

EXAMINING COGNITIVE AND EMOTIONAL
RESPONSES TO INTER-AGE REJECTION

A Thesis

Presented to

the Faculty of the College of Science and Technology

Morehead State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Kristina M. Deem

April 21, 2016

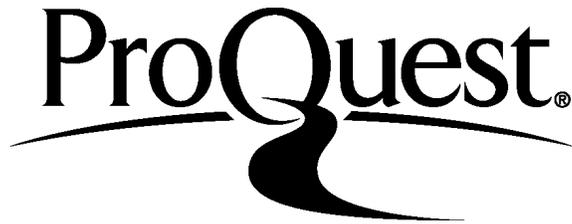
ProQuest Number: 10105481

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10105481

Published by ProQuest LLC (2016). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Accepted by the faculty of the College of Science and Technology Morehead State University, in partial fulfillment of the requirements for the Master of Science degree.

Lynn M. Haller, Ph.D.
Director of Thesis

Master's Committee: _____, Chair
Lynn Haller, Ph.D.

Gilbert Remillard, Ph.D.

Laurie Couch, Ph.D.

Date

EXAMINING COGNITIVE AND EMOTIONAL
RESPONSES TO INTER-AGE REJECTION

Kristina M. Deem
Morehead State University, 2016

Director of Thesis: _____
Lynn M. Haller, Ph.D.

Individuals can be rejected by various types of people. Rather than systematically investigating characteristics of intergroup rejecters that may influence reactions to rejection, most of the psychological research on rejection focuses on peer rejection and characteristics of the rejection victim. The current research attempted to fill this gap by examining the importance of rejecters' age characteristics for responses to rejection such as anger, anxiety, and age stereotypes in an upcoming interaction. Consistent with Butz and Plant's (2006) work regarding race-related rejection, we hypothesized that one reason rejection from an age outgroup member may heighten negativity toward that person is that the rejection experience may increase the belief in the negative stereotypes about an older person. To examine response differences due to age characteristics of a rejecter, a 2(Feedback: Rejection v. Neutral) X 3(Partner Age: college age, older adult, or unspecified) between-subjects design was employed with 157 participants from a midsized southeastern school. After receiving feedback indicating their ostensible

partner's age and willingness to meet with them, participants completed two questionnaires indicating their expectations and emotions about the upcoming interaction. Then, participants were asked to meet with the partner. While they waited for their partner, participants were instructed to complete a disguised measure of stereotype activation (word search with some older adult stereotypes). After 5 minutes, participants were debriefed. As a manipulation check, univariate analyses were conducted on expectations and willingness to meet with their partner. Univariate analyses were also conducted on anxiety, anger, and type of words found on the word search. Our manipulation checks showed that rejection was manipulated successfully. Rejected participants had lower expectations for a pleasant interaction with their partner compared to those who received neutral feedback and were less willing to meet them. However, contrary to hypotheses, rejection from an older adult did not result in heightened anxiety or anger about the interaction or increased stereotype activation relative to the other conditions. The current work mirrors previous work suggesting that people do not expect to have pleasant interactions with those who have rejected them. However, although previous work suggested that race-related rejection results in anger and anxiety (Butz & Plant, 2006), the current work suggests that age-related rejection is different.

Accepted by: _____, Chair
Lynn Haller, Ph.D.

Gilbert Remillard, Ph.D.

Laurie Couch, Ph.D.

Acknowledgements

First and foremost, I would like to thank my graduate advisor, Dr. Lynn Haller, for the time and patience she utilized toward revising the various versions of this thesis. Dr. Haller was an invaluable source of guidance, knowledge, and support and for that I am eternally grateful. I would also like to acknowledge the research assistants she helped recruit for this thesis project including: Ashley Ball, Megan Conn, Ashley Duvall, Pam Lacy, Brittney Monn, and Jesse Tipton, without whom I would have never been able to amass the amount of data that I did.

Additionally, thank you to Dr. David Butz for his priceless initial knowledge, patience, and support on this thesis project. I am also grateful for Dr. Gilbert Remillard and Dr. Laurie Couch's invaluable advice and suggestions offered while serving on my thesis committee.

Finally, I would also like to thank my friends and family whose encouragement enabled me to persevere through times of difficulty, and further enjoy times of success.

Table of Contents

Introduction.....	1
Method.....	6
Results.....	10
Discussion.....	12
Conclusion.....	16
References.....	17
Figures.....	22
Appendices.....	29

Examining Cognitive and Emotional Responses to Inter-Age Rejection

The belongingness hypothesis states that humans have an innate *need to belong* that drives them to form and maintain relationships (Baumeister & Leary, 1995). Baumeister and Leary maintain that the need to belong is innate because there would have been an evolutionary advantage to belong to groups in the past. When individuals belonged to groups, they would have had more dependable survival resources, such as food and caretakers. Using this evolutionary perspective, Baumeister and Leary (1995) describe the need to belong as a universal human need not dependent on geography, culture, or individual factors. However, the need to belong is not just a need for the mere presence of others; instead, there is an emotional component involved in wanting to belong to relationships which are reasonably foreseeable to exist in the future (Baumeister & Leary, 1995).

One implication of this theorizing is that negative social experiences, including social rejection, can thwart the need to belong. Typically, people are rejected because they fail to contribute to the group, violate social norms, or possess undesirable qualities (Baumeister & Tice, 1990). If these three factors are not present, people are generally included and satisfied; however, if present, people are often rejected or excluded and their need to belong is thwarted (Baumeister & Tice, 1990). Because belongingness is a deeply rooted need (Baumeister & Leary, 1995), even the threat of rejection can be very detrimental to individuals. For example, fear of social exclusion can cause major psychological problems, such as social anxiety, jealousy, loneliness, depression, and low self-esteem (Leary, 1990). Rejection can also lead individuals to perceive hostility in others (Dewall, Twenge, Gitter, & Baumeister, 2009) and respond with increased aggression toward others (Bushman & Baumeister, 1998; Twenge, Baumeister, Tice & Stucke, 2001). The surmounting evidence suggests that social rejection

causes a wide range of negative psychological responses and may shape behavior toward others (for a review, see Baumeister, 2003).

Although there is agreement amongst rejection researchers that people are negatively influenced by ostracism and rejection (Baumeister, 2003), the degree to which people are affected by rejection may vary as a function of characteristics of the rejecter. For instance, Butz and Plant (2006) found that people were more hostile and angry in response to an interracial rejecter in an anticipated interaction compared to same-race rejection. In contrast, using Cyberball (Williams, 2001), Gonsalkorale and Williams (2007) showed that ostracism by members of disliked and despised groups (e.g., political outgroup, and Australian KKK) depleted participants' need to belong, meaningful existence, and feelings of control. These findings were replicated with African American students at a historically Black college in the United States (Gonsalkorale, Carter-Sowell, Sloan, & Williams, 2008). Even though African Americans are the targets of hate by the KKK in the United States, ostracism by the KKK was as painful as ostracism by ingroup members. Based upon these experiments, there is mixed evidence regarding the implications of the ingroup/outgroup status of a rejecter for responses to that person.

To date, the existing work on intergroup rejection has primarily focused on how features such as the race of the rejecter influence the dynamics of an interaction (Butz & Plant, 2006). However, there is evidence that individuals categorize others based upon multiple dimensions, including their age, sex, and race (Levin & Levin, 1982). Age, sex, and race are known as the big three dimensions because they are not under the control of individuals, have a genetic component, are culturally salient, and easily observed (Schneider, 2004). Age, similar to race and political categories, consists of various categories (young to old). However, unlike other

characteristics that may result in discrimination (e.g., race and gender), aging is a biological process that is common to everyone and results in a change in classification from being young to being old (McConatha, Schnell, Volkwein, Riley, & Leach, 2003). Although people readily categorize others based upon age, this factor has only been minimally explored in the context of rejection research.

The existing age rejection work has primarily focused on the age of the perceiver of the rejection rather than the age of the rejecter. For instance, Nikitin, Schoch, and Freund (2014) used self-reports and skin conductance levels to examine reactions to either an accepting or rejecting confederate and movement of a mannequin toward an emotion face (happy or frown). They found evidence that older adults are more motivated to maintain social connections and avoid losses; whereas younger adults are more oriented toward forming and maintaining new connections. People also differ on how satisfied they are with their belongingness level at different ages. Hawkey, Williams, and Cacioppo (2011) investigated differences between older and younger adults following exclusion and found that older adults' need satisfaction scores were higher than middle adults and younger adults after they were excluded. There are clearly some differences in how people approach the need to belong at different age groups. However, this research only examined the differences in reactions to ostracism by people in the same age category as the participants.

