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# Are All Older Adult Transgressors Treated Equally?

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ARE ALL OLDER ADULT TRANSGRESSORS TREATED EQUALLY?

A Thesis Presented to  
The Faculty of the Department of Psychology  
Western Kentucky University  
Bowling Green, Kentucky

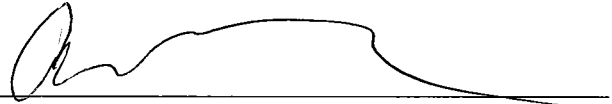
In Partial Fulfillment  
Of the Requirements for the Degree  
Master of Arts

By  
Heather Marie Dahlgren

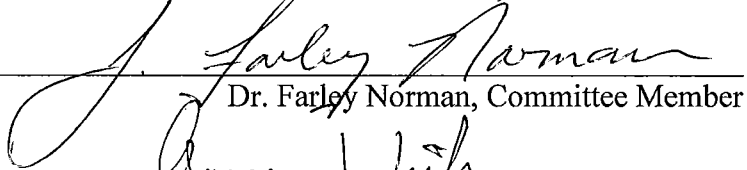
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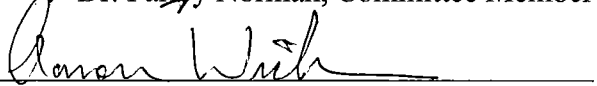
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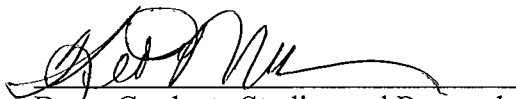
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## ARE ALL OLDER ADULT TRANSGRESSORS TREATED EQUALLY?

Heather Dahlgren

December 2012

49 Pages

Directed by: Andrew Mienaltowski, Farley Norman, and Aaron Wichman

Department of Psychology

Western Kentucky University

Research has shown that young adults treat older adults with less blame and more forgiveness when they commit a social transgression. This study sought to understand whether the stereotype of an assumed positive personality and/or a supposed lack of cognitive ability are potential driving forces behind the greater leniency that young adults display toward older transgressors. Seventy-five young adult participants were randomly assigned to one of five experimental conditions. Participants' aging stereotypes were primed with one of four paragraphs that depicted older adults as (a) socially warm and cognitively competent, (b) socially cold but cognitively competent, (c) socially warm but cognitively incompetent, or (d) socially cold and cognitively incompetent. A fifth group of participants was assigned to a control condition in which aging stereotypes were not deliberately activated. Participants then read 16 vignettes that varied in terms of (1) the age of the transgressor, (2) how socially close the participant is to the transgressor, and (3) the severity of the transgression. After reading each individual vignette, participants indicated how much they blamed the transgressor for the outcome, and how likely they would be to forgive him or her despite the outcome. Relative to younger transgressors, older transgressors were blamed less, and had a higher likelihood of receiving forgiveness. Participants were also more likely to forgive and less likely to blame transgressors after having been primed with a stereotypical older adult who is socially

warm but cognitively incompetent. Inconsistent with expectations, the effect was not unique to the rating of older adult transgressors; it also applied to young transgressors.



## **Introduction**

Past research has found that younger adults are less likely to blame and more likely to forgive older adults who commit a social transgression than they are younger adults who commit the same transgression (Miller, Charles, & Fingerman, 2009). Many factors may influence blame attributions including the tendency to attribute cause to the disposition of a target rather than to the situational factors, stereotyping, and personal identification with the transgressor. Past research has shown that young adults are less likely to blame and more likely to forgive older adults than they are other younger adults; however, why this differential treatment occurs has not been addressed. The goal of this study was to determine whether younger adults are less likely to attribute blame and more likely to grant forgiveness because of the perceived warmth attributed to older adults or because of an assumed deficit in older adults' cognitive functioning, or both.

### **Blame Attributions**

Attributing blame involves assessing a situation to determine what we believe is the cause of an outcome and, if the cause is human, deciding whether or not that person deserves to be held accountable. We generally observe the blame attribution process taking place when a negative event occurs and other natural processes, such as weather, chance, or gravity, were not the sole cause of the event (Gilbert & Malone, 1995). The attribution of blame is a widely observed social phenomenon (Shaver, 1985) that serves as an explanation for an unwelcome situation that adheres to the following general pattern. First, an event with negative consequences occurs, which is followed by judgments about causality, personal responsibility, and possible mitigation. These social judgments then result in the denial or assertion of individual blameworthiness. For

example, if we came home to find that our favorite vase was broken, this negative outcome would cause us to seek to understand who or what caused the vase to break. If we determine that only one person was home with the vase, we would assume they were personally responsible. However, if, when asked about the incident, this person stated that something had jumped out and scared them, causing them to break the vase, this mitigating factor may cause us to not blame the individual as much as we would have otherwise. The process of blame assignment centers on identifying the invariant properties of people, and features of the environment that caused an event to take place (i.e., blame is an attributional process). For instance, knowledge about individuals in one's life, such as the idea that they would not hurt you intentionally, may aid you in deciding whether or not they were the cause of an event. Additionally, knowledge about the basic processes of the world in which we live, such as gravity, may aid us in deciding when the environment is the cause of an event, rather than a living organism. Often, individuals place too much stock in a person's ability to control the situation and believe that they must have acted intentionally when this may have not been the case. The tendency of individuals to overstate the foreknowledge and intention of others is known as the Correspondent Bias (Shaver, 1985) and leads one to blame others for their actions (i.e., attribute cause-effect via an assumed intention to act).

Once cause has been determined, one must decide whether or not the person who caused the event is truly responsible for this event. According to Gilbert and Malone (1995), the determination of responsibility depends on five issues: causality, moral standards, determinism, voluntary choice, and extenuation. The role of causality is obvious in that we tend to grant responsibility only to those who are salient to us and thus

may have directly caused an event, even if other, less obvious factors may also play a role. The moral standards of the perceiver also dictate whether or not individual transgressors will be blamed for an event. For instance, if an individual were to accidentally run over their neighbor's dog with their car, some perceivers may blame the individual because they believe that his actions, willful or not, bear upon blameworthiness, and the driver should be held accountable. However, individuals with a different moral outlook may believe that this individual is not to blame because the action was not intentional.

Whether or not individuals knowingly and voluntarily caused the outcome in question and whether any extenuating circumstances were present are also taken into consideration when assessing blame or responsibility. For instance, despite the complexity of many cognitive theories of attribution, the basic determinants of attribution, in most cases, are the characteristics of a stimulus event that appear to activate automatic, perceptual processes. These automatic attributional processes take place because people desire to quickly make sense out of the world by making the world controllable and predictable (Adolphs, 1999; Gilbert & Malone, 1995; Shaver, 1985; Winter, Uleman, & Cunniff, 1985). However, the automatic nature of our judgments does not always work to our advantage.

The danger then lies in the extent to which our judgments can be considered automatic and possibly heavily influenced by a need for closure when isolating causal factors (Dijksterhuis, Spears, Postmes, Stapel, Koomen, Van Knippenberg, & Scheepers, 1996; Harvey, 1985; Webster & Kruglanski, 1994). By relying on stereotypical information about individuals and situations, individuals may process other people and

situations more quickly, thus making the world more predictable. For example, if a fight is reported at a local shopping mall, police that respond may concentrate on looking for young men because young men are stereotypically more violent than other individuals who normally shop at the mall. Thus, police would not waste time looking for elderly individuals given that, stereotypically-speaking, they are not thought to be a violent group. Once an attribution has been made, the ambiguity of the social situation may lead the perceiver to reconsider the original causal attribution for accuracy (Harvey, 1985), especially if there is a chance that they may be held accountable for their judgment, as with close social partners (Tetlock, 1985).

### **Blame Differs by Age and Closeness**

Miller and colleagues found that older adults transgressors are granted more forgiveness and less blame than young adult transgressors (Miller, Charles, & Fingerman, 2009). Young adults may grant more forgiveness and less blame to older adults because they are relying on stereotypical information about the elderly. In Miller's experiment, participants read vignettes in which characters committed social faux pas, and the age of the transgressor (old vs. young) varied. Participants then rated how likely they would be to blame and forgive the transgressor in each situation. Participants responded with less blame toward and greater forgiveness of older relative to younger adults. The researchers proposed that young adults may regulate reactions to transgressions when older adults make them, but the researchers failed to address the mechanism underlying this regulation. We suspect that aging stereotypes may play a role in this differential reaction toward young and older transgressors. Because judgments had to be made with little other information, participants may have relied on stereotypes about older and younger adults,

causing them to view the actions of older adults as unintentional, based on the propensity of older adults to display warmer affect and less competence than young counterparts. It is unclear whether stereotypes concerning older adults' general cognitive decline and/or their perceived warmth are leading to this exoneration. Thus, the allocation of blame may vary according to the availability of stereotypical information that offers possible extenuating dispositional factors. Additionally, vignettes in Miller's experiment varied not only in the age of the transgressor, but also in the closeness of the relationship with the transgressors. Some vignettes depicted strangers while others depicted friends and relatives. The analysis of blame and forgiveness ratings also revealed less blame and greater forgiveness of close transgressors, compared with distant transgressors. Thus, the attribution of blame varies as a function of the age of the transgressor in question and our relationship with them (Miller et al., 2009).

### **Stereotypes and Expectations Allow the Situation to Define the Target**

Blame can be complex, and extenuating factors might exist that explain the behavior or outcome. Additionally, people can form situation-specific expectations of others instead of relying on overall schema (Noordewier & Stapel, 2008). Past research shows that when individuals form expectations for specific situations (e.g., Michael is kind at work), they are surprised when the expectations are violated in the same situation but not in other ones. However, general expectancies (e.g., Michael is kind) will lead to surprise when violated regardless of the situation. Because little information is known about transgressors whom we meet in short lab-based experiments, we use general expectancies based on stereotypical information, and avoid relying on situation-specific information in the attribution process. We just do not have enough information about the

individual to infer that he or she will behave differently than the way we observe them acting in our brief exposure to them. That said, if the individual belongs to an easily stereotyped group, then our general expectancies will be biased by our stereotypes about this group.

