Age Differences in the Correspondence Bias: When a Plausible Explanation Matters

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We examined the degree to which the dispositional biases observed in older adults reflect their use of the situational information available to them. Using the paradigm of Jones and Harris, we had young, middle-aged, and older adults read essays that were written under constrained or unconstrained conditions and estimate the writer’s attitude. Middle-aged and older adults demonstrated a larger correspondence bias, that is, inferring the target’s true attitude to be consistent with the essay content in the no-choice condition. Studies 2 and 3 increased the salience of the situational constraint placed on the target and found that perceptually increasing salience did not have an impact on age differences in attribution ratings. However, when the situational constraints reflected plausible motives for the target’s essay writing behavior, the age differences between young and older adults were eliminated.

Are older adults more susceptible to social judgment biases? This question has been the focus of increasing attention in the social cognition and aging literature (Blanchard-Fields & Beatty, 2005; Chen & Blanchard-Fields, 2000; Hess, McGee, Woodburn, & Bolstad, 1998; Jacoby, 1999; Mather, Johnson, & De Leonardis, 1999). In a number of studies, we have examined age-related differences in social judgment biases when people are making causal attributions (Blanchard-Fields, 1994; Blanchard-Fields & Beatty; Blanchard-Fields, Chen, Schocke, & Hertzog, 1998). We have consistently found that, in comparison with young adults, older adults are more likely to attribute the cause of relationship conflicts to dispositional characteristics of a primary character (e.g., selfishness) and appear to ignore the contributions of external circumstances (e.g., family pressure). However, a major assumption of our past research was that older adults did not allocate as much weight to situational or extenuating circumstances when people are making causal attributions (Blanchard-Fields, 1994; Blanchard-Fields & Beatty; Blanchard-Fields, Chen, Schocke, & Hertzog, 1998). We have consistently found that, in comparison with young adults, older adults are more likely to attribute the cause of relationship conflicts to dispositional characteristics of a primary character (e.g., selfishness) and appear to ignore the contributions of external circumstances (e.g., family pressure). However, a major assumption of our past research was that older adults did not allocate as much weight to situational or extenuating circumstances, because situational constraints were not directly manipulated. Thus, we could draw no definitive conclusion as to whether older adults were dispositionally biased because they underestimated the effect of situational factors. Therefore, our goal of Study 1 was to directly control for situational constraint by assessing a different type of judgment: attitude attributions. In Study 1, we were also able to determine whether dispositional biases exist for older adults in a different context outside of interpersonal conflict situations.

The Correspondence Bias

Older adults’ overreliance on dispositional information is similar to what social psychologists refer to as the correspondence bias (Gilbert & Malone, 1995). This bias occurs when observers infer that a target actor’s behavior corresponds with stable dispositional traits of the actor, even though powerful situational determinants may also be driving the behavior. In a classic experiment, Jones and Harris (1967) tested this idea by using the attitude-attribution paradigm. College-aged participants read a short essay that was either pro- or anti-Castro and indicated the essay writer’s true opinion. Participants were told that the essay was written either by choice or as an assignment.

Under choice conditions, attribution ratings were highly correspondent. People who had a choice were viewed as holding a belief that was consistent with the essay. However, this finding was also observed in the forced-choice condition, even when it was clear that the author of the essay was writing an assigned position.

Follett and Hess (2002) examined the correspondence bias in older adults and found that both young and older adults were more dispositionally biased than middle-aged participants in rating the responder’s true beliefs. The researchers attributed this age difference to higher levels of cognitive complexity in middle age. Unfortunately, cognitive complexity did not mediate age differences in the correspondence bias.

There are a number of other alternative explanations for age differences in correspondence bias. From an information-processing perspective, dispositional inferences require little cognitive effort and are typically the initial, spontaneous response of individuals, resulting in the correspondence bias. In contrast, elaborative processing effort is required when an individual deliberates on additional information such as situational constraints to adjust this initial response (Gilbert & Malone, 1995; Trope & Gaunt, 2000). It is not enough to be aware of the situational constraints; rather, effort is required in the adjustment phase to modify one’s thinking.

It may be the case that age differences in correspondence bias stem from well-documented age-related decline in processing capacity (Salthouse, 1991), which may force older adults to rely on easily accessible dispositional information. In support of this idea, Gilbert and colleagues found that imposing cognitive load on young adults did not affect their awareness of the situational information, but it did impair their ability to use this information (Gilbert & Malone, 1995). Furthermore, recent findings show that increasing the perceptual salience of the situational constraint helped focus young adults’ attention to the situational information and reduced the correspondence bias despite cognitive load (Trope & Gaunt, 2000).