In most ostracism research, the age of the person who rejected the participant is generally unspecified or similar to the age of target. For example, Twenge and her colleagues (2001) found that rejection led to aggressive responses among college age participants in a series of five experiments. In the first three experiments, the participants were rejected by another participant of the same sex. In experiments four and five, the participants were rejected by several peers.

According to a review of interpersonal rejection (Leary, Twenge, & Quinlivan, 2006), most of the laboratory rejection studies have used similar techniques to (not) describe rejecters. Although it is abundantly clear that rejection by an age ingroup member (i.e., peer) has the potential to result in a range of negative responses, it is still unclear how people might react to rejection by people in different age categories.

There is emerging evidence that young adult students do not understand the aging process of older adults (Zhou, 2007), which could lead to the endorsement of stereotypes about the aging process. Indeed, in the United States negatively stereotyped age references are common and typically made in reference to older adults by both young and older adults (Harris & Dollinger, 2001). The content of stereotypes of older adults includes having hearing and vision impairments and being weak (Schneider, 2004). These negative stereotypes of older adults may lead to negative impressions of older individuals. For instance, if emerging adults are aware of age stereotypes, it is possible that such concerns would lead to more anxiety in interactions with older adults compared to interactions with peers (see Frey & Tropp, 2006 for a review). Consistent with prior findings in the context of race, anxiety in an intergroup context may encourage a range of avoidant behaviors. For instance, anxiety may lead people to exhibit decreased eye contact, greater social distance, and increased fidgeting (Fiske & Ruscher, 1993; Word, Zanna & Cooper, 1974), which if exhibited during an intergroup interaction may lead to a tense and strained interaction (see Plant & Butz, 2006).

In a study conducted by Sanders, Montgomery, Pittman, and Balkwell (1984), students rated much older adults negatively for attractiveness and conservativeness. Student have also rated older adults more negatively than younger adults for health, flexibility, conservativeness,

attractiveness, tolerance, optimism, and complaining (Hawkins, 199; Sanders et al, 1984).

Overall, this work supports the idea that young adults hold negative perceptions of older adults.

Negative stereotypes of older adults may subsequently impact how young adults feel and respond when they are rejected by older adults. Because of the work documenting negative attitudes toward older people in general, a negative rejection experience from an older individual may even further heighten negativity toward this person. Consistent with Butz and Plant's (2006) theorizing regarding race-related rejection, one reason that rejection from an age outgroup member may heighten negativity toward that person is that the rejection experience may increase the belief in the negative stereotypes about an older person (i.e., they are cranky). That is, receiving rejecting feedback from that person may in some way confirm the initially negative expectations they had about that person and justify anger toward or avoidance of that person.

Current Study

With the increasing opportunity for intergroup interaction, and as a result intergroup rejection, understanding the role of rejecter characteristics in responses to rejection is of increasing importance. To my knowledge, there are no empirical studies that have investigated rejection by people of differing age groups. The primary goal of the current research is to begin to fill this gap in the literature by exploring differences in responses to rejection when the rejecter is a person in the same age category (age ingroup), much older (age outgroup), or not specified. Although prior work indicates that rejection by a same-age peer can be distressing and lead to negative emotions (Platt, Kadosh, & Lau, 2013), interethnic rejection research (Butz & Plant, 2006) and existing work on negative age-related stereotypes supports the idea that responses to rejection from an age outgroup member may be more intense than response to rejection from a peer. Therefore, I hypothesize that when college students are rejected by older

adults they will be more hostile and angry than when rejected by a peer or a person whose age is not unspecified.

Younger adults may also experience more anxiety when rejected by an older adult compared to a peer or person whose age is not specified because of a possible perception of the rejecter's prejudice against Generation Y and Z college students. This anxiety, in turn, may translate into avoidance-related behaviors such as decreasing one's distance from the older adult interaction partner. To examine this possibility, the current study will employ a measure of seating distance used in previous work on anticipated interactions with a racial out group member (e.g., Plant & Butz, 2006). I hypothesize that individuals who are rejected by an age out group member will draw more distance between themselves and the person who rejected them, compared to the distance maintained when participants are rejected by an age in group member or a person whose age is not specified.

Method

Participants

One-hundred fifty seven psychology students at Morehead State University participated in a study about "personality and first impressions." Participants were recruited from a participant pool where the opportunity to choose to participate in various studies was presented. Participants received partial course credit or extra credit for participation. Three participants were excluded from data analyses because they were 27 years or older, which was established as exclusion criteria prior to collecting data. One participant was excluded from data analyses for taking her experimental materials at the conclusion of the study. Finally, twelve participants' data were excluded due to disbelief that they would be interacting with a partner, a crucial element of the experimental design. The final data sample consisted of 141 participants (*Female*

= 134, *Male* = 7). Their ages ranged from 18 to 26 years old ($M = 18.64$, $SD = 1.27$). Each cell consisted of 23 participants, with the exception of the rejected-19 years old partner condition ($N = 25$) and rejected-57 years old partner condition ($N = 24$).

Design and Procedure

The study employed a 2(Rejection feedback: rejection vs. neutral) X 3(Age of anticipated partner: 19 years old vs. 57 years old vs. age unspecified) between-subjects factorial design.

Prior to arrival, participants were randomly assigned to a rejection feedback and partner age condition. Participants were informed that the study involved understanding how first impressions influence the quality of a social interaction. They were also led to expect that they would have the opportunity to exchange information with a partner prior to meeting him or her. After written consent (Appendix A) was provided participants were asked to fill out questionnaires with demographics that they believed would be exchanged with a potential partner (Appendix B). Upon finishing the questionnaires, the experimenter informed the participant that he or she was going to leave to get the partner's surveys. The experimenter then placed the participants' completed questionnaires in a manila folder and left the room with the folder.

The experimenter returned three minutes later with a different manila folder contained completed demographics survey in it, ostensibly completed by the partner (Appendix C). These folders were labeled on the reverse with a letter corresponding to one of the six possible conditions for this study. Thus, the experimenter was able to deliver the appropriate version of the questionnaire without being aware of the contents of the folder and the condition to which the participant had been assigned. Participants were asked to look over the demographics so that they would know whom they were meeting. The demographics listed were all similar to the

participants' except for the age variation (peer age: 19, much older: 57, or age unspecified) (Appendix C).

Another survey in the partner's folder indicated the partner's willingness to speak with the participant on an interval scale ranging from 0 (extremely disinterested) to 100 (extremely interested). In the neutral condition, the partner ostensibly circled a tick around 53. In the exclusion condition, the partner circled a tick around 8 (Appendix D). After seeing the partner's willingness form, the participant was asked to complete their own willingness form (Appendix D). The willingness form allowed the participant to rate their partner and was used as a check of the rejection manipulation (Appendix D). Expectations that participants held was also assessed via a survey (Appendix E) which was administered after they completed the willingness survey (Appendix D). A questionnaire which assessed the emotions of the participant prior to the interaction was also administered immediately after the willingness form (Appendix F).

Upon completion of the emotions questionnaire, participants were asked to go to a second, similar laboratory room where there was one chair and a desk. The chair had a black backpack beside it resting on its back. The experimenter then explained that the partner had excused her/himself to go to the bathroom and asked the participant to pull up an empty chair from the hallway into the lab room to talk to the partner when they returned.

After taking a seat, participants were asked to complete a word search while they waited (Appendix G). After 5 minutes, the participant was informed that the study ended and they would not be meeting their anticipated partner. The experimenter then debriefed the participants about the nature of the study and ask them not to tell anyone about the true purpose (Appendix D). All efforts (explanations and questions answered) were be made to return the stability of the participant to the same condition or better than when they begin the study. No counseling

referrals were necessary, although counseling information was provided on the debriefing form. Following the conclusion of the study, the experimenter measured and recorded the seating distance (in inches) between the participant's chair and the anticipated partner's chair using a standard measuring tape. Note: I did not directly screen for participants' prior knowledge of the true nature of the study at any point in the experimental session.

Measures

Manipulation Check. As a check of the rejection manipulation, two measures were utilized: the willingness survey (Appendix D) and the expectations survey (Appendix E). The willingness survey consisted of a single question asking participants to indicate their willingness to interact with their partner on a scale of 0 (extremely disinterested) to 100 (extremely interested). Participants rated their expectations for the interaction on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) (Appendix E). Five items were averaged to form an index of rejection expectancies such that higher scores indicated less negative, rejection-related expectancies. As indicated in Appendix E, rejection manipulation check items included statements such as "I am concerned that my partner will not like me" [R]. And "I think my interaction partner is open to interacting with me."