While stereotypes bias our expectations of individuals we do not know well, dispositional constructs also play a crucial role in blame and forgiveness of individuals we do know well. Accordingly, researchers have found that compassion is more often allocated to vulnerable individuals (Goetz, Keltner & Simon-Thomas, 2010). However, when dispositional constructs are not well known, perceivers may rely heavily on stereotypical information. The importance of stereotypes is highlighted in research showing that participants assume that all individuals with similar characteristics (e.g., age) are just as likely to be the cause of an event, regardless of situational constraints (Vesico, Sechrist, & Paolucci, 2003). Thus, stereotype information may play a more significant role in blame attribution than does situation information.

Further research has shown that both reward and punishment are delivered according to the causal factor to which performance is thought to be linked (Kelley, 1973). Specifically, the degree of anger and aggression expressed at a frustrating behavior performed by a transgressor was related to how much information was available that linked such attributions to the person's dispositional characteristics. If it was revealed that individuals were acting differently than usual, less anger and aggression were shown. However, if it was revealed that individuals were acting as they usually do, more anger and aggression were shown. Accordingly, the stereotype of reduced cognitive functioning in old age, which may cause inconsistent behavior, may lead to the

assumption of decreased intentionality, accounting for differences in blame (Fiske, Cuddy, Glick, & Xu, 2002).

### **Attitude Formation Models**

There are multiple methods by which an evaluator's attitudes direct his or her judgments. Frequently, people rely on automatic, uncorrected and non-deliberated processes (Chaiken & Trope, 1999). These processes are viewed as relatively spontaneous and prone to error. For example, if a person were to meet a new colleague for the first time and note that he or she seemed disinterested and were not talkative, then one might assume that this new colleague was rude. However, after further thought one may realize that perhaps a situational factor is affecting the colleague and causing them to behave in this way. Perhaps the colleague was not feeling well or was having family problems, which altered their behavior, causing them to act in a way that is not actually indicative of their dispositional characteristics. When individuals are instructed to be accurate, and an opportunity for more time and thought is provided, they are more likely to consider situational attributes, and thus rely less on stereotypes and assumptions (Tetlock, 1985; Weiner, 1993). Although attributions that include more deliberate processing can be more accurate, judgments are often either immediate or a mix of deliberate and non-deliberate. Thus, perceivers in a situation are ignorant of situational factors when they are not given ample time to consider them (Gilbert & Malone, 1995). The factors that motivate us to be more careful and deliberate in our consideration vary from situation to situation, but interpersonal closeness consistently motivates deliberate processing (Wade & Worthington, 2003). When a perceiver is close to a transgressor, closeness will drive the perceiver to think more carefully about those extenuating factors

that may explain the actor's behaviors, reducing the likelihood of blame and increasing the likelihood of forgiveness.

The Motivation and Opportunity as Determinants or MODE model, which suggests that race-related judgments will depend on automatically activated evaluations, lends support to the influence of stereotypes on age differences in blame and forgiveness (Chaiken & Trope, 1999).. This model predicts that stereotypes may cause automatic judgments that will vary for different individuals in the same situation according to stereotypes. Accordingly, researchers have found that participants use an age-based double standard when making attributions for memory failures and slow behavior at work (Erber & Long, 2006). Specifically, participants showed more anger for young transgressors and more sympathy for old transgressors after reading vignettes depicting young and older adults in hypothetical employment-based scenarios in which they do not perform optimally. Additionally, participants attributed forgetful and slow behavior to internal stable causes for older adults because it did not violate expectancies for this group. However, for younger adults, forgetful and slow behaviors did violate expectancies and thus young adults were treated more negatively and stringently (Cuddy, Norton, & Fiske, 2005). Thus, information processing, influenced by the details available to young people, drove biased social judgments, especially the exoneration of older adults who committed wrongs.

More specifically, the Stereotype Content Model (Fiske, Cuddy, Glick, & Xu, 2002) proposes that differences in treatment between recognizably distinct groups may occur due to stereotypes about the group's standing on two primary dimensions: warmth and competence. Groups may be high or low on both dimensions, or they may have a



mixed stereotype pair in which they are high on one construct and low on the other. In one study that contributed to the formation of this model, Fiske and colleagues presented participants with 24 distinct groups and then asked them to rate members of each group on the dimensions of warmth and competence (Fiske, Cuddy, Glick, & Xu, 2002). Five clusters of groups emerged reflecting divergent stereotype pairings that were high in both warmth and competence (Christians, middle-class-individuals, students, whites, and women), low in both warmth and competence (poor people, welfare recipients, and homeless people), high in competence and low in warmth (Asians, educated people, Jews, men, professionals, and rich people), low in competence and high in warmth (disabled people, elderly people, and retarded people), or average in competence and average in warmth (gay men, blue-collar workers, Hispanics, Muslims, Native Americans, Blacks and young people), respectively. Additionally, distinct groups defined by stereotype combinations were rated by perceivers as being more or less likely to exhibit four emotions: admiration, contempt, envy, and pity. In-groups (high competence, high warmth) were rated as most deserving of admiration, while groups of pure degradation (low competence, low warmth) were rated as most deserving of contempt. In regard to mixed-stereotype content groups, paternalistic groups (high warmth, low competence) were rated to be most deserving of pity, and envious groups (low warmth, high competence) were rated to be most deserving of resentment or jealousy.

These results lead us to believe that the status of elderly adults as a paternalistic (high warmth, low competence) group may be the cause of observed age differences in blame and forgiveness. It is our prediction that stereotyping activates knowledge about older adults, clarifying any dispositional ambiguity using superficial knowledge that cuts

across situations. Thus, stereotypes of warmth and incompetence activated in connection with salient elderly-related cues may impact the perceived intentionality of the wrong doing, causing people to assume that although older adults may be the cause of an event, they should not be blamed, and should be forgiven.

### **Current Study**

In this study, the goal was to extend the findings of Miller and colleagues (2009) by examining the impact that activating aging stereotypes has on forgiveness and blame attributions. Miller and colleagues found that respondents were less likely to blame and more likely to forgive transgressors who were elderly and with whom they had a close relationship. The authors proposed that the differential treatment of older transgressors might have been based on an inclination to believe that older adults have a positive disposition and declining intelligence (i.e., warm and incompetent). The current study sought to reveal whether or not stereotypes bias such judgments by examining possible differences in judgments as a function of the content of the stereotypes that were specifically activated. Moreover, by also examining the impact of stereotypes on blame and forgiveness attributions for close and distant others, we can determine if activated stereotypes are overridden by knowledge that is embedded in the relationship that the participant has with close others.

### **Hypotheses**

Given the past literature previously described, a number of hypotheses logically follow. The first hypothesis tested in this experiment was the idea that older adults will be granted more forgiveness and less blame after committing a transgression. In a previous study, researchers presented younger adults with vignettes depicting transgressors

committing social faux pas (Miller, Charles, & Fingerman, 2009). Participants rated older adult transgressors as deserving less blame and more forgiveness than younger adult transgressors

The second hypothesis that was tested in this experiment was the idea that close social partners will be granted more forgiveness and be assessed less blame than distant social partners. In the study previously discussed, conducted by Miller, Charles, and Fingerman (2009), vignettes also varied in the closeness of the transgressor, depicting a close friend or family member versus an acquaintance or stranger. This study found that close social partners were granted more forgiveness and less blame, a trend we hope to replicate in our study. We believe that this tendency to treat close social partners more favorably is closely tied to the idea that we have more motivation to consider our evaluations thoroughly when dealing with a social partner with whom we expect to have further contact.

The third and final hypothesis tested in this experiment was the proposition that reduced blame and increased forgiveness given to older adults are based on stereotypes of increased warmth and decreased competence in old age. We predicted that participants primed with stereotypes depicting older adults as high in warmth and low in competence (traditional aging stereotype linked to unintentional faux pas; Fiske, Cuddy, Glick, & Xu, 2002), would exhibit decreased subsequent ratings of blame and increased forgiveness relative to ratings by participants primed with other stereotype combinations. Consequently, participants primed with stereotypes depicting older adults as low in warmth and high in competence (traditionally envious groups), will show increased ratings of blame and decreased forgiveness. We also sought to consider the blame and

forgiveness ratings linked with mixed messages (i.e., individuals primed with low warmth, low competence older adults and high warmth, high competence older adults).

## **Method**

### **Summary of Method**

Participants were asked to judge how worthy younger and older transgressors were of blame and forgiveness after having unintentionally committed hypothetical negative actions toward the participants. Half of the hypothetical transgressions were committed by people who are close to the participant (e.g., grandfather), and half were committed by strangers (e.g., young man in coffee shop). Moreover, transgressions were evenly balanced so that close others and strangers committed equal numbers of minor and severe transgressions. Participants were asked to consider these hypothetical transgressions only after being primed with a short passage about an older target who displays behaviors that vary in their consistency with aging stereotypes. The five passages used in the current study reflect a distribution of dispositional attributes that present just positive, just negative, or a mix of positive and negative aging stereotypes (see Appendix A for passages). One passage served as a control condition and did not intentionally activate aging stereotypes. Overall, a 2 (age of the transgressor) x 2 (closeness of transgressor) x 2 (severity of situation) x 5 (aging stereotype) mixed-model design was used. The age of the transgressor (young versus old), the participants' closeness to the transgressor (relative/friend versus stranger), and the severity of the transgression (minor versus severe) are within-subject factors. The aging stereotype manipulation was administered to five separate groups: (1) control group, no stereotype; (2) solely negative stereotype activation, or socially cold + cognitively incompetent; (3)

solely positive stereotype activation, or socially warm + cognitively competent; (4) mixed stereotype including socially cold + cognitively competent; and (5) mixed stereotype including socially warm and cognitively incompetent.