If enhancing perceptual attention to the situational constraints results in more adjustment processing, it should be particularly helpful in attenuating the correspondence bias in older adults.
However, if it only enhances perceptual awareness, with no effect on the adjustment process, then we should not see an effect of perceptual salience in reducing age differences. Thus, in Study 2 we examined the role that perceptual salience of the constraint plays in observed age differences in correspondence bias.

Social Motivational Factors and the Correspondence Bias

As already indicated, it may not be the case that perceptual salience alone reduces correspondence bias in older adults. We argue that social motivational factors may play a key role in whether age differences in correspondence bias will be observed. From this perspective, Malle and colleagues (Malle, 1999; O’Laughlin & Malle, 2002) argued that people explain an actor’s intentional behavior in terms of the actor’s motive for displaying that behavior. Accordingly, recent findings in the social psychology literature suggest that inferences about the motives of an actor influence the degree to which situational forces are considered in producing the correspondence bias (Fein, 1996; Fein, Hilton, & Miller, 1990; Reeder, Vonk, Ronk, Ham, & Lawrence, 2004).

Perceptual salience of the instructions may focus the attention of older adults on the target’s forced-choice situation, but older adults may still not engage in processing the situational information. In contrast to such a processing capacity view, we suggest that older adults’ attention and further processing involves more social emotional factors. Therefore, heightening the salience of the target’s motives for the behavior may not only enhance the situational constraint in a way that captures older adults’ attention, but it will also motivate them to engage in an adjustment process. In support of this idea, recent research in the aging literature supports the idea that the socioemotional and motivational salience of the information plays an important role in how older adults make judgments and decisions (Hess, Rosenberg, & Waters, 2001; Isaacowitz, Charles, & Carstensen, 2000). In addition, in exit interviews older adults expressed the opinion that, in typical situations, individuals cannot hide their true beliefs without a good reason to do so. Therefore, in Study 3 we increased the salience of social motivational factors by providing a plausible motive for why the writer would compose an essay under forced-choice conditions (e.g., a motive suggesting the target may need to put her or his true attitude aside and write a convincing essay supporting an alternative point of view).

Hypotheses

First, we aimed to extend our past findings of age-related differences in dispositional tendencies by using a new paradigm that directly manipulates situational constraint, a modified version of the attitude-attribution paradigm (Jones & Harris, 1967). On the basis of our own research (Blanchard-Fields, 1994, 1996), we hypothesized that older adults would exhibit dispositional tendencies, that is, the correspondence bias, more so than younger age groups across conditions. We also explored the possibility that middle-aged adults would be less likely to exhibit correspondence bias (Follett & Hess, 2002). Second, we examined the influence of perceptual salience of the situational constraint on age-related differences in correspondence bias. On the basis of the research by Trope and Gaunt (2000), we expected that increasing the salience of the instructions to the writer would result in a minimal correspondence bias in young adults. We explored the possibility that enhancing perceptual salience would also result in a minimal correspondence bias for middle-aged and older adults. Finally, we examined a social motivational factor that should determine when age differences in the correspondence bias will be observed. We expected that providing a plausible motive for the writer’s behavior would reduce the age differences in the correspondence bias.

STUDY 1

In order to examine age differences in the correspondence bias, we used a 3 (age: young, middle aged, old) × 2 (choice condition: choice vs no choice) × 2 (essay content: pro vs con) design. Participants read an essay that was either in favor of or opposed to capital punishment. Half of the participants were told that the writer of the essay chose the position to advocate in the essay. The remaining half of the participants were told that the writer was assigned the position to write in the essay. All participants then read the essay and indicated the writer’s true attitude about capital punishment.

METHODS

Participants

There were 109 young adults, 110 middle-aged adults, and 101 older adults who participated in this study. Of these participants, we omitted 43 from the analyses: 15 of the excluded participants were young adults, 16 were middle-aged adults, and 12 were older adults. Of the excluded participants, 6 young adults and 1 middle-aged adult had not been living in a Western culture for more than 10 years; 2 young adults, 6 middle-aged, and 6 older adults had extremely low vocabulary or letter sets scores of less than five correct answers. There were 1 young adult and 1 older adult who had prior knowledge of the study; 6 young adults, 9 middle-aged, and 5 older adults failed to recall the target writer’s instructions in the no-choice condition. We therefore conducted the analyses on 94 young adults (aged 18–25 years, M = 20.27, SD = 1.22), 94 middle-aged adults (aged 35–55, M = 46.28, SD = 6.07), and 89 older adults (aged 60–80, M = 68.76, SD = 4.45). Young adult participants were recruited from a pool of undergraduate psychology students. Each student who participated received one credit hour toward a course participation requirement. Middle-aged and older adult participants were recruited from an adult participant pool and received $15 for participation, as well as reimbursement for public transportation costs or parking fees. Participant characteristics for all three studies are found in Table 1. The majority of young adults in our sample were college freshmen; middle-aged and older adults on average reported completing some college.