Anger and Anxiety. Participants indicated their emotional reactions to the upcoming interaction by responding to a series of emotion descriptors using a 1 (*does not apply at all*) to 7 (*applies very much*) scale (Appendix F) (Butz & Plant, 2006). To form an index of anxiety, I averaged seven anxiety-related emotions (e.g., anxious, tense, worried) with higher numbers indicating greater anxiety. I formed an anger index by averaging five items that are related to angry emotions (e.g., angry, hostile, agitated) with higher numbers indicating greater anger.

Avoidance Behavior. Consistent with Plant and Butz (2006), the distance between the participant and the partner's chair was measured in inches. Greater distance between the participant and the partner's chair reflected more avoidant behavior on the part of the participant.

Stereotype Activation (Appendix G). To examine older adult stereotype activation, a 15 X 15 word search was used. The words for the word search were arbitrarily chosen by the researcher that seemed to be either stereotypical for older adults or neutral. It included a word bank of 18 negative stereotypical older age words (ex. cranky, gray, grouchy, slow, grumpy, and stubborn) and 18 neutral words (ex. fresh, large, clear, lengthy). Finding more stereotypical words than neutral words indicated more stereotype activation.

Results

Between subjects two-way ANOVAs were used to assess the effect of rejection feedback (rejected vs. neutral) and age of anticipated partner (19 years old vs. 57 years old vs. age unspecified) on the manipulation check variable, as well as the key dependent variables of anger, anxiety, and avoidance, and stereotype activation. Although the analyses reported below excluded 16 participants, analyses including all participants were also conducted. However, no significant differences in results emerged whether all participants were included or not, p 's > .05. The data was also analyzed using a between subjects two-way ANOVA for a 2(feedback: rejected v. neutral) x 2(age of anticipated partner: 19 years old vs. 57 years old). However, again, no significant differences emerged in the results, p 's > .05.

Manipulation Check

Willingness (Figure 1). There was a main effect of rejection on willingness to interact with the partner, such that rejected participants were less willing ($M = 51.12$, $SD = 21.76$) than participants who received neutral feedback ($M = 64.47$, $SD = 13.87$), $F(1, 135) = 19.10$, $p < .001$.

There was no main effect of age nor an Age X Rejection interaction, $F(2, 135) = .40, p = .670$ and $F(2, 135) = 1.27, p = .285$, respectively.

Expectations (Figure 2). A main effect of rejection was found, indicating that rejection was successfully manipulated, $F(1, 135) = 54.73, p < .001$. Rejected participants had less positive expectations ($M = 18.62, SD = 3.66$) than participants who received neutral feedback ($M = 24.11, SD = 4.92$). No main effect of age or age x rejection interaction was found, $F(2, 135) = .59, p = .555$ and $F(2, 135) = .27, p = .766$, respectively.

Anger and Anxiety

Anger (Figure 3). Anger did not significantly differ as a result of the rejection, age or age x rejection interaction, $F(1, 135) = 2.07, p = .153$, $F(2, 135) = 1.62, p = .202$, and $F(2, 135) = .97, p = .384$, respectively.

Anxiety (Figure 4). Anxiety did not significantly differ as a result of the rejection, age or the age x rejection interaction, $F(1, 135) = .06, p = .815$, $F(2, 135) = 2.29, p = .105$, and $F(2, 135) = .18, p = .84$, respectively.

Avoidance Behavior

Seating Distance (Figure 5). There was no main effect of rejection nor age on seating distance, $F(1, 135) = 1.17, p = .314$ and $F(2, 135) = .02, p = .879$, respectively. There was also no age X rejection interaction for seating distance, $F(2, 135) = .54, p = .582$.

Stereotype Activation

Total Words Found (Figure 6). There was a marginally significant main effect of age for total words found in the word search, $F(2, 135) = 2.78, p = .066$. Tukey post-hoc comparisons showed that participants expecting their partner to be an older adult ($M = 13.78, SD = 3.99$) found marginally fewer words than those who did not know the age of their partner ($M = 16.24$,

$SD = 6.25$), $p = .055$. No main effect of rejection nor age X rejection interaction was found for total words, $F(1, 135) = 1.26$, $p = .263$ and $F(2, 135) = 1.01$, $p = .366$, correspondingly.

Age Stereotypical Words (Figure 7). The proportion of age stereotypical words found was calculated by dividing the number of age stereotypical words found in the word search by the total number of age words possible for each participant. Analyses showed no main effect of age or rejection, $F(2, 135) = 1.940$, $p = .148$ and $F(1, 135) = 1.614$, $p = .206$, respectively. No age x rejection interaction was found either, $F(2, 135) = .275$, $p = .760$.

Discussion

The primary goals of the present study were to further understand responses to inter-age interactions and factors that might determine those responses, particularly when the interaction is expected to be unpleasant. Previous work has explored determinants of people's avoidance to other types of interactions, such as interracial and political interactions (Butz & Plant, 2006; Gonsalkorale & Williams, 2007), but none have explored inter-age as a factor. Previous studies have shown when people hold negative expectations of an upcoming interracial interaction, they experience negative emotions about the interaction and exhibit avoidant behavior (Butz & Plant, 2006). The current work sought to examine if those findings could generalize to inter-age interactions. I proposed that people who expected that outgroup age members were not willing to meet with them, they would become angry and anxious, and have avoidant responses. I also expected that stereotypes of older adults would become activated for people who thought they were about to interact with an older adult, more so, if they were expecting a negative interaction to occur.

My hypotheses were not confirmed. Although the manipulation checks show that rejection was successfully manipulated, the hypotheses that age and rejection would result in

increased negative emotions and cognitions were not supported. Participants who were rejected did have lower expectations for the success of the upcoming interaction than participants who were not rejected. Rejected participants, compared to neutral feedback participants, were also less willing to meet with their anticipated partner. However, participants who were rejected were statistically no more anxious, angry, or avoidant than participants who received neutral feedback, nor did they find more age-related words in the word search. I suspect that the marginal differences between the numbers of words found for old age compared the unspecified condition is due to chance. Furthermore, the age characteristics of the rejecter did not significantly impact cognitive or emotional responses either. These findings suggest that people who perceive older adults as not open to interacting may enter inter-age interactions expecting a poor interaction to occur, but unlike interracial interactions, they may not have negative emotional or cognitive responses.

Considering the interracial interaction evidence (Butz & Plant, 2006), which has shown differences in reactions due to rejecter characteristics and is similar to the methods of the current study, these results are perplexing. Because of the methodological similarity to Butz & Plant (2006), we should infer that any differences in results found between studies should be attributed to the characteristics of the rejecter. On the other hand, the results of the current study are also similar in nature to findings in the ostracism literature. For instance, Gonsalkorale and Williams (2007) showed that ostracism by people in either political ingroups, outgroups, or despised groups is significantly more painful than inclusion. Although my work employed a rejection paradigm more similar to Butz & Plant (2006) than Gonsalkorale and Williams (2007), it is possible that inter-age rejection is more closely related to ostracism than it is to interracial

rejection. Further studies are needed to determine how the relationships of age and rejection compare to age and ostracism.

Although age and race are both part of the big three dimensions within people are categorized (Schneider, 2004), the current study suggests that age and race characteristics of rejecters appear to create different reactions to rejection than one another. The results suggest that the people with negative response expectancies in inter-age situations may avoid the self-fulfilling prophecy (Devine, Evett, & Vasquez-Suson, 1996). That is, they may not actually elicit negative responses from their age out-group partners because they do not feel emotionally distressed or act avoidant. Therefore, they could potentially avoid confirming their expectations and future negative interactions. Sometimes, people get trapped in a cycle of self-fulfilling prophecies (Devine et al., 1996; Butz & Plant, 2006), but according to the results of the current study, these interactions may not be as negative with older adults. However, further research is necessary to substantiate this claim.

By examining young adults' reactions to interactions with peers and older adults, I showed that the age of the partner nor rejection status significantly influenced emotional or cognitive responses to the anticipated interaction for young adults. Since most research has shown that rejection and ostracism elicit negative emotional responses (Butz & Plant, 2006; Gonsalkorale & Williams, 2007; Williams, 2008), perhaps age is a factor which mitigates these feelings. In Appalachia, there is an unspoken reverence for older adults. It is possible that the reverence outweighs any positive or negative expectations for the interaction. This explanation could justify the lack of response differences between rejected and neutral participants who expected to interact with older adults. However, more research is needed to substantiate these claims.

Limitations and Future Directions

The current research may have been limited in several ways. First, I believe that the partner's demographic and willingness forms were not always perceived as I intended. For instance, one rejected participant noted that she thought that the "Age" line was left blank because the partner was old and did not want to admit her age. Therefore, that participant's anxiety may have been altered by inferring the partner had high anxiety about the interaction. Nevertheless, it is not clear how others interpreted the unspecified age. Additionally, many participants said they thought that the neutral feedback was rejection feedback. Therefore, they may have been high in anxiety, regardless of condition, due to perceived rejection. This explanation is supported by the lack of differences in anxiety between conditions. In the future, I believe it is necessary to manipulate partner information in a different way that will create similar perceptions amongst all participants in a given condition. I will also need to include a manipulation check for the age of the partner if I manipulate age again in the future.