### **Participants**

Seventy-five young adult participants (38 females, 37 males) ranging in age from 18 to 30 ( $M=20.39$ ,  $SD=2.85$ ) were recruited from Western Kentucky University. Fifteen participants were assigned to each of the five between-subjects priming categories. Two participants were removed from statistical analysis; Participant #25 (a male from the incompetent cold prime group) was removed for an abnormal pattern of responding, and participant #30 (a female from the incompetent cold prime group) was removed for an extremely low cognitive performance score.

### **Measures**

*Brief cognitive battery.* The brief cognitive battery consisted of three tests: the Finding A's Test (Ekstrom, French, Harman & Dermen, 1976), the Mill Hill Vocabulary Test (Raven, 1943), and the FAS Verbal Fluency Task (Spren & Strauss, 1998). These tests served to assess the participant's individual abilities and to ensure that they had the vocabulary and verbal fluency to understand the paragraphs presented to them. The test-retest reliability scores for these measures are as follows: for the Finding A's Test, .73 (Ekstrom, French, Harman & Dermen, 1976), for the Mill Hill Vocabulary Test, between .90 and .98, varying with age (Foulds, 1949), and for the FAS, .74 (Tombaugh, Kozak, & Rees, 1999). These tests revealed one low performing individual, who was excluded from further analyses. Otherwise, these cognitive measures did not impact any of the analyses performed and thus, will not be discussed further.

*Stereotype activation.* Individuals were presented with one of five priming paragraphs that served to activate stereotypes of older adults as being competent and warm, competent and cold, incompetent and warm, incompetent and cold, or a paragraph which contained no aging-stereotype related information (Erber & Long, 2006). Individuals were given three minutes to study the paragraph after being advised that they would be asked to recall as much information as they could from the priming paragraph later. Within the procedure of this experiment, participants were asked to recall the contents of the paragraph after completing the stereotype measure, at the end of the session. Memory performance was used to ensure that the stereotype-relevant information was still accessible to the participants after they completed the social judgment task.

*Social judgment task.* Individuals were presented with sixteen scenarios, their order varying randomly, depicting older and younger adults enacting social faux pas that directly affected the participant or their property. Participants were asked to read each individual scenario and then respond to a few questions about their feelings. Participants were asked to assess how likely it is that this situation would happen to anyone and how likely it is that it may happen to them. Participants then responded to questions about how upset and angry they felt at the situation and how severe they viewed each situation to be. Finally, the participants rated how close they felt to the transgressor, how much they blamed the transgressor, and how much they wished to forgive them (see Appendix B for social judgment scenarios and Appendix C for social judgment questions). Responses to each of the eight questions following the vignettes used a five point rating scale that included the responses: not at all, a little, somewhat, moderately, and very much.

*Stereotype measure.* After completing the social judgment task, participants were presented with a stereotype assessment that asked them to rate how they view older adults in terms of ten intelligence-based adjectives and ten social-pleasantness-based adjectives (20-item questionnaire based on an internally consistent two-factor scale developed by Fiske et al., 2002; see Appendix D for measure). Warmth (Cronbach's Alpha = .643) and competence (Cronbach's Alpha = .686) beliefs totals were constructed from the ten variables concerning each in the stereotype measure. However, these two variables were transformed into 9 variable compilations: warmth9 (Cronbach's Alpha = .701 after "proud" construct removed) and intell9 (Cronbach's Alpha = .710 after "inexperienced" construct removed.), which were found, through internal consistency analysis, to better represent the construct than the original 10 aspect constructs.

## **Procedure**

Participants first signed an informed consent document approved by WKU's Human Subjects Review Board (HSRB #12-208; refer to Appendix E for consent form) participants then completed a demographics questionnaire. Next, participants were lead through a battery of vocabulary and verbal fluency tests including the Finding A's Test (Ekstrom, French, Harman & Dermen, 1976), the Mill Hill Vocabulary Test (Raven, 1943), and the FAS Verbal Fluency Task (Spren & Strauss, 1998). The participants then studied one of five randomly assigned stereotype activation paragraphs. Next, they completed the social judgment task, after which they completed the 20-item stereotype measure. They were then asked to write down as much as they could recall from the stereotype activation paragraph. Finally, they were debriefed on the true nature of the study.

## Results

### Stereotype Activation

First, a manipulation check was performed to examine the relationship between prime condition and ratings of warmth and competence levels on the stereotype measure. It was predicted that we would observe higher ratings of warmth for those primed with a warm older adult, lower ratings of warmth for those primed with a cold older adult, higher ratings of competence for those primed with a cognitively competent older adult, and lower ratings of competence for those primed with an incompetent older adult. Competence and warmth stereotype responses were submitted to a 2 (warmth prime: warm/cold) x 2 (competence prime: competent/incompetent) analysis of variance. Contrary to expectations, no significant effects of warmth prime condition,  $F(4,68) = 2.44$  ( $p=.06$ ) or competence prime condition,  $F(4,68) = 1.28$  ( $p=.29$ ) were found on the stereotype beliefs reported by participants about typical older adults in the questionnaire.

Memory test responses were coded for the presence of appropriate stereotype information given for each prime condition and the absence of intruding stereotype information that was not presented. No significant differences in memory accuracy were found between groups, meaning that participants in all four stereotype groups and the control condition all performed at the same level on the memory task, remembering the information that was relevant to their respective conditions without recording information that was not supplied. Even though individuals in the stereotype conditions were given more information to recall than those in the control condition, this did not significantly impact the accuracy of their memory. All groups displayed highly accurate memory for stereotype information, with only one to two total errors (absence of appropriate



stereotype information or presence of inappropriate stereotype information) per group, including all participants assigned to each group. In other words, errors were extremely rare.

### **A Note about Gender**

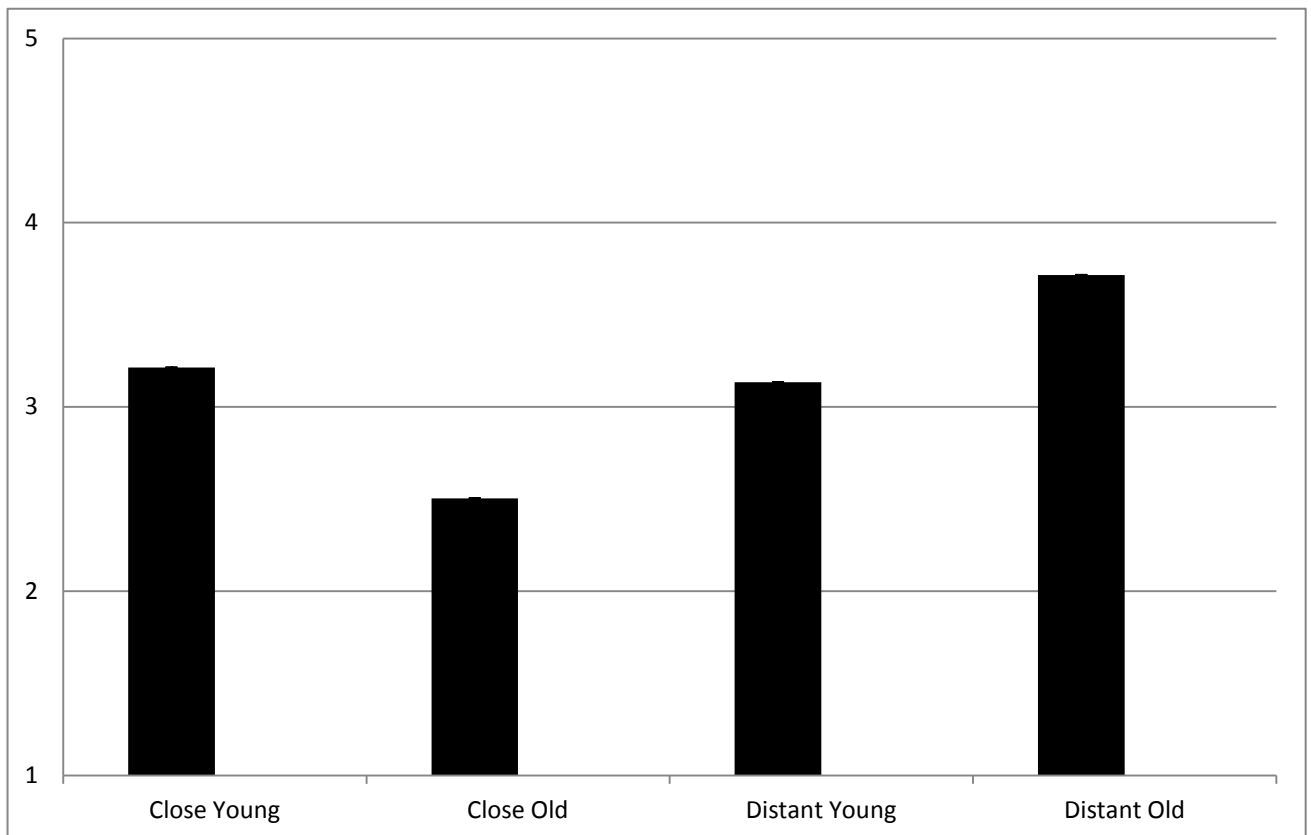
Gender significantly effected ratings of how upset the participant would be with the situation,  $F(1,71) = 5.10, p < .05, \eta_p^2 = .07$ ; women ( $M=27.22$ ) were more upset on average than men ( $M=24.31$ ). Because gender differences were restricted to upset ratings alone, and did not significantly affect ratings of forgiveness or blame, the following analyses are collapsed across gender groups.