Materials

Essays.—The existing correspondence bias literature has predominantly studied young adult participants. We therefore conducted extensive pilot testing to ensure that the materials
used in the present study were not differentially relevant by age group on a variety of dimensions (see authors for data). Findings indicated that, of the topics we examined, capital punishment was considered equally important and controversial across age groups. We constructed essays for the four most controversial topics by following the format of stimuli used in Krull and colleagues (1999). Capital punishment essays received the strongest mean ratings for both favorable and opposed essays, $M = 6.20$ ($SD = .70$) and $M = 2.06$ ($SD = 1.39$) respectively, on a 7-point scale that ranged from 7, strongly in favor of the topic, to 1, strongly opposed to the topic. Thus, half of the participants received an essay that was in favor of capital punishment and the other half of participants received an essay opposing capital punishment.

**Essay questionnaire.**—Participants were asked to make several ratings on 7-point Likert-type scales. Participants rated the degree to which the writer of the essay was in favor of or opposed to capital punishment ($1 =$ very much opposed, $7 =$ very much in favor), to rate their confidence in making that judgment ($1 =$ not at all certain, $7 =$ extremely certain) and to give a written explanation for their responses. We included a confidence rating, given that some research suggests that judgmental uncertainty may be reflected more in confidence ratings than in the actual attitude-attribution rating (Devine, 1989). As a manipulation check, participants were asked to identify the position that the writer was instructed to advocate. We included this manipulation check to ensure that participants in the no-choice condition were aware of the constraint placed on the writer. We excluded participants from the analyses who did not correctly identify the instructions that the writer received.

**Vocabulary test.**—We used the Advanced Vocabulary Test (Ekstrom, French, Harman, & Derman, 1976) to measure verbal ability. Participants were asked to indicate the one word, from a list of four words, that was closest in meaning to a target vocabulary word. The test had 36 items that increased in difficulty as the participant worked through the test. The score was the number of correct responses.

**Letter sets test.**—Participants completed the letter sets test (Ekstrom et al., 1976) as a test of general reasoning ability. Participants received a series of five letter sets (e.g., ABCD) and were asked to infer the rule that tied the letter sets together. Participants eliminated the letter set that deviated from the pattern rule (e.g., JKMN violated the rule that all members of a set were in alphabetical order). The test had 30 items that varied in difficulty as the participant worked through the test. The score was the number of correctly completed sets.

**Procedure**

Participants completed the study in groups of one to five people. Each group of participants received a brief oral explanation of the study. Participants then received a questionnaire packet containing a consent form, demographics form, vocabulary test, letter sets test, and the essay questionnaire. Participants were instructed to complete these tasks in order. Both vocabulary and letter sets tests were timed. After all participants had completed the letter sets task, the experimenter handed out the essays and instructed participants to read the instructions on the first page, adapted from Krull and colleagues (1999), which were as follows:

Please read the following essay and estimate the writer’s actual position on this issue. That is, what does the essay writer truly believe about capital punishment? Keep in mind that the writer was given the following instructions: “Please write a short essay in favor of capital punishment, regardless of your own attitude. What is important is your ability to generate arguments and reason about a social issue. Please keep your essay shorter than 200 words in length.”

Participants in the other conditions received a modified version of the instructions stating that the writer was asked to “Please write a short essay opposed to capital punishment, regardless of your own attitude” (no-choice opposed condition) or “Please write a short essay either in favor of, or opposed to, capital punishment” (choice conditions). Participants then read one of the two essays (see Appendix) and completed the essay questionnaire. On completion of the study, participants were thanked, debriefed, and received remuneration.

**Results and Discussion**

**Attitude Attribution**

For all three studies, we recoded our data into extremity scores (as in Follett & Hess, 2002). Participants initially rated the target writer’s attitude on a 7-point scale. We rescaled this measure into a 4-point extremity scale by calculating the absolute difference from the neutral point on the original scale (i.e., the distance from 4). This meant that for the rescaled attitude scale, lower numbers reflect a less biased rating (i.e., closer to neutral) and higher numbers reflect a correspondent rating in the direction of the essay. Finally, gender differences were nonsignificant across studies; therefore, we collapsed all analyses across gender.