Second, I relied more on self-report responses than on physical measures. Although these measures have previously been used to show significant differences in anxiety and anger between interracial rejection (Butz & Plant, 2006), the questionnaires are still subjective. It would have been more informative to have included both physiological and self-report measures of anxiety and anger. For instance, eye blink changes and transient cardiac responses have been observed in response to social rejection compared to social inclusion (Gyurak & Ayduk, 2007; Popousek et al., 2014). To further measure anger and anxiety, I could have gathered video evidence to have objective coders analyze body language when the participants believed they would be meeting their partner. With a video, I might have observed behavior not captured on a

self-report, such as laughter, as an indication of anxiety in this study's upcoming interaction (Popousek et al., 2014). Involving physiological measures will be key in future studies.

Third, to measure avoidant behavior, I measured the distance between the participants' chair that they brought into the room and a chair supposedly used by the partner. Although this method has been used to measure avoidant behavior in the past, I believe the constraints of the laboratory room may have interfered with the ability to replicate these results. To illustrate, when participants walked into the lab room, they saw an office desk and the partner's chair. Nearly all participants placed their chair near the nearest end of the desk. One exception occurred when one participant sat out in the hallway to wait for the partner to return. Given these environmental constraints, it is unlikely that the seating distance would have statistically varied between or within conditions.

Conclusion

As Appalachia grays (see Haaga, 2004) it is becoming more critical to ensure that interactions between young and older adults are high quality. The current work showed that differences in quality of anticipated inter-age interactions are not significantly explained by their expectations of these interactions. Because people do not respond negatively, there will likely be more positive, than negative, interactions in inter-age situations. The positive interactions may help young people with their communication skills and become more involved in the community as a result. Efforts should be made to increase the likelihood of positive expectations when approaching inter-age situations to build pleasant experiences.

References

- Baumeister, R. F. (2003). Review of ostracism: The power of silence. *Journal of Social and Personal Relationships, 20*(1), 141-142.
- Baumeister, R. F. & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology, 9*(1), 165-195.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529.
- Bushman, B.J. & Baumeister, R.F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology, 75*(1), 219-229.
- Beeri, A., & Lev-Wiesel, R., (2012). Social rejection by peers: a risk factor for psychological distress. *Child and Adolescent Mental Health, 17*(4), 216-221.
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the effect between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology, 98*(1), 1-13.
- Butz, D. A., & Plant, E. A. (2006). Perceiving outgroup members as unresponsive: Implications for approach-related emotions, intentions, and behavior. *Journal of Personality and Social Psychology, 91*(6), 1066-1079.
- Carter-Sowell, A. R., Chen, Z., & Williams, K. D. (2008). Ostracism increases social susceptibility. *Social Influence, 3*(3), 143-153.
- Chase, C. A. (2011). An intergenerational e-mail pal project on attitudes of college students toward older adults. *Educational Gerontology, 37*(1), 27-37.

- Cialdini, R. B., Vincent, J. E., Lewis, S. K., Catalan, J., Wheeler, D., & Darby, B. L. (1975). Reciprocal concessions procedure for inducing compliance: The door-in-the-face technique. *Journal of Personality and Social Psychology, 31*(1), 206–215.
- DeWall, C. N., Twenge, J. M., Gitter, S. A., & Baumeister, R. F. (2009). It's the thought that counts: The role of hostile cognition in shaping aggressive responses to social exclusion. *Journal of Personality and Social Psychology, 96*(1), 45-59.
- Freedman, J. L., & Fraser, S. C. (1966). Compliance without pressure: The foot-in-the-door technique. *Journal of Personality and Social Psychology, 4*(1), 195–203.
- Gonsalkorale, K. & Williams, K. D. (2007). The KKK won't let me play: Ostracism even by a despised group hurts. *European Journal of Social Psychology, 37*(6), 1176-1186,
- Gonsalkorale, K., Carter-Sowell, A. R., Sloan, L. R., & Williams, K. D. (2008, February). The KKK won't let Tyrone play; but inclusion hurts too. *Presentation at the annual meeting of the Society for Personality and Social Psychology*. Albuquerque, NM.
- Gyurak, A., & Ayduk, Ö. (2007). Defensive physiological reactions to rejection: The effect of self-esteem and attentional control on Startle Responses. *Psychological Science, 18*(10), 886-892.
- Haaga, J. (2004, April). Demographic and socioeconomic change in Appalachia: The aging of Appalachia. *Population Reference Bureau, 1-26*.
- Harris, L. A., & Dollinger, S. (2001). Participation in a course on aging: Knowledge, attitudes, and anxiety about aging in oneself and others. *Educational Gerontology, 27*(1), 657–667.
- Hawkins, M. J. (1996). College students' attitudes toward elderly persons. *Educational Gerontology, 22*(3), 271-279.

- Hawkley, L. C., Williams, K. D., & Cacioppo, J. T. (2011). Responses to ostracism across adulthood. *Social, Cognitive, and Affective Neuroscience*, 6(1), 234-243.
- Kiecolt-Glaser, J. K., Cacioppo, J. T., Malarkey, W. B., & Glaser, R. (1992). Acute psychological stressors and short-term immune changes: What, why, for whom, and to what extent? *Psychosomatic Medicine*, 54(1), 680-685
- Leary, M. R. (1990). Responses to social exclusion: Social anxiety, jealousy, loneliness, depression, and low self-esteem. *Journal of Social and Clinical Psychology*, 9(2), 223-229.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518-530.
- Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, 10(2), 111-132.
- Levenson, A. R. (2010). Millennials and the world of work: An economist's perspective. *Journal of Business and Psychology*, 25(1), 257-264.
- McConatha, J. T., Schnell, F., Volkwein, K., Riley, L., & Leach, E. (2003). Attitudes toward aging: a comparative analysis of young adults from the United States and Germany. *International Journal of Aging and Human Development*, 57(3), 203-215.
- Nikitin, J., Schock, S., & Freund, A. M. (2014). The role of age and motivation for the experience of social acceptance and rejection. *Developmental Psychology*, 50(7), 1943-1950.
- Nussbaum, J. F., Pitts, M. J., Huber, F. N., Krieger, J. L. R., & Ohs, J. E. (2005). Ageism and ageist language across the life span: intimate relationships and non-intimate interactions. *Journal of Social Issues*, 61(2), 287-305.

- Platt, B., Kadosh, K. C., & Lau, J. Y. F. (2013). The role of peer rejection in adolescent depression. *Depression and anxiety, 30*(1), 809-821.
- Papousek, I., Aydin, N., Lackner, H. K., Weiss, E. M., Bühner, M., Schuler, G., & Freudenthaler, H. H. (2014). Laughter as a social rejection cue: Gelotophobia and transient cardiac responses to other persons' laughter and insult. *Psychophysiology, 51*(11), 1112-1121.
- Raman, P., Harwood, J., Weis, D., Anderson, J. L., & Miller, G. (2008). Portrayals of older adults in U.S. and Indian magazine advertisements: A cross-cultural comparison. *Howard Journal of Communications, 19*(3), 221-240.
- Sanders, G., Montgomery, J., Pittman, J., & Balkwell, C. (1984). Youth's attitude towards the elderly. *Journal of Applied Gerontology, 3*(1), 59-70.
- Schneider, D.J. (2004). *The Psychology of Stereotyping*. New York, New York: The Guilford Press.
- Thompson, C. & Gregory, J. B. (2012). Managing millennials: A framework for improving attraction, motivation, and retention. *The Psychologist-Manager Journal, 15*(1), 237-246.
- 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*(6), 1058-1069.
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. Zanna (Ed.), *Advances in Experimental Social Psychology, 41*(1), 279-314
- Williams, K.D. (2007). Ostracism: The kiss of social death. *Social and Personality Psychology Compass, 1*(1), 236-247.

Wirth, J.H., Sacco, D.F., Hugenberg, K., & Williams, K.D. (2010). Eye gaze as relational evaluation: Averted eye gaze leads to feelings of ostracism and relational devaluation.

Personality and Social Psychology Bulletin, 356(1), 869-882.

Word, C.O., Zanna, M. P., & Cooper, J. (1974). The nonverbal mediation of self-fulfilling prophecies in interracial interaction. *Journal of Experimental Social Psychology*, 10(1), 109-120.