### **Hypotheses 1 and 2**

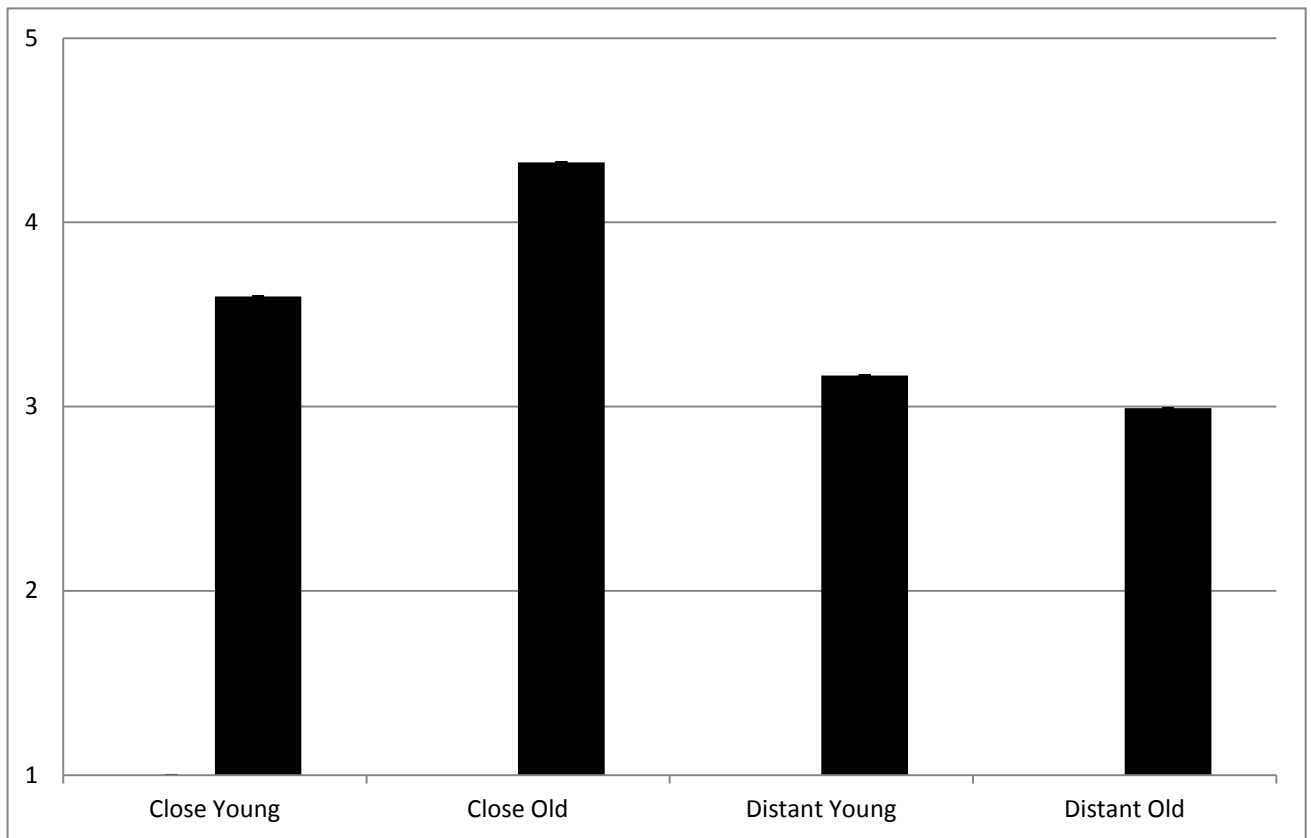
The first hypothesis that was tested in this experiment was the idea that older adults will be granted more forgiveness and less blame after committing a transgression than younger adults. Our second hypothesis was the idea that close social partners will be granted more forgiveness and be assessed less blame than distant social partners. In order to examine our first and second hypotheses, we submitted participant's blame attributions to a 2 (severity of transgression: minor/severe) x 2 (closeness to transgressor: close/distant) x 2 (age of transgressor: old/young) within-subjects ANOVA. A main effect of closeness on blame,  $F(1,68) = 64.16, p < .01, \eta_p^2 = .49$ , was found, but there was no main effect of age of transgressor on blame,  $F(1,68) = 0.77 (p=.38)$ . There was, however, a two-way interaction between closeness and age of transgressor,  $F(1,68) = 78.09, p < .01, \eta_p^2 = .54$  (see Figure 1). There was no difference in blame of young transgressors whether they were close or distant; however there was a difference in blame of older transgressors whether they were close or distant such that blame was higher

when the old transgressor was socially distant than when he/she was close. We also submitted the forgiveness attributions of participants to a 2 (severity of transgression: minor/severe) x 2 (closeness to transgressor: close/distant) x 2 (age of transgressor: old/young) within-subjects ANOVA. A main effect of closeness on forgiveness was found,  $F(1,68) = 110.41, p < .01, \eta_p^2 = .60$ , in addition to a main effect of age of transgressor on forgiveness,  $F(1,68) = 19.92, p < .01, \eta_p^2 = .21$ . These main effects on forgiveness ratings were qualified by a two-way interaction between closeness and age of transgressor,  $F(1,68) = 61.42, p < .01, \eta_p^2 = .48$  (see Figure 2). There was no difference in forgiveness between old and young transgressors when they were socially distant; however, socially close older transgressors received more forgiveness than close young transgressors.

**Figure 1: Blame Attribution Ratings**



**Figure 2: Forgiveness Attribution Ratings**



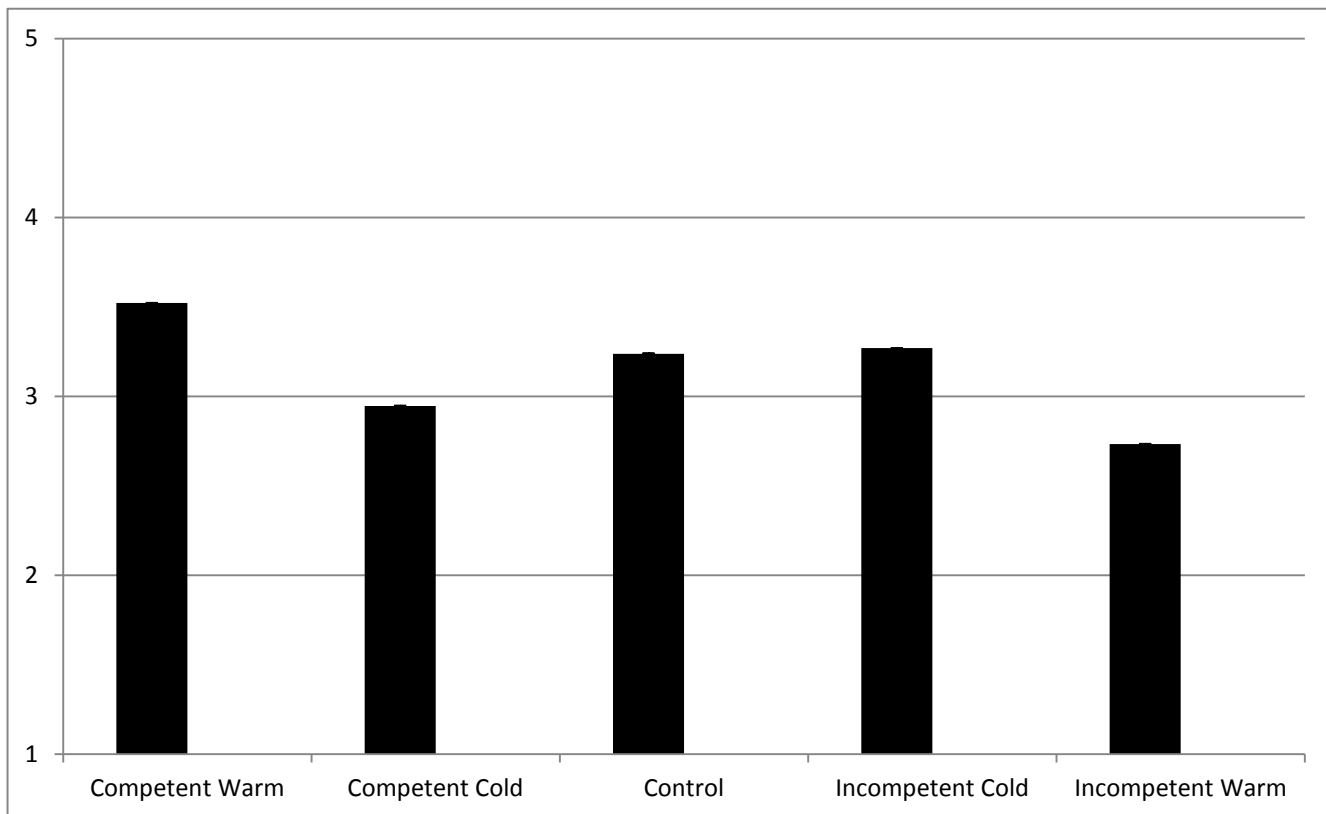
### **Hypothesis 3**

The final hypothesis tested in this experiment was the proposition that reduced blame and increased forgiveness given to older adults are based on stereotypes of increased warmth and decreased competence in old age. We predicted that participants primed with stereotypes depicting older adults as high in warmth and low in competence (traditional aging stereotype), would exhibit decreased relative ratings of blame and increased forgiveness of subsequent older adults. In order to examine our third hypothesis, we submitted the blame attributions of all subjects to a 5 (prime condition: control/competent-warm/competent-cold/incompetent-warm/incompetent-cold) x 2 (severity of transgression: minor/severe) x 2 (closeness to transgressor: close/distant) x 2