Consistent with past research, our Age × Choice analysis of variance (ANOVA) revealed that participants inferred correspondent attitudes more in the choice condition than in the
There was also a main effect of age, $F(2, 271) = 10.51, p < .001, \eta^2 = .07$. A post hoc Tukey test indicated that middle-aged and older adults did not differ from each other ($p > .10$) and they provided more extreme attitude ratings than young adults ($p < .01$).

Older adults were expected to exhibit a similar bias regardless of whether the target essay was written in the choice or no-choice conditions. In contrast, young adults were expected to have less extreme ratings in the no-choice condition than in the choice condition. To test this hypothesis, we conducted planned contrasts by using $t$ tests between the choice and no-choice conditions for each age group. To control for the Type I error rate, we applied a Bonferroni correction with a critical $p = .017$. As shown in Figure 1, young adults' ratings were lower in the no-choice condition than in the choice condition, $t(92) = 13.28, p < .01$. However, unlike the results of Follett and Hess (2002), middle-aged and older adult ratings did not differ across choice conditions, $t(78.18) = -1.51, p > .10$ for middle-aged adults and $t(66.37) = -1.89, p > .05$ for older adults. This replicates past findings that older adults tend to be dispositionally biased and supports the idea that they do not take situational factors into account in their judgments.

**Figure 1. Mean attitude attribution rating as a function of age group and choice condition.**

Confidence

The Age × Choice ANOVA revealed a main effect of choice, $F(1, 265) = 13.97, p < .001, \eta^2 = .05$, on the participants’ rating of confidence in their assessment of the target’s true attitude. Confidence ratings in the choice condition were higher ($M = 6.23, SE = .10$) than in the no-choice condition ($M = 5.65, SE = .12$). There was a main effect of age, $F(2, 265) = 4.65, p < .01, \eta^2 = .03$. A post hoc Tukey test indicated that young adults were less confident in their ratings than were middle-aged and older adults ($M = 5.61, SE = .13, M = 6.15, SE = .13$, and $M = 6.06, SE = .14$, respectively), $p < .05$. The Age × Choice interaction did not reach significance.

Qualitative Responses

For all three studies, we coded the qualitative responses into eight categories as described in Table 2. Two raters coded the qualitative data independently and then discussed discrepancies to reach an agreement. For Study 1, interrater reliability was 84% agreement.

Many of the categories were not frequently reported. The data presented for all three studies are the most common responses as well as the responses that focus on participants’ use of the directions to the writer in making their attitude attribution and confidence judgments. We present the qualitative data as a percentage of the sample, broken down by age groups, who provided a response in a given category.

The most frequently mentioned explanation for the rating of the target attitude was the type and quality of arguments presented in the essay, with 85%, 90%, and 85% of young, middle-aged, and older adults, respectively, reporting this as a reason. We were particularly interested in the frequency with which participants mentioned that the instructions to the writer influenced their ratings. In giving the reasons for their attitude attribution ratings, only 3% of young adults, none of the middle-aged adults, and only 1% of older adults mentioned the instructions to the writer.

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of arguments</td>
<td>Referred to the number of arguments the essay writer used.</td>
<td>The writer gave four reasons against capital punishment.</td>
</tr>
<tr>
<td>Passion and/or strength of feeling</td>
<td>Referred to the amount of emotion and/or passion that the essay writer seemed to feel for the topic based on his/her arguments.</td>
<td>I felt the writer didn’t feel passionate about his or her convictions.</td>
</tr>
<tr>
<td>Following directions</td>
<td>Referred to the instructions given to the writer of the essay.</td>
<td>The writer was told to write in favor of capital punishment.</td>
</tr>
<tr>
<td>Type and quality of arguments</td>
<td>Referred to the quality of the arguments or the type of argument presented in the essay.</td>
<td>The writer gave convincing, factual arguments.</td>
</tr>
<tr>
<td>Personal characteristics of the writer</td>
<td>Referred to the writer’s potential age, gender, or other demographic characteristics.</td>
<td>I’m not sure how young the writer is, and so she might just be using general arguments because she hasn’t yet formed an opinion about the issue.</td>
</tr>
<tr>
<td>Self-confidence in beliefs</td>
<td>Referred to the participant’s own instincts about the essay, his/her ability to remember what he/she read, and his/her ability to understand the writer.</td>
<td>I felt I really understood how against capital punishment the writer actually was.</td>
</tr>
<tr>
<td>Need more information</td>
<td>Referred to the need for more information to be provided to be able to make a judgment.</td>
<td>Based on such a short article, I think it is difficult to make an analysis with any kind of certainty.</td>
</tr>
<tr>
<td>Noncodeable</td>
<td>Off-topic responses that did not fit within any other category.</td>
<td>When I was growing up, we taught our children the difference between right and wrong.</td>
</tr>
</tbody>
</table>
In discussing the reasons for their confidence ratings, 15% of young adults mentioned that the instructions given to the writer influenced their ratings compared with 7% of middle-aged adults and only 2% of older adults. It appears that the target instructions in the present study were less salient to the middle-aged and older adults, and thus they may not have considered the instructions when making their attributions. In Study 2 we addressed this issue by enhancing the perceptual salience of the instructions to the writer.