Zhou, L. (2007). What college students know about older adults: A cross-cultural qualitative study. *Educational Gerontology*, 33(1), 811-831.

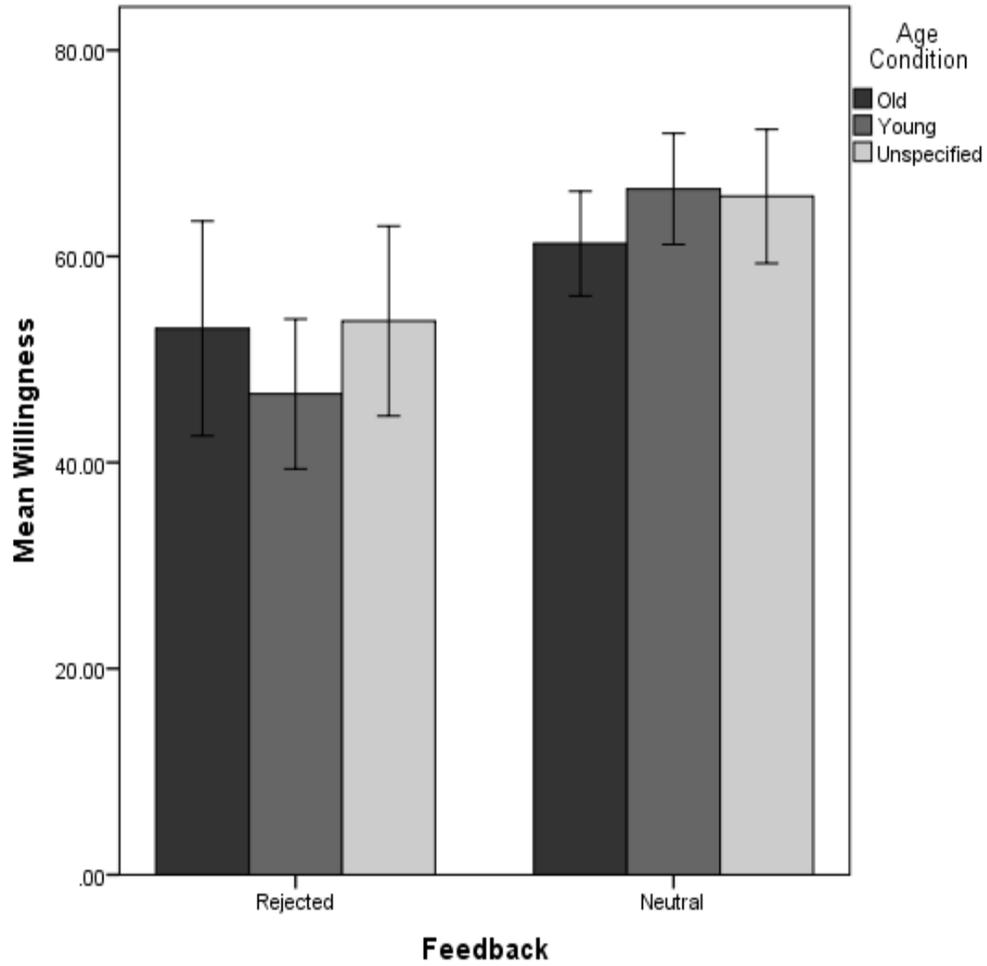


Figure 1. Mean (\pm SE) willingness to interact with partner as a function of rejection feedback and age condition.

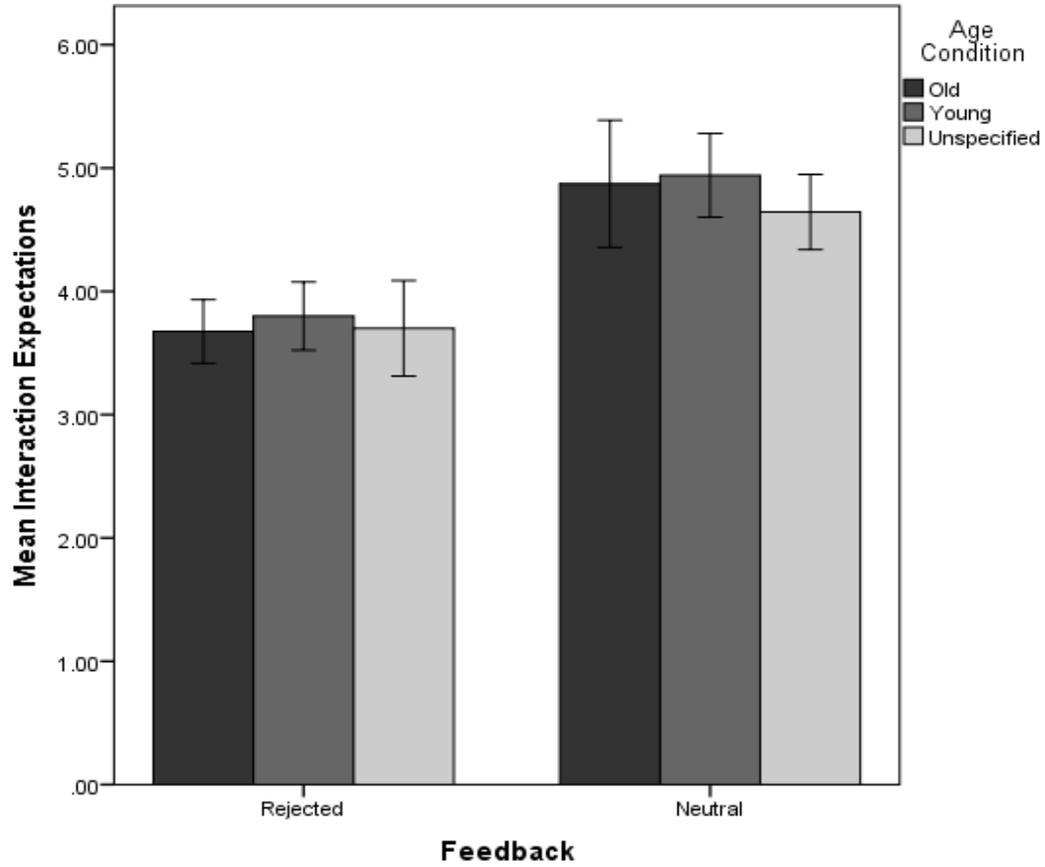


Figure 2. Mean (\pm SE) rejection expectation as a function of rejection feedback and age condition.