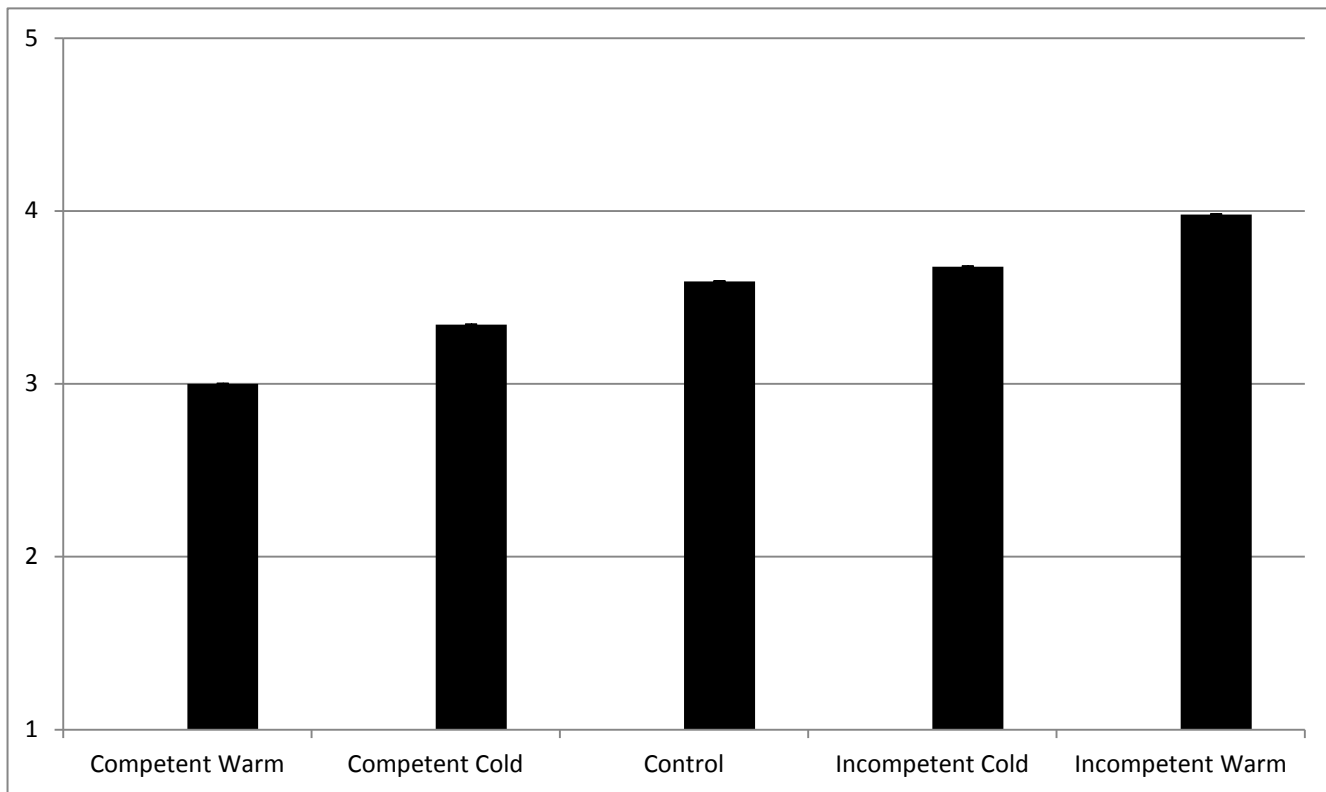
(age of transgressor: old/young) mixed-model ANOVA. A main effect of prime condition emerged,  $F(4,68) = 2.72, p < .05, \eta_p^2 = .14$ . Post hoc comparisons using the Tukey HSD test indicated that the cold blame score for transgressors after having been exposed to the incompetent warm prime ( $M=2.73, SD=.19$ ) was significantly lower than the cold score for transgressors offered by those exposed to the competent warm prime ( $M=3.52, SD=.19$ ). Thus, the prime, in this case, functioned by making participants think that all transgressors were like the prime that they viewed, William. So when participants saw a warm, incompetent William, they exonerated transgressors because they were probably like William and did not know better. When participants saw a warm, competent William, they thought transgressors should have known better, like William, and were more likely to blame them for their shortcomings. However, no other significant differences between groups were found (see Figure 3). Additionally, no significant prime condition by age of transgressor or prime condition by closeness of transgressor interactions were found. We then submitted the forgiveness attributions of all subjects to the same 5 (prime condition: control/competent -warm/competent -cold/incompetent -warm/incompetent -cold) x 2 (severity of transgression: minor/severe) x 2 (closeness to transgressor: close/distant) x 2 (age of transgressor: old/young) mixed-model ANOVA. Once again, a main effect of condition emerged,  $F(4,68) = 3.16, p < .05, \eta_p^2 = .16$ . Post hoc comparisons using the Tukey HSD test indicated that the cold forgiveness score following the incompetent warm prime ( $M=3.98, SD=.21$ ) was significantly higher than the mean forgiveness score following the competent warm prime ( $M=3.00, SD=.21$ ). However, no other significant differences between groups were found (see Figure 4). Again, no significant prime condition by age of transgressor or prime condition by

closeness of transgressor interactions were found. The prime had the expected effect on forgiveness, except this effect was not specific to older adult transgressors. After having read about an incompetent and warm William, participants offered less blame and more forgiveness to hypothetical transgressors than they did after reading about a competent and warm William. This is consistent with our original hypothesis in that we expected those primed with an incompetent and warm stereotype to receive the least blame and most forgiveness. However, it is inconsistent with our predictions in that we expected the cold and competent group (the polar opposite) to receive the most blame and least forgiveness, but it was shown to be the warm and competent stereotype that received this treatment.

**Figure 3: Prime Condition Effects on Blame Attribution Ratings**



**Figure 4: Prime Condition Effects on Forgiveness Attribution Ratings**



**Exploring Predictors of Blame and Forgiveness Attributions**

While the lack of effect of the prime condition, on the stereotype measure suggests that some people may not have been impacted by the primes in each condition, the presence of a prime condition effect on ratings of blame and forgiveness suggests the opposite. These conflicting results led us to perform a series of exploratory hierarchical linear regression analyses to investigate whether prime condition factors (warmth and competence prime conditions), beliefs about older adults (perceived warmth and competence, as indicated by the stereotype measure), or some combination of these factors significantly predicted participant's ratings of blame and forgiveness for older and younger adults. For the following analyses, vignette ratings were averaged together to calculate older adult blame (Cronbach's Alpha = .79), younger adult blame (Cronbach's

Alpha = .77), older adult forgiveness (Cronbach's Alpha = .80), and younger adult forgiveness scores (Cronbach's Alpha = .84). These scores were collapsed across vignette presentation (vignette version 1 or 2), transgressor social closeness (close or distant) and transgression severity (severe or not-severe). This averaging took place because, for these analyses, we were not interested in predicting the effects of these conditional differences, but rather in predicting overall blame and forgiveness for older and younger adult transgressors respectively. For the sake of brevity, only significant regression weights will be provided.

*Blame attributions for young adult transgressors.* A hierarchical linear regression analysis was conducted on predictors for blame of young adult transgressors in which first the prime conditions (compprime and warmprime) were entered into the model (level 1), followed by warmth beliefs (level 2; warmth9), and then all lower order interactions (level 3; warmcomp, warmwarm9, compwarm9) were added, and finally the three-way interaction term was added (level 4; warmcompwarm9). The results of this regression can be seen in Table 1 below. The first two levels did not yield significant predictors of blame. At the third level, the predictors accounted for enough variability for the model to become significant,  $R=.47$ ,  $R^2 = .22$ ,  $R^2$  change = .19,  $F(3,50) = 2.39$ ,  $p<.05$ ). At this level, the prime condition interaction term (warmcomp) was the only significant predictor,  $B=1.46$ ,  $t=3.06$ ,  $p<.05$ , demonstrating that blame increases for young transgressors when individuals are exposed to a competent and warm prime (see Table 1). The fourth and final level of the model did not add a significant predictor.

**Table 1: Hierarchical Regression On Young Blame, Warmth Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
3	Compprime	-.95	1.43
	Warmprime	-2.65#	1.30
	warmth9	.05	.11
	warmcomp	1.47*	.48
	warmwarm9	.02	.05
	compwarm9	-.05	.05

\*Significant  $p < .05$ , #Significant at displayed level but not at level originally entered

A second hierarchical linear regression analysis was conducted on predictors for blame of young adult transgressors, repeating the above regression except replacing stereotype-related warmth beliefs in the model with the participants' stereotype-related competence beliefs (captured by *intell9*). Again, first the prime conditions were entered into the model (*compprime* and *warmprime*; level 1), followed by the competence beliefs (*intell9*; level 2). Then all lower order interactions (*warmcomp*, *warmintell9*, and *compintell9*) were added in the third level of the regression, followed by the three-way interaction term in the final level (*warmcompintell9*; level 4). The results of this regression can be seen in Table 2 below. The hierarchical regression analysis revealed that the predictors at levels 1 and 2 did not account for a significant amount of variance in blame ratings. However, at level 3, adding interaction terms led to a significant model ( $R = .49$ ,  $R^2 = .24$ ,  $R^2$  change = .20,  $F(3,50) = 2.65$ ,  $p < .05$ ). The significant predictor at this level was, once again, the interaction of prime conditions (*warmcomp*)  $B = 1.28$ ,  $t = 2.94$ ,  $p < .05$ , meaning that blame of young transgressors increases when individuals are



exposed to an competent and warm prime (see Table 2). The final level of the model did not add a significant predictor.

**Table 2: Hierarchical Regression On Young Blame, Intelligence Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
3	Compprime	-1.06	1.50
	Warmprime	-2.94#	1.46
	intell9	.00	.14
	warmcomp	1.28*	.44
	warmintell9	.04	.05
	compintell9	-.04	.05

\*Significant  $p < .05$ , #Significant at displayed level but not at level originally entered

*Blame attributions for older adult transgressors.* The analyses performed on the young adult transgressors' blame ratings were repeated for older adult transgressors. Separate regression models were developed for warmth and for competence beliefs, as was the case with the young adult transgressors. First the prime conditions were entered into the model (compprime and warmprime; level1), followed by the warmth beliefs (warmth9; level 2). Then all lower order interactions (warmcomp, warmwarm9, and compwarm9; level 3) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompwarm9; level 4). Results of the regression analysis can be found in Table 3. The analysis found no predictors of older transgressor blame at any level of the hierarchical regression (see Table 3).