**Study 2**

In order to examine the influence of perceptual salience on age differences in the correspondence bias, we used a 3 (age: young, middle aged, old) × 2 (essay content: pro vs con) design. As in Trope and Gaunt (2000), all participants listened to the instructions that the writer received through headphones, while reading along with the instructions on a sheet of paper. Participants then completed the attitude-attribution task. In Study 1, the age differences in attitude ratings occurred in the no-choice condition; therefore, in Study 2, all participants were told that the author was assigned the position to write in the essay. It was expected that presenting the instructions in both an aural and printed format would heighten the participant’s awareness of the instructions to the writer and thereby reduce or eliminate the age differences in the correspondence bias.

**Methods**

**Participants**

There were 32 young adults, 43 middle-aged adults, and 35 older adults who participated in this study. Of these participants, we omitted 17 from the analyses: 1 was a young adult, 11 were middle-aged adults, and 5 were older adults. We excluded 1 young adult, 10 middle-aged adults, and 5 older adults because they failed to recall the target writer’s instructions correctly, and we excluded 1 middle-aged participant as a result of a malfunction in the equipment. Therefore, we included 31 young adults (aged 18–27 years, M = 20.89, SD = 1.78), 32 middle-aged adults (aged 35–55, M = 46.38, SD = 4.81), and 30 older adults (aged 60–80, M = 66.55, SD = 4.37) in the analyses. Participants were recruited in the same manner as in Study 1. The majority of young adults in our sample were college freshmen; middle-aged and older adults on average reported completing some college.

**Procedure**

The procedure and materials for this study were identical to that of Study 1, with the addition of an auditory salience component. Immediately before the essay questionnaire, participants were asked to put on wireless headphones and listen to and then write down a sentence that they heard. This ensured that participants could hear what was coming through the headphones clearly. The experimenter then handed out the essays. Participants were told that they would be listening to the two essays and completed the essay questionnaire. On completion of the study, participants were thanked, debriefed, and received remuneration.

**Results and Discussion**

**Attitude Attribution**

As in Study 1, the ANOVA revealed a main effect of age, \( F(2, 90) = 4.65, p < .05, \eta^2 = .09 \). Planned comparisons using \( t \) tests with a Bonferroni adjustment with a critical \( p = .017 \) showed that middle-aged and older adults reported more extreme ratings than young adults: \( t(61) = -2.42, p < .01 \) and \( t(59) = -2.95, p < .01 \) for middle-aged and older adults respectively. Middle-aged and older adults did not differ from one another, \( t(60) = -1.41, p > .10 \). Contrary to our expectations, Figure 2 shows that increasing the perceptual salience of the situational constraint did not change the pattern of attitude-attribution ratings from that shown in Study 1.

**Confidence**

Replicating Study 1, the Age × Essay direction ANOVA revealed a main effect of age for confidence ratings, \( F(2, 87) = 4.137, p < .05, \eta^2 = .09 \). A post hoc Tukey test indicated only that young adults were less confident in their ratings than older adults, \( p < .05 \). Middle-aged participants did not differ from young adults (\( p > .05 \)) and were not different from older adults (\( p > .05 \)). Thus, increasing the perceptual salience of the situational constraint did not change the pattern of results for confidence from those shown in Study 1.

**Qualitative Responses**

The two raters had an intrarater reliability of 88% agreement. As in Study 1, the most common explanation for the rating of the target attitude was the type and quality of arguments presented in the essay, with 94%, 72%, and 87% of young, middle-aged, and older adults, respectively, reporting this as a reason. In discussing their reasons for rating the writer’s attitude, 16% of young adults mentioned that the directions to
the writer influenced their responses, compared with 7% of older adults and none of the middle-aged adults in our sample. An increase from 3% in Study 1 to 16% in Study 2 suggests that the aural presentation of the situational constraint worked to heighten awareness of the situational constraint in our young adult sample.

We found further support for the effectiveness of increasing the salience of the constraint for young adults in the explanations for participant confidence ratings. A large percentage of young adults (32%) mentioned that the directions the writer received influenced their confidence rating, up from 15% in Study 1. For middle-aged and older adults, however, we found no such increase, as only 3% of middle-aged and 7% of older adult participants reported that the instructions influenced their confidence ratings.