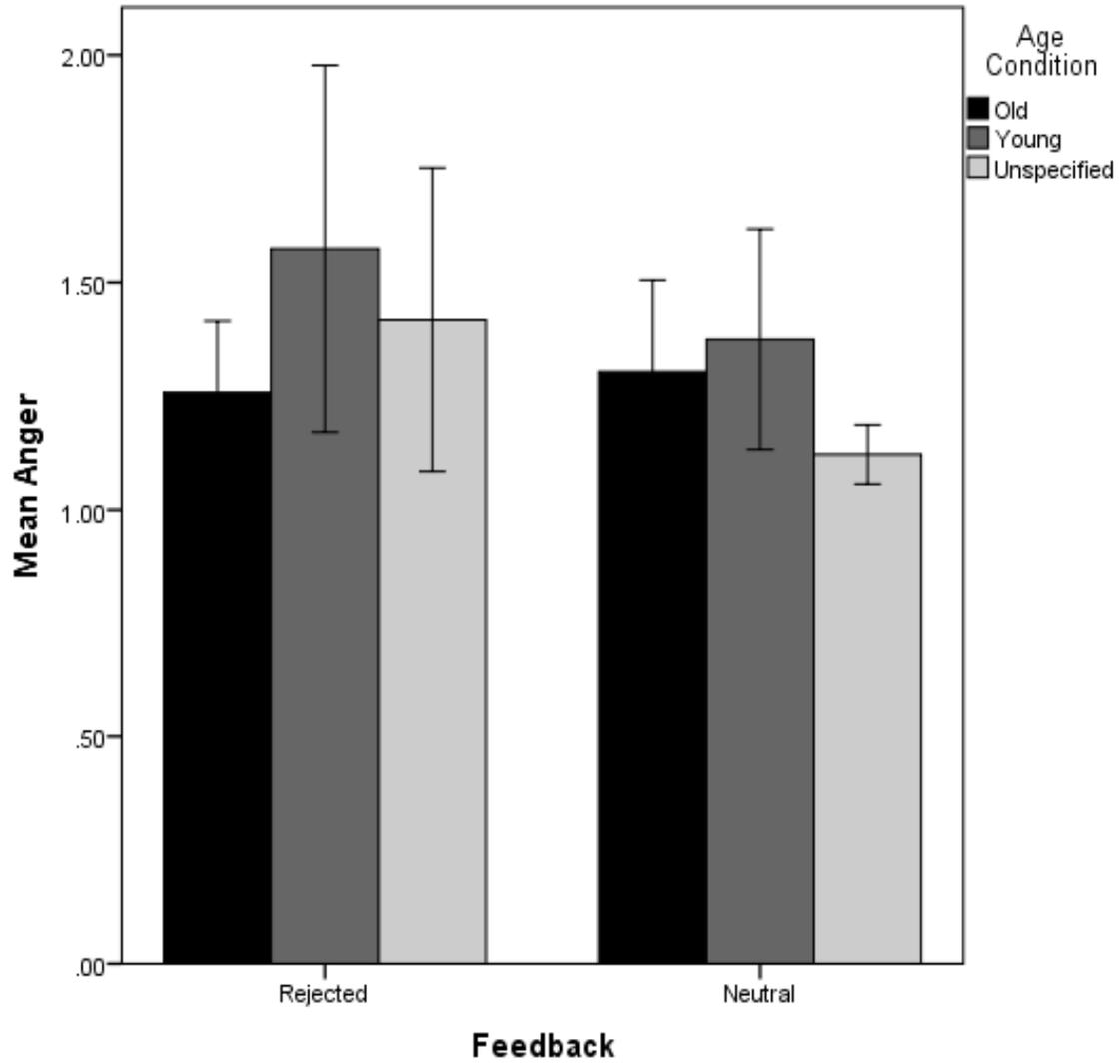


Figure 3. Mean (\pm SE) anger as a function of rejection feedback and age condition.

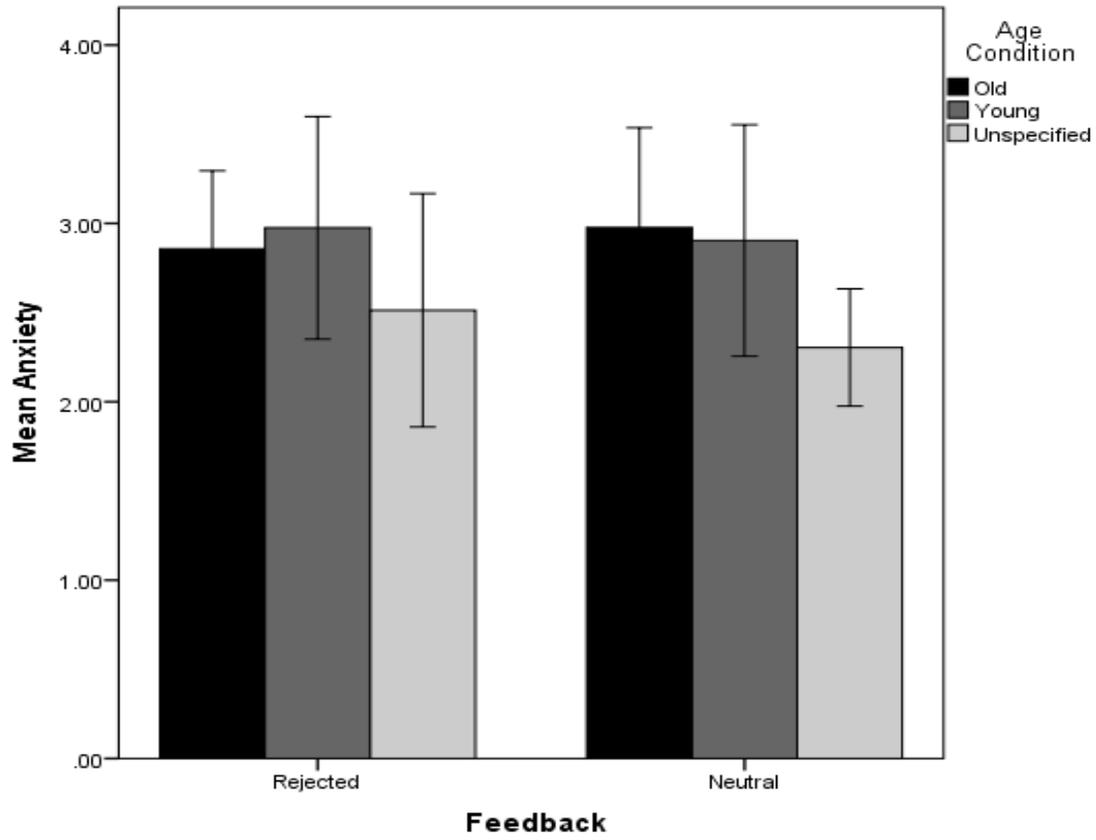


Figure 4. Mean (\pm SE) anxiety as a function of rejection feedback and age condition.

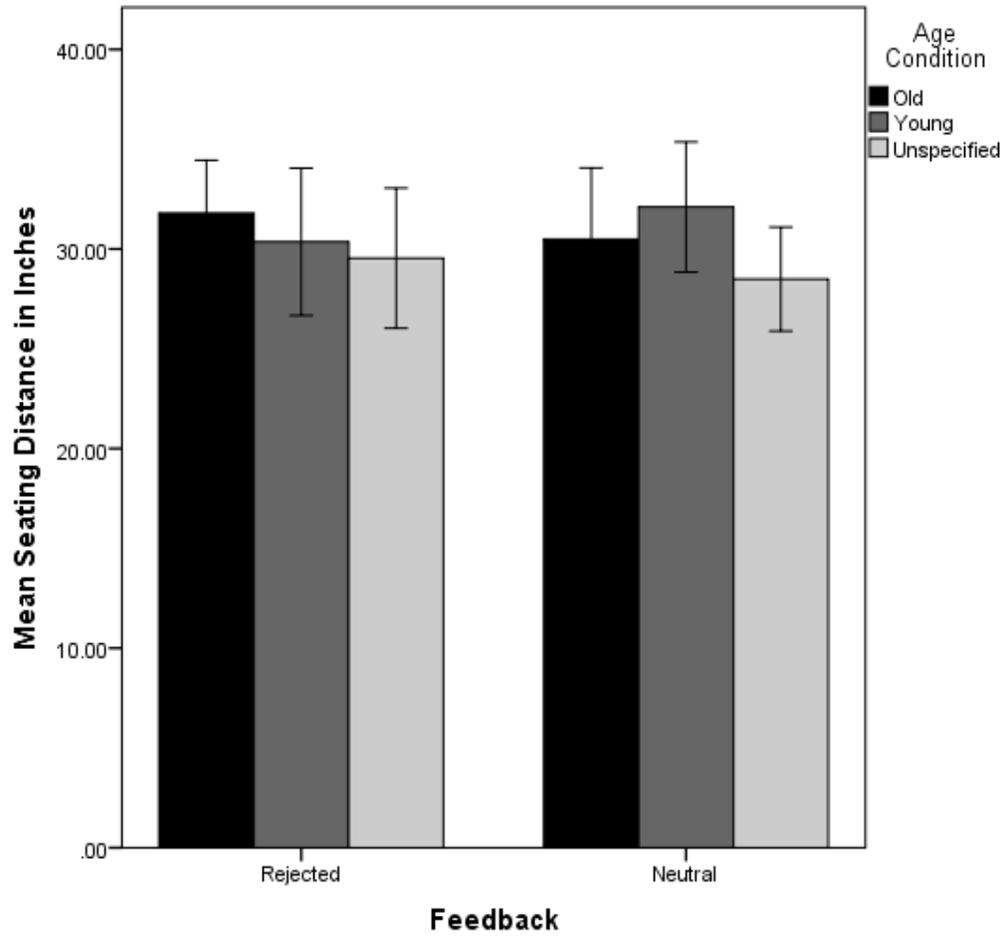


Figure 5. Mean (\pm SE) seating distance as a function of rejection feedback and partner age condition.