**Table 3: Hierarchical Regression On Old Blame, Warmth Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
4	Compprime	-.30	4.59
	Warmprime	-2.52	4.10
	warmth9	-.02	.23
	warmcomp	1.18	3.00
	warmwarm9	.04	.14
	compwarm9	-.04	.15
	warmcompwarm9	-.01	.10

\*Significant  $p < .05$ , #Significant at displayed level but not at level originally entered

A second hierarchical linear regression analysis was conducted on predictors for blame of older adults focusing on the participants' stereotype-related beliefs about older adults' competence. First the prime conditions were entered into the model (compprime and warmprime; level 1), followed by the competence beliefs (intell9; level 2). Then all lower order interactions (warmcomp, warmintell9, and compintell9) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompintell9; level 4). Results of the regression analysis can be found in Table 4. The regression revealed no significant predictors in the first two levels of the analysis. However, at the third level, the interaction terms accounted for a marginally significant amount of variance ( $R = .46$ ,  $R^2 = .21$ ,  $R^2$  change = .17,  $F(3,50) = 2.23$ ,  $p = .06$ ), and adding the three-way interaction term resulted in a significant model ( $R = .50$ ,  $R^2 = .25$ ,  $R^2$  change = .15,  $F(3,50) = 2.36$ ,  $p < .05$ ). At both the third and fourth levels, the only significant predictor was the term representing the interaction between the competence prime

condition and the participants' competence stereotype-related beliefs (compintell9)  $B = -.10$ ,  $t = -2.18$ ,  $p < .05$ . For older transgressors, blame ratings of the transgressors who were presented to the participants after the prime were less when individuals were exposed to a competent prime while also believing that older adults are competent (see Table 4a, 4b).

**Table 4a: Hierarchical Regression On Old Blame, Intelligence Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
3	Compprime	1.59	1.46
	Warmprime	-1.45	1.42
	intell9	.10	.13
	warmcomp	.73	.42
	warmintell9	.01	.05
	compintell9	-.10*	.05

\*Significant  $p < .05$ , #Significant at displayed level but not at level originally entered

**Table 4b: Hierarchical Regression On Old Blame, Intelligence Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
4	Compprime	9.12	4.80
	Warmprime	5.37	4.38
	intell9	.55	.30
	warmcomp	-3.73	2.75
	warmintell9	-.25	.16
	compintell9	-.38*	.18
	warmcompintell9	.17	.10

\*Significant  $p < .05$ , #Significant at displayed level but not at level originally entered

*Forgiveness attributions for young adult transgressors.* As with the blame attributions, hierarchical linear regressions were conducted to examine the predictors of forgiveness attributions. As earlier, separate regression models were developed for warmth and for competence beliefs. In this first model, a number of factors were regressed on to the young adult transgressors' forgiveness ratings. First the prime conditions were entered into the model (compprime and warmprime; level1), followed by the warmth beliefs (warmth9; level 2). Then all lower order interactions (warmcomp, warmwarm9, and compwarm9) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompwarm9; level 4). The results of this regression analysis can be seen in Table 5. The analysis found that, in the first level, the first-order predictors tied to the prime condition accounted for a significant amount of variance ( $R=.35$ ,  $R^2 = .12$ ,  $R^2$  change = .12,  $F(2,54) = 3.79$ ,  $p<.05$ ). The significant predictor in this model was the competence prime condition (compprime)  $B=.69$ ,  $t=2.74$ ,  $p<.05$ , meaning that forgiveness attributions for young transgressors are greater when the participants are exposed to a competent prime (see Table 5). The final three levels of the model did not yield any additional significant predictors.

**Table 5: Hierarchical Regression On Young Forgive, Warmth Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
1	Compprime	.69*	.25
	Warmprime	-.03	.25

\*Significant  $p<.05$ , #Significant at displayed level but not at level originally entered

Another hierarchical linear regression analysis was conducted on predictors for forgiveness of young adults, but this time the model focused on the predictive value of

the participants' competence stereotype-related beliefs. First the prime conditions were entered into the model (compprime and warmprime; level1), followed by the competence beliefs (intell9; level 2). Then all lower order interactions (warmcomp, warmintell9, and compintell9) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompintell9; level 4). The results of this regression analysis can be seen in Table 6. The regression revealed that only one predictor in the first level accounted for a significant amount of variance,  $R=.35$ ,  $R^2 = .12$ ,  $R^2$  change = .12,  $F(2,54) = 3.79$ ,  $p<.05$ . Just as in the prior model, the competence prime factor significantly predicted younger adults' forgiveness attributions (compprime)  $B=.69$ ,  $t=2.74$ ,  $p<.05$ . After being primed with a competent older adult, the participants' forgiveness ratings were higher than when exposed to an incompetent older adult (see Table 6). The final three levels of the model did not yield any additional significant predictors.

**Table 6: Hierarchical Regression On Young Forgive, Intelligence Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
1	Compprime	.69*	.25
	Warmprime	-.03	.25

\*Significant  $p<.05$ , #Significant at displayed level but not at level originally entered

*Forgiveness attributions for older adult transgressors.* Finally, we conducted two hierarchical linear regression analyses to determine which predictors best accounted for forgiveness attributions directed toward older adult transgressors. Separate models were developed to focus on the impact of warmth older adult stereotype-related beliefs on forgiveness attributions and to focus on the impact of competence older adult stereotype-

related beliefs on forgiveness attributions. In this first model, a number of factors were regressed on to the older adult transgressors' forgiveness ratings. First the prime conditions were entered into the model (compprime and warmprime; level1), followed by the warmth beliefs (warmth9; level 2). Then all lower order interactions (warmcomp, warmwarm9, and compwarm9) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompwarm9; level 4). The results of this regression analysis can be seen in Table 7. The regression analysis showed that only level 1 was significant,  $R=.40$ ,  $R^2 = .16$ ,  $R^2$  change = .16,  $F(2,54) = 5.19$ ,  $p<.05$ . The significant predictor driving this model was the competence prime condition (compprime)  $B=.70$ ,  $t=3.18$ ,  $p<.05$  meaning that forgiveness of old transgressors increases when individuals are exposed to a competent prime (see Table 7).

**Table 7: Hierarchical Regression On Old Forgive, Warmth Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
1	Compprime	.70*	.22
	Warmprime	.15	.22

\*Significant  $p<.05$ , #Significant at displayed level but not at level originally entered

Another hierarchical linear regression analysis was conducted on predictors for forgiveness of older adult transgressors, but this time the focus was on the impact of competence-related stereotypical beliefs held about older adults. First the prime conditions were entered into the model (compprime and warmprime; level1), followed by the competence beliefs (intell9; level 2). Then all lower order interactions (warmcomp, warmintell9, and compintell9) were added in the third level of the regression, followed by the three-way interaction term in the final level (warmcompintell9; level 4). Results of

the regression analysis are found in Table 8. The regression revealed that only the predictor included in level 1 accounted for a significant amount of variance,  $R=.40$ ,  $R^2 = .16$ ,  $R^2$  change = .16,  $F(2,54) = 5.19$ ,  $p<.05$ . In this level, the competence prime factor (compprime) was the only significant predictor  $B=.70$ ,  $t=3.18$ ,  $p<.05$ . After being exposed to a competent older target in the competent prime condition, the participants' forgiveness ratings were higher than when exposed to an incompetent older adult in the incompetent prime condition (see Table 8). None of the other levels of the regression led to a significant increase in the amount of variance accounted for.

**Table 8: Hierarchical Regression On Old Forgive, Intelligence Beliefs Model**

Level	Predictor	<i>B</i>	<i>SE B</i>
1	Compprime	.70*	.22
	Warmprime	.15	.22

\*Significant  $p<.05$ , #Significant at displayed level but not at level originally entered

### Discussion

The purpose of the current study was to extend the findings of Miller and colleagues (2009) by examining the impact that activated aging stereotypes have on blame and forgiveness attributions. We sought to do this by examining possible differences in blame and forgiveness judgments as a function of the content of the stereotypes that we specifically activated. By activating the stereotype that older adults are cold and competent, warm and competent, cold and incompetent, or warm and incompetent, we sought to determine if these stereotype combinations had an effect on subsequent blame and forgiveness ratings. Consistent with our hypotheses, participants were less likely to blame and more likely to forgive close social partners than distant ones

and likewise less likely to blame and more likely to forgive older adults than young adults. Interestingly, the impact of the older adult stereotype primes on the participants' ratings of blame and forgiveness were minimal. The main difference that emerged was that participants primed with a warm and incompetent older adult were less likely to blame subsequent transgressors than participants primed with a warm and competent older adult. Additionally, participants primed with a warm and incompetent older adult were more likely to forgive subsequent transgressors than participants primed with a warm and competent older adult. This difference in blame and forgiveness ratings of subsequent transgressors held for both young and older adult transgressors alike. Exploratory regression analyses revealed that blame of young adult transgressors increases when participants are exposed to a competent and warm prime while blame of older adult transgressors increases when participants are exposed to a competent prime and they also believe that older adults are competent; however, forgiveness of both young adult and older adult transgressors increases when participants are exposed to a competent prime.

Stereotypes about older adults competency and warmth were activated through the presentation of a memory test, in which an exemplar older adult was presented, and the description included information about his warm or cold affect, and competence or lack thereof. This prime paragraph was adapted from a past study concerning age differences in the perceptions of forgetful and slow employees (Erber & Long, 2006). Studies incorporating age primes often rely on memory test paradigms, like ours, which disguise the prime as another test in a battery, making the priming process less obvious to participants. Contrary to our hypotheses, no significant effects of prime condition on



stereotype measure responses were found. However, the analyses of prime condition effects on ratings of blame and forgiveness suggest that, while primes may not have been strong enough to change overt attitudes measured with the stereotype survey, they did affect the overall tendency to blame and forgive, though not only for older adult transgressors, as we had predicted. In the future, more information may need to be provided about how the behaviors of the exemplar in the prime are similar to those of other older adults, in hopes that this prime would show larger effects on a subsequent stereotype beliefs questionnaire. Additionally, by providing more age related information than just stating the exemplar's age (e.g., providing a picture) future studies may be able to ensure that the prime effects materialize specifically for subsequent older transgressors, not just all subsequent transgressors.