It appeared that heightening the perceptual salience of the situational constraint was not effective for our middle-aged and older adults, and it did not affect either the attitude attributions or the confidence ratings. Following Studies 1 and 2, participants were briefly interviewed to gain some insight into what factors participants felt were most important to the study. Several of our older adult participants mentioned that they didn’t believe that the writer would write contrary to his or her belief without a good reason. In Study 3 we aimed to reduce age differences by focusing on a motivational factor (i.e., providing a plausible motive for why the writer may be writing under forced-choice conditions).

**Study 3**

In order to examine the effect of a plausible motive on age differences in the correspondence bias, we used a 3 (age: young, middle aged, old) × 2 (essay content: pro vs con) design. Participants read an essay that was either in favor of or opposed to capital punishment. As in Study 2, all participants were told that the writer was assigned the position to advocate in the essay. However, in Study 3, participants were told that the author completed the essay as part of a social psychology class assignment during the unit on persuasion. Participants then read the essay and indicated the writer’s true attitude about capital punishment. We expected that, when the no-choice situation was plausible, the age differences in the attitude-attribution ratings that were observed in the previous two studies would be eliminated.

**Methods**

**Participants**

There were 36 young adults, 32 middle-aged adults, and 42 older adults who participated in this study. Of these participants, we omitted 24 from the analyses; 6 were young adults, 4 were middle-aged adults, and 14 were older adults. Of the excluded participants, 5 young adults, 4 middle-aged adults, and 10 older adults failed to recall the target writer’s instructions correctly; 3 older adults had extremely low vocabulary scores of less than five correct; 1 young adult had not been living in a Western culture for more than 10 years; and 1 older adult failed to complete the tasks. We included 30 young adults (aged 18–25 years, $M = 20.50, SD = 1.31$), 28 middle-aged adults (aged 35–55, $M = 45.67, SD = 5.84$), and 28 older adults (aged 60–80, $M = 66.72, SD = 4.74$) in the analyses. Participants were recruited in the same manner as in Studies 1 and 2. The majority of young adults in our sample were college freshmen, whereas on average middle-aged and older adults had completed some college.

**Procedure**

The procedure and materials for this study were identical to that of Study 1, with the addition of a cover story to make the no-choice situation more plausible. Participants were told the following:

This study is part of an ongoing project on attitudes and styles of reasoning. My professor offered a special topics course on social psychology a couple years ago and in it she taught a section on persuasion. The class assignment for this portion was to write a short persuasive essay on a controversial topic. The grade on this assignment depended on the student’s ability to demonstrate that he or she learned the principles of that section. In today’s study we are using these essays to investigate how people form impressions of others on the basis of limited information.

Participants completed tasks in the same order as in Study 1. Before completing the essay task, participants were again reminded that the writer of the essay was a student and the instructions given to the writer were reviewed. Participants then read one of the two essays and completed the essay questionnaire. On completion of the study, participants were thanked, debriefed, and received remuneration.

**Results and Discussion**

**Attitude Attribution**

The ANOVA revealed a main effect of age, $F(2, 83) = 4.32, p < .05, \eta^2 = .09$; however, the pattern of means was different from that of Studies 1 and 2. Planned contrasts using $t$ tests with a Bonferroni adjustment with a critical $p$ value ($p < .017$) showed that young and older adults did not differ in the extremity of their ratings, $t(56) = -1.75, p > .05$ (see Figure 3),
whereas young and middle-aged adults did differ in their ratings, t(56) = −3.12, p < .01. Older and middle-aged adults did not differ in their ratings of target attitude, t(54) = −1.03, p > .10. It appears that when a plausible motive is given for a target’s behavior, the age difference between older and young adults is eliminated.

Confidence
Contrary to Studies 1 and 2, our Age × Essay direction ANOVA revealed no effects of age or direction of the essay, p > .10, for confidence ratings. This was again consistent with the attitude-attribution finding.

Qualitative Responses
Interrater reliability for the two coders was 88% agreement. We again found type and quality to be the most common response, with 93% of young adults and 86% of middle-aged and older adults citing it as a reason for their attitude-attribution ratings. Of particular importance in Study 3 is that the percentage of older adults using the instructions in their attitude-attribution rating increased dramatically from Studies 1 and 2 (which were 1% and 7% respectively) to 29%. The young adults increased from 15% and 16% in Studies 1 and 2, respectively, to 33%. This is consistent with the idea that having a plausible reason for the no-choice situation increased both young and older adults’ awareness of the situational constraint and their willingness to factor it into their judgments. Only 3% of middle-aged adults mentioned that the directions to the writer influenced their attitude rating, suggesting that the plausibility of the situational constraint did not influence middle-aged adults’ responses. We found no differences between age groups in the reasons given for the confidence ratings.

