was gay or lesbian.
- 6) ___ I would be uncomfortable being friends with a gay man or lesbian woman.
- 7) ___ I like gays and lesbians.

* Note: the above items are specifically tailored to gay men and lesbians. However, the questions above will be duplicated using the following groups: Atheists, former convicted felons, deaf person, users of marijuana.

Appendix D: Partner Checklist

For this next task, we are interested in knowing what information you remembered about the other players after having read their online profiles. We need this information to know what player information was clearly presented and also _____ .

Player 1

I was this player (NOTE: if you check this box, please skip the questions pertaining to yourself below)

This player...

1. was male.
2. was female.
3. was on the blue team.
4. was on the red team.
5. liked a warm color (e.g., red, orange, yellow) as their favorite color.
6. shared a hobby with me.
7. plays online games regularly.
8. was older than me.
9. was referred by their professor.
10. was referred by a friend or significant other.
11. was referred by SONA.
12. listed a favorite class that I have taken.
13. was a psychology major.
14. had a creative alias for their profile.
15. made a typo in their profile.

Player 2

I was this player (NOTE: if you check this box, please skip the questions pertaining to yourself below)

This player...

1. was male.
2. was female.
3. was on the blue team.
4. was on the red team.
5. liked a warm color (e.g., red, orange, yellow) as their favorite color.
6. shared a hobby with me.
7. plays online games regularly.
8. was older than me.
9. was referred by their professor.
10. was referred by a friend or significant other.
11. was referred by SONA.
12. listed a favorite class that I have taken.
13. was a psychology major.
14. had a creative alias for their profile.
15. made a typo in their profile.

Appendix E: Demographics Questionnaire

Thank you for participating in our study! Before you finish today, we have just a few more questions about your experiences here today as well as a few questions about yourself.

1) What is your religious affiliation, if any? _____

- 2) 3. What is your racial/ethnic heritage?
- a. 1) White/Anglo or European American
 - b. 2) Black/African American, Caribbean
 - c. 3) Asian, Asian American, Pacific Islander
 - d. 4) Hispanic/Latino(a)
 - e. 5) Native American
 - f. 6) Arabic/Middle Eastern
 - g. 7) Bi-racial _____
 - h. 8) Other _____

3) What is your sexual orientation?

1	2	3	4	5	6	7
Exclusively heterosexual (Straight)			Bisexual			Exclusively homosexual (Gay)

Which of the following best describes your political ideology in general (circle the corresponding number)?

1	2	3	4	5	6	7
Extremely Liberal	Liberal	Slightly Liberal	Moderate	Slightly Conservative	Conservative	Extremely Conservative

Which of the following best describes your political ideology when it comes to *social* issues?

1	2	3	4	5	6	7
Extremely Liberal	Liberal	Slightly Liberal	Moderate	Slightly Conservative	Conservative	Extremely Conservative

Which of the following best describes your political ideology when it comes to *economic* issues?

1	2	3	4	5	6	7
Extremely Liberal	Liberal	Slightly Liberal	Moderate	Slightly Conservative	Conservative	Extremely Conservative

Appendix F: Short-Form ATG Scale (Herek, 1993)

This scale is derived from Herek (1993). The following statements are to address your personal attitudes. There are no right or wrong answers, and we are only interested in how the students at USF feel about the following issues. With respect to the following statements, please indicate whether you strongly agree (SA), agree (A), neither agree nor disagree (N), disagree (D), or strongly disagree (SD). Please circle your answer.

- 1) ____ Homosexual behavior between two men is just plain wrong.
- 2) ____ Male homosexuality is merely a different kind of lifestyle that should not be condemned.
- 3) ____ Male homosexuality is a perversion.
- 4) ____ I think male homosexuals are disgusting
- 5) ____ Male homosexuality is a natural expression of sexuality in men.

Appendix G: Debriefing Script

Thank you for completing the survey and for giving your feedback about the games. Before you leave, I would like to ask you a few final questions.

At the beginning of the session I told you what the purpose of the experiment was, but I didn't tell you what any of our hypotheses were, or what we were expecting to find. I wondered if you had any ideas about that during the session? Did you have any ideas about what we were expecting to find?

If participant says anything at this point, be encouraging and enthusiastic about hearing his/her thoughts. Even if the P is totally off-base, try to find some way to compliment the idea(s).

Sometimes when people participate in psychology experiments, they feel suspicious because they think that there might be a hidden purpose to the experiment. Did you have any feelings of suspicion about anything that happened during this session? Was there ever a time when you thought that there was more to the study than what I told you? Did anything happen during the session to make you feel uncomfortable or odd?

Pause after each question to give participant a chance to respond. If participants say anything other than a firm "no" to any of these questions, ask open-ended questions in an effort to determine precisely which aspects of the experiment they were suspicious about. Try to get them to elaborate. Don't ever let on that there was anything more to the experiment until you've fully assessed the participant's level of suspicion. Make note of any suspicions or prior expectations that the participant admits.

If a participant voices suspicion:

Could you tell me a little bit about that? What specifically made you feel that way? Were you *certain* [about whatever suspicion they just revealed], or were you just suspicious about that? Do you think that your suspicion might have influenced any of your responses or behaviors during the session? It's okay if it did, but it's important for me to know about it.

Okay, I'd like to explain what the study is about. First, I would like to explain that the other people playing the games with you just now were not real people but instead were pre-programmed responses. Did you have any idea that the participants were not real people?

Discuss participants' reactions with him/her. If P claims that s/he knew, ask: Were you certain about that or were you just suspicious about that? Do you think that your suspicion might have influenced any of your responses?

Second, the purpose of the study was to see if being excluded by your peers results in a more positive evaluation of an outgroup member. Some people were made to feel included or excluded by their peers during the first game. Did you have any idea that this study involved including or excluding people during gameplay?

*Discuss participants' reactions with him/her. If P claims that s/he knew, ask: **Were you certain about that or were you just suspicious about that? Do you think that your suspicion might have influenced any of your responses?***

During the second game, some people were told that the fourth player was gay, some people were told that the fourth player was straight, and some people did not work with a fourth player during a second game. (For participants with a cooperative partner) Were you aware of your partner's sexual orientation? How sure about it were you? Discuss participants' reactions with him/her and note if they are inaccurate and/or uncertain.

Finally, we are interested in whether or not being initially excluded during the first game would result in a more positive evaluation of the partner wanting to cooperate with you during the second game and, more specifically, whether this positive evaluation generalized to that partner's group. Did you have any idea that this study was about group evaluations or stereotyping?

*Discuss participants' reactions with him/her. If P claims that he/she knew, ask: **Were you certain about that or were you just suspicious about that? Do you think that your suspicion might have influenced any of your responses?***