### **Age-based Differential Treatment**

Confirming our first hypothesis, we found that older adult transgressors were granted more forgiveness and less blame than young adult transgressors; this is consistent with previous research (Miller, Charles, & Fingerman, 2009). Our results went beyond these original findings by showing that older adults are forgiven more and blamed less than younger adults across a wider variety of situations. Older adult transgressors may receive this preferable treatment because they are respected for their warm affect, or pitied for their incompetence. Thus, our participants may have offered less blame and more forgiveness to older adults than younger adults because they pitied their lack of competence and did not place them at fault, or wished to forgive them because of their warm affect.

### **Closeness-based Differential Treatment**

Also as predicted, close social partners were given more forgiveness and less blame than strangers, consistent with previous findings (Miller, Charles, & Fingerman, 2009). Once again, our results went beyond these original findings by showing that close social partners are forgiven more and blamed less than strangers across a wider variety of situations. Close social partners may receive this special treatment because we wish to maintain our relationship with them, and thus look to overcome transgressions. Thus, our participants offered less blame and more forgiveness to family members and friends in vignettes than they did to strangers or acquaintances, because they were not concerned about their relationship status with these individuals.

We predicted that participants primed with stereotypes depicting older adults as high in warmth and low in competence (traditional aging stereotype), would exhibit decreased relative ratings of blame and increased forgiveness to subsequent older adult transgressors, but not to subsequent younger adult transgressors. Confirming our third hypothesis, primes containing older adult stereotypes influenced subsequent blame and forgiveness ratings. Consistent with our predictions, individuals primed with the traditional aging stereotype (incompetent and warm) granted the most forgiveness and least blame to subsequent transgressors, for which competence and warmth information was not given. It is possible that the participants were attributing William's characteristics to all transgressors and not just the elderly ones. Evidence for this can be found in the lack of interaction with age of transgressor. When we meet a stranger who is warm, we want to believe that, when he or she commits a transgression, it happens on accident and not because he or she is trying to hurt us. To know if this is the case, we

then try to gauge their intelligence. With our prime, William, we meet a warm older man. If we meet an incompetent William, then we are likely to be lenient with others who commit a transgression. One possibility is that we think to ourselves “People are warm but they don’t always make good decisions. William couldn’t help making the same mistake if he were the transgressor, so maybe the transgressor is not competent, too.” OR “William was old and did not have much time left in life. He was a warm guy, but showing signs of cognitive decline. If I met him in person, I would be warm to him because he is old. So, when I see all of these people committing transgressions, I think that I should forgive them because life is too short and we all are going to end up like William, friendly, well-meaning, and demented.”

Only one significant difference (the difference between incompetent -warm and competent -warm prime groups) was found to be driving the main effect of prime group differences on blame and forgiveness ratings. This was not consistent with our original hypothesis. We predicted that participants primed with the competent cold stereotype would grant the most blame and least forgiveness to transgressors; however, it was the group primed with the competent warm older adult that expressed the most blame and least forgiveness to subsequent transgressors. We believe that this effect may have emerged for two reasons. First, it may be that the personality disposition (warm/cold) was unimportant, a proposition supported by the lack of significant differences between competent -cold and competent -warm prime group ratings of blame and forgiveness. Secondly, and perhaps more likely, it may be that after seeing a competent and warm older adult, participants compared subsequent transgressors to this individual, causing them to be angry and less forgiving of their shortcomings because they did not measure

up to the person they were primed with. This idea is consistent with our finding that there were no age of transgressor by condition interactions. Meaning that judgments of young people are prime dependent, just like judgments of older adults. This may be because our prime paragraph failed to include enough age related information about the prime individual, and thus elicited stereotypes about people in general, not just older adults. In future studies, care should be taken to include more older adult information, to ensure that when attempting to elicit the stereotype that older adults are warm and incompetent , researchers are not inadvertently priming the stereotype that people in general are warm and incompetent .

This pattern of results leads us to believe that in cases where more forgiveness and less blame are taking place, participants are assimilating the warm-competent prime and applying that to subsequent transgressors. Accordingly, when less forgiveness and more blame are taking place, participants are contrasting the competent warm prime with subsequent transgressors; these effects are consistent with previous research (Dijksterhuis et al., 1998).

### **Demonstrating Contrast Effects When Provided With Specific Examples of Individuals**

Blame of younger adults increased when participants were exposed to a warm and competent prime. We believe that the warm and competence prime increased blame because, when exposed to a warm and competent older adult who performed well, subsequent young adult transgressors are compared to this prime and are seen as falling short, causing increased blame. Conversely, blame of older adults decreased when participants were exposed to a competent prime if they also believed that older adults are

competent . This pattern of results suggests that, while both primes predict younger adult blame, older adult blame is dependent on a combination of competency primes and the beliefs individuals hold about older adult competence. We believe that the findings for older adult blame were dependent on stereotype beliefs while the young adult blame findings were not because the primes and beliefs are combining to form opinions and influence blame for older adults. The primes are serving for a point of comparison for the blame of younger adults and thus stereotypes about older adults are not influential in this case. Additionally, the fact that both competence prime and competence beliefs influence older adult blame suggests that beliefs about older adult competence are not easily manipulated and may be relatively stable, causing both the prime and prior beliefs to play a role in blame outcome.

Forgiveness of both older and younger adults was predicted by the competency prime alone, so that forgiveness for all subsequent transgressors increased after being exposed to a competent prime. This suggests that perhaps blame attribution is a more complex process, involving more factors, than forgiveness attribution. The competence prime led to greater forgiveness of young adult transgressors; this may have been because young adult transgressors were thought to be less competent than the older adult prime, leading to pity and forgiveness. While for blame ratings, both the competence and warmth prime conditions mattered, warmth may not matter for forgiveness because being warm or cold is not a mitigating factor for transgressions, while incompetence versus competence may be.

## **Conclusions**

In this study we were able to replicate previous findings showing that older adult transgressors will be granted more forgiveness and less blame than young adults, and that close social partners will also be granted more forgiveness and less blame than distant social partners. We also found support for our interpretation that the reduced blame and increased forgiveness granted to older adults is based on stereotypes of increased warmth and decreased competence in old age. The finding that older adults are treated differently due to stereotype information has practical implications concerning their social satisfaction. Researchers have found that older adults experience more satisfaction in interpersonal relationships (Akiyama, Antonucci, Takahashi, & Langfahl, 2003). The finding that older adults report experiencing increased positivity and decreased negativity in social situations may be due to the treatment they receive from their social partners. Additionally, the way in which individuals view the blameworthiness and need for forgiveness of older adults has practical implications for the psychology of law. When defending an older adult transgressor, lawyers may wish to present older adults in a stereotypical way (warm and incompetent ) in order to influence judges and jury members to blame their client less, and grant him/her more forgiveness. In conclusion, while stereotypes of warmth and incompetence characteristic of elderly adults may be hurtful in situations involving performance evaluation, they also may be beneficial in social situations and may even be applied to older people to whom such stereotypes should not apply.

## APPENDIX

### APPENDIX A: Priming Paragraphs (Adapted from Erber & Long, 2006)

William Smith is 68 years old. He has been working in the library circulation department for about a year. William is about 5'10'', has thin gray hair, and usually wears brown pants and a tan shirt. He always looks well groomed and he rarely misses a day of work. He usually collects fines for overdue books when people try to check out new ones...

- (FRIENDLY/WARM) The customers like to speak with William while they check out books because he is friendly. He always has a kind word to say.

- (UNFRIENDLY/COLD) The customers do not like to speak with William while they check out books because he is not friendly. He never has anything kind to say.

- (COGNITIVELY DECLINING/INCOMPETENT) However, he does seem to be forgetful. Last week he was reminded that the library would be opening for a special event but he arrived at the normal opening time; he seemed to have forgotten all about the important occasion.

- (COGNITIVELY THRIVING/COMPETENT) However, he does not seem to be forgetful. Last week he was reminded that the library would be opening for a special event and he arrived at the early time that day, ready for the important occasion.

## APPENDIX B. Vignettes

(OLD, CLOSE, SEVERE)

1. Your new TV is not getting cable reception so you call your grandfather, a retired electrician, to come look at it. As he works behind the TV, he accidentally knocks it forward, causing it to fall onto the floor and break.
2. Your grandmother is helping you to clean your wedding china for Christmas dinner. She accidently drops a glass given to you by your in-laws, a priceless family heirloom, and it breaks.

(OLD, CLOSE, NOT SEVERE)

1. You leave a DVD at your grandmother's house for her to watch. When she gives the movie back the disk is scratched. You try to watch it but it skips when you play it.
2. Your grandmother drinks the last of your Vanilla Coke, which you were saving, thinking that it was hers.

(YOUNG, CLOSE, SEVERE)

1. You are organizing an important event for a club you and your sibling belong to. You delegate finding a venue to your sibling and he finds one that is way too small. The whole event must be canceled; everyone blames you for failing to put on this important event.
2. You come home to find that your roommate's dog has found his way into your room and chewed up your Boomerang that your sister brought you back from her trip to Australia before she passed away.



(YOUNG, CLOSE, NOT-SEVERE)

1. You and your best friend are watching movies and eating dinner together. She reaches for more popcorn and spills fruit punch all over your favorite pants. You try to wash them out quickly but the stain stays.
2. You are trying to study for a test with your roommate and he keeps tapping his pencil and shaking his leg, a nervous habit that is very distracting for you.

(OLD, DISTANT, SEVERE)

1. As you are walking out of the supermarket you see an old man backing out of the space near yours; the man backs up too far, running into your parked car and leaving a large dent.
2. The older gentleman working at the dry cleaners accidentally destroys your favorite, irreplaceable coat while he is supposed to be cleaning it.