GENERAL DISCUSSION
Our findings extend previous research showing that dispositional biases in older adults generalize to nonrelationship domains. We also more definitively show that older and middle-aged adults do not always consider situational constraints in making attitude-attribution judgments. In Study 1, both older and middle-aged adults exhibited a stronger correspondence bias than young adults (i.e., middle-aged and older adults tended to ignore the situation when making attitude attributions).

We also extended our past work and that of Follett and Hess (2002) by examining whether age differences in dispositional tendencies could be reduced by enhancing the salience of the situational constraint. Study 2 showed that simply heightening the perceptual salience of the constraint-inducing instructions through auditory presentation did not eliminate the age differences observed in the first study. However, Study 3 found that providing a situational constraint that gave a plausible explanation or motive for the target’s behavior in the no-choice condition eliminated age differences, at least between young and older adults, in the correspondence bias.

Perceptual Salience Versus Plausibility of the Constraint
Why did heightening the perceptual salience of the no-choice situation fail to eliminate age differences in the correspondence bias? Gilbert and Malone (1995) suggest it is not enough to notice the situational constraint. To engage in an adjustment phase that considers situational information, one must effortfully and deliberately make use of the information. Given that we dropped participants who incorrectly reported the situational constraint on the writer, we could be assured that all participants had situational information available to them. Age-related decline in processing capacity may have forced older adults to rely on easily accessible dispositional information and stop there, that is, not advance into an effortful adjustment stage (Blanchard-Fields & Beatty, 2005; Blanchard-Fields & Hertzog, 2000). This perspective is bolstered by the qualitative findings in which older and middle-aged adults did not report using the situational information in making the attitude attributions. However, it remains an open question as to whether reductions in cognitive capacity actually affected the older (and perhaps middle-aged) adults’ attitude-attribution ratings, given that we did not directly assess cognitive capacity in the context of the task. Moreover, a social motivational perspective suggests that older adults may have simply chosen not to expend the effort to deliberate in the adjustment phase irrespective of the perceptual salience of the instructions.

In fact, increasing the plausibility of the situational constraint eliminated age differences between young and older adults in the correspondence bias. In light of this, we argue that a social motivational mechanism is a more promising factor in determining the strength of the correspondence bias in general, and age differences in particular. This fits with recent social psychological research on the role motive inferences play in the process of making dispositional attributions (Fein, 1996, 2001; Reeder et al., 2004). These studies suggest that contextual information that suggests that situational constraint is related to the target’s behavior (such as accentuating the target’s motive in the plausibility instructions) may activate a schema that facilitates an adjustment process (Fein, 1996). Similarly, Reeder and colleagues furthered this argument in that situational constraints are more likely to affect dispositional inferences when the content of the target’s motives (e.g., perhaps an achievement motivation) is made salient. In this case, the accessibility of the target’s motive makes perceivers more willing to devote the cognitive effort necessary to adjust initial inferences by taking into account situational information.

Older adults may have been drawn to the motive of the target, given the plausibility instructions, which in turn evoked a schema that motivated them to engage in the extra processing necessary to consider situational factors in determining the “true” belief of the writer. This is supported by our qualitative findings that older adults focused more on the directions given to the writer as reasons for making their attitude-attribution ratings in comparison with the other two studies. Similarly, in a recent study, we found that whether or not specific beliefs were evoked by particular situations predicted the degree to which older adults would exhibit an extreme dispositional tendency (Blanchard-Fields & Hertzog, 2005). A motivational explanation of attributions also fits well with some of the recent aging literature. As Isaacowitz, Charles, and Carstensen (2000) pointed out, there appears to be a shift in older adults’ processing goals in that subjective and affective components are given more weight than more factual components. Again, the plausibility instructions may have accentuated subjective
social motivational information (i.e., the target’s motive). It is also possible that the plausibility instruction evoked other social schemas on the part of older adults, such as the generative concern about the essay writer’s grade, leading them to engage in further processing of the situational information.

If older adults are motivated to pay more attention to the social emotional aspects of behavior, this may also explain why the plausibility instruction worked to eliminate age differences whereas an increase in perceptual salience did not. Enhancing perceptual salience may not have provided the contextual information necessary to evoke a schema that suggests that situational constraints are important to consider. Thus, it becomes a motivational issue rather than a capacity one. Of course, future research is needed for this hypothesis to be tested directly, but the findings for older adults are consistent with this explanation.