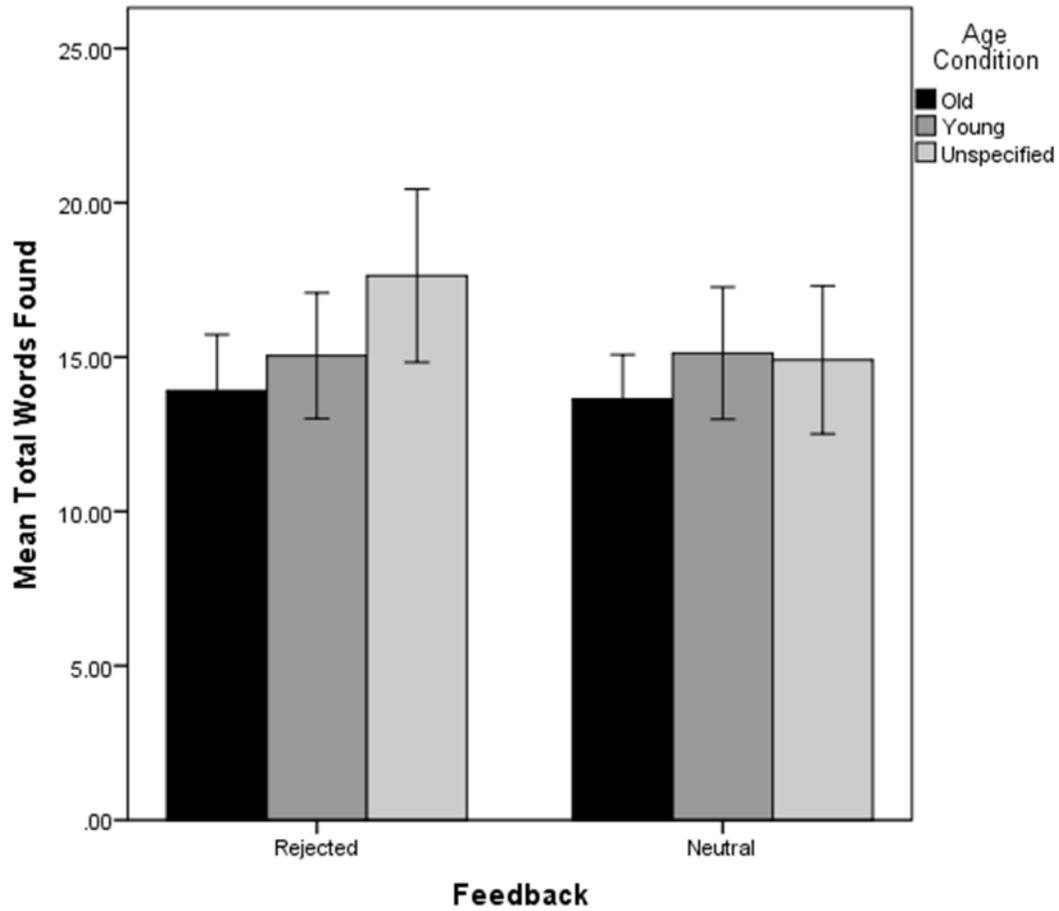


Figure 6. Mean (\pm SE) total number of words found as a function of rejection feedback and age condition.

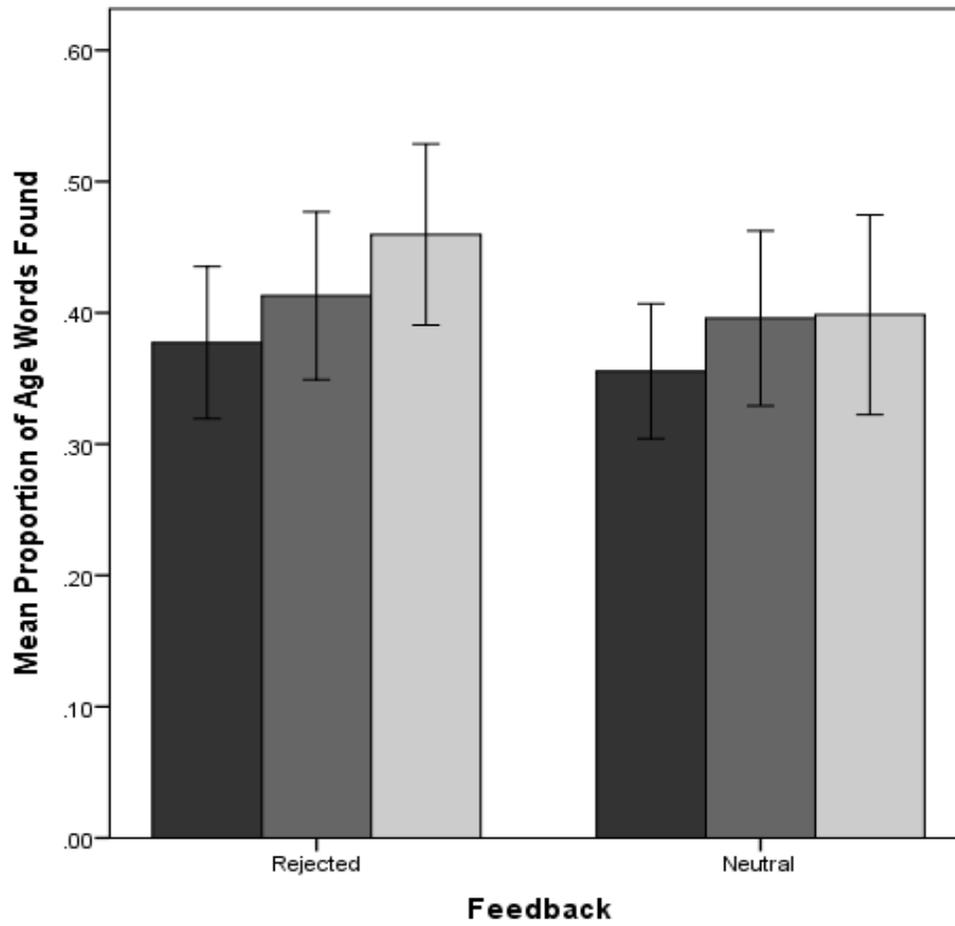


Figure 7. Mean (\pm SE) proportion of age stereotypical words found as a function of rejection feedback and age condition.

Appendix A
INFORMED CONSENT STATEMENT
First Impressions on the Quality of Interactions

This research is being conducted by Kristina Deem, graduate student in the Psychology Department at Morehead State University. This project is supervised by Dr. Lynn Haller. You must be at least 18 years of age in order to participate. The purpose of this research is to understand how first impressions can affect the quality of interactions. As part of this project, you will be asked to respond to survey questions concerning your experiences and expectations about an interaction with a partner. You will then meet the partner and have an introductory conversation.

The study will last about 45 minutes and you will receive 1 credit toward your Introduction to Psychology class for today's participation. Your participation is totally voluntary and you may stop participation at any time. You are free not to answer specific items or questions, or to complete any part of the process. If you decide to stop your participation today you will not be penalized. You may choose to do something else for credit in your psychology class in consultation with your instructor.

Your responses today will remain confidential to the extent allowed by law. Your name will not appear on any of the results. No individual responses will be reported. Only group findings will be reported. We are required by law to report to the proper authorities any information that a person under the age of 18 is being abused or neglected by a family member, and/or that physical abuse has occurred between married persons. Aside from those cases, only members of the research team will have access to your responses. Data will be kept in a locked filing cabinet in Reed Hall on the campus of Morehead State University.

Participating in this research is not expected to pose more than minimal risk. This study has been reviewed to determine that it poses little or no threat to participants, and there appear to be minimal risks or discomfort associated with completing any part of the study. Your responses on the survey will be assigned a random identification number to ensure that your responses remain completely anonymous and cannot be tied back to your name. Your instructor will be notified of your participation in order to assign course credit, however he/she will not have access to any of your responses from the study.

There are benefits for participating in this research project, for example, reflecting upon and gaining insight into first impressions on the quality of social interactions with others. You will also be providing researchers with valuable knowledge about the factors that influence people's experiences in diverse interactions.

You may contact Kristina Deem (kmdeem@moreheadstate.edu) if you have questions about the research project, either now or later. If you feel discomfort because of your participation in the study, you are encouraged to contact Dr. Lynn Haller, in the Psychology department (l.haller@moreheadstate.edu) or the MSU Counseling and Health Services Center (112 Allie Young, 606-783- 2123) or Pathways, Inc. in Morehead (606-784-4161).

I have read and understood the explanation of the study and agree to participate. I understand that by signing and dating this form I have given my consent to participate in the study.

SONA ID: _____

Date: ___/___/___

Appendix B

Participant Demographics

General Instructions: Below you will see a series of items related to demographic information and social experiences. Please be as open and honest in your responses as possible. **You may leave blank any item/s that you are not comfortable answering.** Your responses will remain completely anonymous and will not be tied back to you personally.

Age: _____

Gender: Male Female

Year in School: Freshman Sophomore Junior Senior Other

Political Affiliation: _____ Republican _____ Democrat _____ Other (please specify)

Racial/ethnic group that you belong to:

White Black/African American Asian/Asian American Native
American Hispanic Latino Bi-Racial Multi-Racial

Other: _____

Appendix C

Partner Demographics

General Instructions: Below you will see a series of items related to demographic information and social experiences. Please be as open and honest in your responses as possible. *You may leave blank any item/s that you are not comfortable answering.* Your responses will remain completely anonymous and will not be tied back to you personally.

Age: _____ ← 57 or 19 was written here, or the line was left blank (unspecified condition)

Gender:

Male Female ← the gender circled always matched the participant gender.