(OLD, DISTANT, NOT SEVERE)

1. Your retired neighbor places a political sign in your front yard. Your friends see the sign and become angry, thinking that you support that candidate, and avoid spending time with you.
2. You are sitting with your blinker on to turn into a parking spot and an older woman, without seeing you, pulls into the spot ahead of you.

(YOUNG, DISTANT, SEVERE)

1. You are sitting at a table in a coffee shop and as a young man walks by your table his foot catches your computer cord and pulls your laptop onto the floor, causing the screen to crack.
2. Two guys are throwing a football around on campus when one throws it and the wind catches it, causing it to miss his partner and hit you in the head as you are walking by, knocking you to the ground.

(YOUNG, DISTANT, NOT SEVERE)

1. You have an announcement to make in front of a group of your peers. As you walk to the front of the room, the guy in front of you stretches, not seeing that you are coming, and you stumble on his outstretched leg and lose your balance in front of everyone.
2. As you walk out of the bathroom at a local hangout a guy holding two drinks leaves the bar area and turns around right into you, spilling both his drinks all over your clothes.

## **APPENDIX C: Hypothetical Scenarios Test Questions**

### Questions

1. How upset do you feel by the situation?
2. How close do you feel to the transgressor?
3. How likely is this situation to happen to someone?
4. How mad would you be in this situation?
5. How severe is this situation?
6. How likely is this situation to happen to you?
7. How much do you blame the transgressor for the outcome?
8. How much do you wish to forgive the transgressor despite the outcome?

### Scale

1. Not at all
2. A little
3. Somewhat
4. Moderately
5. Very much

## APPENDIX D: 20 Item Stereotype Measure

Prompt: As viewed by society, how **XXXXXXXXXXXX** are older adults?

Scale

1. Not at all
2. A little
3. Somewhat
4. Moderately
5. Very Much

Adjectives Used

- Positive Intelligence: Competent, Confident, Independent, Competitive, Competent
- Negative Intelligence: Ignorant, Unaware, Inexperienced, Confused, Forgetful
- Positive Personality: Warm, Tolerant, Good-natured, Sincere, Honest
- Negative Personality: Irritable, Proud, Grouchy, Sour, Selfish

## APPENDIX E: IRB Approved Consent Form



### INFORMED CONSENT DOCUMENT

Project Title: Perceptions of Social Transgressors

Investigator: Dr. Andrew Mienaltowski - WKU Psychology Department. Phone: (270) 745-2353

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your signed agreement to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and the possible risks of participation. You are welcome to ask any questions that you might have to help improve your understanding of the project. A basic explanation of the project is written below. Please read this explanation and discuss any questions that you might have with the researcher.

If you decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

1. **Nature and Purpose of the Project:**

This project looks at the attitudes of college age students towards transgressors. More specifically, we are interested in examining your reactions and feelings towards fictional transgressors.

2. **Explanation of Procedures:**

You will be asked to read short scenarios in which a person, the transgressor, does something to upset you and then rate your reactions and describe your feelings. You will also be asked to complete a few other tests that examine your thought processes. One test will ask you to think of as many words as you can that start with a certain letter within a time limit. Another test will test your knowledge of verbal meanings by asking you to identify which of six words means the same as a target word. A different test will ask you to identify all the words that contain a certain letter. You will also be asked to tell us a little about your personal background.

3. **Discomfort and Risks:**

There are no known risks associated with participation in these experiments. However, should you become tired, you are free to quit at any time.

4. **Benefits:**

Your participation will help to further understand everyday perception of transgressors and how that may vary as a result of multiple factors.

5. **Confidentiality:**

During this study, you will be asked for some personal information (name, age, gender, etc.). This information will be confidential and will only be used by the experimenter. The data that is collected about you will be kept private. To protect your privacy, your records will be kept under a code number rather than by name. Your records will be kept in locked files and only study staff will be allowed to look at them. We are only interested in group information. The reporting of the experimental results will only contain group mean results and will contain NO personal information

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about individual participants, including performance during the experiment. Your name and any other fact that might point to you will not appear when results of this study are presented or published. To make sure that this research is being carried out in the proper way, the Western Kentucky University Human Subjects Review Board will review study records.

6. **Compensation for Participation:**

You will receive 1 Study Board credit for each 30-minute period of participation in this study. The study is anticipated to require 90 to 120 minutes.

7. **Costs to You:**

Other than your time there are no costs to you to participate in this study.

8. **In Case of Harm or Injury:**

Reports of injury or reaction should be made to Andrew Mienaltowski, by phone at (270) 745-2353 or by e-mail at [andrew.mienaltowski@wku.edu](mailto:andrew.mienaltowski@wku.edu). Neither Western Kentucky University nor the principal investigator has made provision for payment of costs associated with any injury resulting from taking part in this study.

9. **Questions about the Study:**

If you have questions about the study, please contact Andrew Mienaltowski at WKU's campus at (270) 745-2353.

10. **Refusal/Withdrawal:**

Refusal to participate in this study will have no effect on any future services that you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time and with no penalty.

*You understand also that it is not possible to identify all potential risks in an experimental procedure, and we believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.*

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT  
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY  
THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD  
Paul Monney, Compliance Coordinator  
TELEPHONE: (270) 745-4652



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## References

- Adolphs, R. (1999). Social cognition and the human brain. *Trends in Cognitive Sciences*, 3(12), 469-479.
- Akiyama, H., Antonucci, T., Takahashi, K., & Langfahl. (2003). Negative interactions in close relationships across the life span. *Journal of Gerontology*, 58B(2), 70-79.
- Chaiken, S., & Trope, Y. (1999). *Dual-process theories in social psychology*. (pp. 97- 116). Guilford Press. Retrieved from [http://books.google.com/books?hl=en&lr=&id=5X\\_auIBx99EC&oi=fnd&pg=PA97&dq=modedualprocessattitudeformationmodelFazio&ots=OHOU\\_W6goe&sig=m5OGI4TTbAUqr2z-EoQCoiEFrXI](http://books.google.com/books?hl=en&lr=&id=5X_auIBx99EC&oi=fnd&pg=PA97&dq=modedualprocessattitudeformationmodelFazio&ots=OHOU_W6goe&sig=m5OGI4TTbAUqr2z-EoQCoiEFrXI)
- Cuddy, A. J. C., Norton, M. L., & Fiske, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, 61(2), 267-285.
- Dijksterhuis, A., Van Knippenberg, A., Kruglanski, A., & Schaper, C. (1996). Motivated social cognition: Need for closure effects on memory and judgment. *Journal of Experimental Social Psychology*, 32(3), 254-270.
- Dijksterhuis, A., Spears, R., Postmes, T., Stapel, D.A., Koomen, W., Van Knippenberg, A., Scheepers, D. (1998). Seeing one thing and doing another: Contrast effects in automatic behavior. *Journal of Personality and Social Psychology* 75(4), 862-871.
- Ekstrom, R. B., French, J. W., Harman, H. H., & Dermen, D. (1976). Finding A's Test. *Manual for Kit of Factor-Referenced Cognitive Tests*, 150(329), 123-130.

- Erber, J. T., & Long, B.A. (2006). Perceptions of forgetful and slow employees: Does age matter? *Journal of Gerontology*, *61B*(6), 333-339.
- Fiske, S. T., Cuddy, A. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality & Social Psychology*, *82*, 878-902.
- Foulds, G.A. (1949). Variations in the intellectual activities of adults. *The American Journal of Psychology*, *62*(2), 238-246.
- Gilbert, D.T., & Malone, P.S. (1995). The correspondence bias. *Psychological Bulletin*, *117*(1), 21-38.
- Goetz, J.L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351-374.
- Harvey, J. H. (1985). *Attribution: basic issues and applications*. Orlando, Florida: Academic Press.
- Kelley, H. H. (1973). The process of causal attribution. *American Psychologist*, *28*, 107-128.
- Miller, L. M., Charles, S. T., & Fingerman, K. L. (2009). Perceptions of social transgressions in adulthood. *Journal of Gerontology: Psychological Sciences*, *64B*(5), 551-559.
- Noordewier, M. K., & Stapel, D. A. (2008). Judging the unexpected: Disconfirmation of situation-specific expectancies. *European Journal of Social Psychology*, *39*(6), 944-956.
- Raven, J. C. *The Mill Hill Vocabulary Scale*. London: H.K. Lewis, 1943.



- Shaver, K. (1985). *The attribution of blame: causality, responsibility, and blameworthiness*. New York: Springer-Verlag.
- Spreen, O., & Strauss, E. (1998). *A compendium of neuropsychological tests: Administration, norms and commentary*. 2nd edition. New York: Oxford University Press.
- Tetlock, P.E. (1985). Accountability: a social check on the fundamental attribution error. *Social Psychology Quarterly*, 48(3), 227-236.
- Tombaugh, T.M., Kozak, J., & Rees, L. (1999). Normative data stratified by age and education for two measures of verbal fluency: FAS and Animal Naming. *Archives of Clinical Neuropsychology*, 14(2), 167-177.
- Vesico, T.K., Sechrist, G.B., & Paolucci, M.P. (2003). Perspective taking and prejudice reduction: The meditational role of empathy arousal and situational attributions. *European Journal of Social Psychology*, 33, 455-472.
- Wade, N.G., & Worthington, E.L. (2003). Overcoming interpersonal offenses: Is forgiveness the only way to deal with unforgiveness? *Journal of Counseling & Development*, 81(3), 343-353.
- Webster, D.M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049-1062.
- Weiner, B. (1993). On sin versus sickness: A theory of perceived responsibility and social motivation. *American Psychologist*, 48(9), 957-965.
- Winter, L., Uleman, J.S., & Cunniff, C. (1985). How automatic are social judgments? *Journal of Personality and Social Psychology*, 49(4), 904-917.