The question remains as to why the middle-aged adults did not respond to the plausibility instructions in Study 3. Contrary to Follett and Hess (2002), we did not find that middle-aged adults were less likely to exhibit correspondence bias than young or older adults. Our middle-aged adults exhibited a higher degree of correspondence bias irrespective of increases in the salience of the situational constraint. Follett and Hess (2002) argued that the higher levels of cognitive complexity in middle-aged adults accounted for their findings. It could be the case that our middle-aged adults were lower in functioning (which could coincide with lower cognitive complexity). For example, middle-aged individuals were equivalent to older adults on letter sets across studies. However, post hoc analyses did not reveal strong correlations between measures of cognitive ability (e.g., letter sets) and attribution ratings. Thus, we cannot conclusively suggest that our middle-aged adults represent a low-functioning sample.

We can be confident, given the qualitative self-reports, that the majority of middle-aged adults did not focus their attention on the directions given to the target when making their attitude- attribution ratings as did young and older adults. In addition, whereas approximately 50% of the young and older adults reported multiple reasons that they jointly considered in making their attribution ratings, the majority (71%) of middle-aged adults reported only a single reason (i.e., most typically the type of argument). We suggest that it is possible that the plausibility motivation had a differential effect on middle-aged in comparison with older adults. In other words, the increased plausibility and the content of the motive that was made salient were not sufficient to motivate middle-aged adults to further process the situational constraints. This is supported by the contention by Reeder and colleagues (2004) that how an individual is affected by the specific content of the motive determines whether or not further processing will occur. This, of course, is a topic to address in future research.

Limitations and Future Directions

Although our findings are informative, several limitations of the studies have to be taken into account. First, it remains unclear whether having the situational constraint presented in an aural manner did not have an effect because the perceptual salience was not strong enough or because it was unimportant in activating a schema. This is especially important to consider in future research, given that we did not find an effect on young adults. It may be the case that other forms of perceptual salience documented in the social psychology literature could be more potent, such as placing the individual in a similar situation (Choi & Nisbett, 1998).

Second, a more direct assessment of the stages of attributional processes is needed to determine the nature of the schemas evoked that draw a person’s attention to the target’s motives and how this facilitates extra processing in the adjustment stage. In addition, future studies could include a purely social motivational condition in addition to the free versus force-choice conditions. Similarly, future studies might investigate the exact nature of the social motives that are inferred (e.g., wanting a good grade in a class). For example, Reeder and colleagues (2004) suggested that different situations lead the perceivers to infer different motives to the target and infer traits or attitudes that “fit” with those motives. In other words, the content of the motive is important for the kinds of traits that are inferred.

Finally, future research has to examine the perplexing finding that middle-aged adults did not respond to the plausibility instructions. For example, is it the case that our middle-aged adults were lower in cognitive complexity, which could explain our conflicting findings with previous research? Or is it the case that middle-aged adults are differentially motivated to engage in extra processing? That is, are there different types of motives that would motivate middle-aged adults to engage in an adjustment stage of attributional processing?

In sum, the present studies contribute to our understanding of conditions under which dispositional biases are found in older adults. We find that a key factor in determining whether or not older adults exhibit the correspondence bias involves social motivational aspects of the situation. In other words, awareness of the situational forces such as those operating in a no-choice condition is not sufficient to influence the judgments of older adults. However, if the situational force is accompanied by a plausible motivation for a target’s behavior, older adults may be more motivated to consider the situational constraint in making their judgments. It is apparent that dispositional inferences and motives are jointly considered by individuals when making attitude attributions.

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References


Appendix

Favorable essay

Capital punishment should be legal in all states. There are many reasons for having this position. Capital punishment decreases crime because it acts as a deterrent to criminals who engage in serious or life-threatening crimes. It also is useful because capital punishment reduces the amount of government taxes necessary for the upkeep of prison facilities by reducing the number of criminals who are incarcerated at a given time. Another benefit is that capital punishment teaches youths morality by making clear the line between right and wrong. Finally, capital punishment is the only just means to punish a murderer. Clearly, there are many good reasons why capital punishment should be legal in all states.

Unfavorable essay

Capital punishment should not be legal in any state. There are many reasons for having this position. Capital punishment is murder and will only increase the amount of violence in society. Also, there is the potential that capital punishment may sometimes execute an innocent person. Another problem is that capital punishment is out of date; in this day and age there are better ways to deal with criminals. Finally, capital punishment does not leave room for rehabilitation of the person. Clearly, there are many good reasons why capital punishment should not be legal in any state.