Year in School: ← Freshman was always circled.

Freshman Sophomore Junior Senior Other (specify) _____

Political Affiliation: ← This was left blank.

_____ Republican _____ Democrat _____ Other (please specify)

Racial/ethnic group that you belong to: ← White was always circled.

White Black/African American Asian/Asian American

Native American Hispanic Latino Bi-Racial Multi-Racial

Other: _____

Appendix D**Willingness to Interact**

Please indicate your interest in speaking with the other participant.

Extremely
Disinterested

Extremely
Interested

0-----50-----100

***The participant received a blank willingness form to fill out after viewing the partner's willingness form which was marked as the following:**

*In the neutral condition, the 53rd and 54th tick was circled, supposedly by the partner.

*In the exclusion condition, the 8th and 9th ticks were circled, supposedly by the partner.

Appendix E

Manipulation Check**Expectations**

The following set of questions asks about your expectations about the upcoming interaction. Your answers will be completely confidential. There are no right or wrong answers to these questions. For us to learn anything, it is important that you respond openly and honestly to all questions. Please give your response according to the scale below.

Yellow—used in index.

1	2	3	4	5	6	7
strongly disagree						strongly agree

_____ 1. I am unsure how to behave toward my interaction partner in order to make a positive impression.

_____ 2. When interacting with my partner, I would be unsure how to act in order to show him or her that I am a nice person.

_____ 3. I expect that I will feel awkward during this interaction.

_____ 4. I am confident that I can respond positively in this interaction.

_____ 5. I expect that I might look like I am nervous in the interaction (e.g., fidget).

_____ 6. I think my interaction partner is open to interacting with me.

_____ 7. I expect my interaction partner will view me as prejudiced no matter what I do.

_____ 8. It is important to me that I convey a positive impression on my interaction partner

_____ 9. I feel that I don't have the skills to have a positive interaction.

_____ 10. I expect that my partner will notice how I perform in the interaction.

_____ 11. I think that my interaction partner will like me.

_____ 12. I expect that my partner will enjoy the interaction.

____13. When interacting with my partner, I would know what to say in order to come across positively

____14.I expect that my partner won't like me. **(reverse code)**

____15. I am confident that I will make a good impression during this interaction.

____16 I expect that my partner will not enjoy the interaction. **(reverse code)**

____17. I am confident that stereotypes will not affect the quality of this interaction.

____18. I think that I am capable of having a pleasant interaction.

____19.I think my interaction partner is looking forward to interacting with me.

____20. I could imagine becoming friends with this person.

____21. I believe I will like this person.

____22. Regardless of my behavior, my interaction partner will view me negatively.

____23.I expect that my interaction partner will look for reasons not to like me.

Appendix F
Emotions

We are interested in how you are feeling about your upcoming interaction. Please read each of the feeling words below and circle the number on the scale that indicates the extent to which each word applies to how you are feeling right now. Don't spend much time thinking about each word, just give a quick, gut-level response. It is important that you respond openly and honestly. Your responses will be averaged with those of other students to give us an idea of how students in general feel about such interactions

**angry **anxious

				does not apply at all					very much applies	
1.	bothered	...	...	1	2	3	4	5	6	7
2.	angry at myself...	...	...	1	2	3	4	5	6	7
3.	friendly	...	...	1	2	3	4	5	6	7
4.	uncertain	...	...	1	2	3	4	5	6	7
5.	uneasy	...	...	1	2	3	4	5	6	7
6.	depressed	...	...	1	2	3	4	5	6	7
7.	happy...	...	...	1	2	3	4	5	6	7
8.	embarrassed...	...	...	1	2	3	4	5	6	7
9.	concerned	...	...	1	2	3	4	5	6	7
10.	frustrated	...	...	1	2	3	4	5	6	7
11.	nervous	...	...	1	2	3	4	5	6	7
12.	good about myself---			1	2	3	4	5	6	7
13.	anxious	...	...	1	2	3	4	5	6	7
14.	irritated	...	...	1	2	3	4	5	6	7
15.	disappointed with myself			1	2	3	4	5	6	7
16.	tense	...	...	1	2	3	4	5	6	7

17. regretful	...	...	1	2	3	4	5	6	7
18. relaxed	...	...	1	2	3	4	5	6	7
19. fearful..	...	...	1	2	3	4	5	6	7
20. worried	...	...	1	2	3	4	5	6	7
21. guilty	...	...	1	2	3	4	5	6	7
22. content	...	...	1	2	3	4	5	6	7
23. distressed	...	...	1	2	3	4	5	6	7
24. comfortable	...	...	1	2	3	4	5	6	7
25. sad ...	...	...	1	2	3	4	5	6	7
26. agitated	...	...	1	2	3	4	5	6	7
27. helpless	...	...	1	2	3	4	5	6	7
28. hostile	...	...	1	2	3	4	5	6	7
29. shame	...	...	1	2	3	4	5	6	7
30. calm	...	...	1	2	3	4	5	6	7
31. angry...	...	...	1	2	3	4	5	6	7
32. self-critical	---	---	1	2	3	4	5	6	7
33. good	...	---	1	2	3	4	5	6	7
34. threatened	...	---	1	2	3	4	5	6	7
35. resentful	...	...	1	2	3	4	5	6	7

Appendix G
Word Search

Directions: Find as many words as you can as quickly as possible.

Y H C U O R G G K A D F V P C
 E S F A E D Y C P E O L A U O
 L E U O O K I P C R S O R R M
 K R T F N S L N G N H N I E P
 N F L A F E E E W I S E A C O
 I T R A D I T I O N A L T N S
 R C U S R F C S L E H Y I A E
 W B A E U G S I S N S L O R Y
 J F P L P S E T E E E T N T A
 E X G R U M P Y U N N D E N R
 E T E L P M O C G B T K R E G
 N I I S O L A T E D B I R U M
 G N I R O B H E A V Y O R A B
 E L B A T Y R A E L C C R E D
 P O L I S H P I N C H I P N D

APPLE

CLEAR

CRANKY

ENTRANCE

FORGETFUL**GROUCHY****ISOLATED****LONELY**

PURE

SLOW

TABLE

VARIATION

BORING

COMPLETE

DARKNESS

ESTEEM

FRESH

GRUMPY

LARGE

PINCH

SAFE

STUBBORN**TIRED****WISE****BURDEN**

COMPOSE

DEAF**EXPERIENCED****GRAY**

HEAVY

LENGTHY

POLISH

SICK

SUFFICIENT

TRADITIONAL**WRINKLE**

****Stereotypical Words****

Appendix H Written Debriefing

In this study, we were primarily interested in understanding how an anticipated interaction with a rejecter of either peer age or an older age could affect levels of anxiety, anger, and avoidance. In order to do this, we led participants to believe that they would be interacting with someone who has expressed no disinterest in meeting with the participant or was neutral toward meeting the participant. We also varied the age of the person that they would be meeting on the demographic questionnaire. We then had participants fill out questionnaires about the upcoming interaction and also measured seating distance once the participant was in the same room as the anticipated partner. The purpose of this study was to analyze how college students would react to rejection by peers and older adults. We believed our rejection conditions would elicit more anxious, angry, and avoidance behavior than our non-rejection conditions. We also predicted that participants would be more anxious and angry and avoid the anticipated rejecting partner when that partner was an older adult compared to when the partner was a peer.

We would like to emphasize that the responses you provided will remain completely anonymous. In fact, we did not enter any information into the computer or on the survey beyond the identification number you were assigned, which cannot be tied back to your name. You may recall that you provided your signature on the consent form at the beginning of the session, and this form will be stored in a separate location such that your name can never be tied to the data you provided. In addition, we would like to mention that we are not interested in the responses of individuals, but are instead focusing on how groups of people respond on this task and series of questions. Therefore, your data will be pooled with data collected from other college students. Because we will be pooling the data, we cannot provide feedback on how you personally responded on the task or survey. However, if you are interested in learning more about the study and the results, we would be happy to provide additional information to you at the conclusion of this project.

You may contact Kristina Deem, the graduate researcher for this project, or Dr. Lynn Haller, the faculty sponsor for this project using the contact information below to receive this additional information or if you have questions or concerns about the project.

Thanks again for your participation in this study!

Contact Information:

Kristina Deem (Graduate Researcher) kmdeem@moreheadstate.edu

Dr. Lynn Haller (Faculty Supervisor) l.haller@moreheadstate.edu

If you feel distress as a result of participating in this study and think you need to talk to a professional, please contact the Morehead State University Counseling Center at (606) 783-2123. Please sign with your Sona ID and date below if 1) you agree that you have been fully informed about the purpose of this study AND 2) if you allow your data to be used in analysis.

Sona ID: _____

Date ____/____/____