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Why we Ask Why: The Ways in Which Control and Stereotyping Biases Affect Internal Attributions

Tia Francis
University of Arkansas, Fayetteville

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Why we Ask Why:

The Ways in Which Control and Stereotyping Biases Affect Internal Attributions

An Honors Thesis submitted in partial fulfillment of the requirements for Honors Studies

in Psychology

By

Tia Francis

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J. William Fulbright College of Arts and Science

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Abstract

Since the idea of attributions was famously discussed by Fritz Heider (1958), a wide array of empirical research has focused on the phenomenon. Included within the sphere of attributional theories are internal attributions, which have been of particular interest to the psychological community for decades. Although there is no comprehensive theory for why people make these attributions, literature points to establishing control as a possible motivator. In addition, research suggests that people may make more extreme internal attributions about minorities, particularly when they are not aware they are relying on stereotypes. Participants ($N = 377$) observed a modified version of the quizmaster paradigm (Ross, Amabile & Steinmetz, 1977), which relies on the Fundamental Attribution Error. They first completed a control manipulation that either deprived their sense of person control or left it unaffected. Then, they watched a video depicting the quizmaster paradigm with either a black contestant or a white contestant. After the video, they rated quizmasters, contestants and themselves based on intelligence. Although the quizmaster paradigm proved to be robust, neither Race nor Control affected the strength of the internal attributions participants made. The lack of significant findings suggest that further research needs to be conducted to ascertain the causality of internal attributions.

Keywords: Internal Attributions, Fundamental Attribution Error, Control, Racial Biases

Why we Ask Why:

The Ways in Which Control and Stereotyping Biases Affect Internal Attributions

Despite decades of research devoted to the ways we explain human behavior, many questions on this topic remain unanswered. Classic research on the perceptions of observed behavior have unearthed many phenomena, with some of the most influential being attribution theories. (Gilbert & Malone, 1995; Heider, 1958; Liu & Steele, 1986; Peturson, Cramer & Pomerleau, 2011; Pittman & Pittman, 1980; Ross, 1977; Ross, Amabile & Steinmetz, 1977). Attribution theories have accumulated much interest since their inception, with some psychologists referring to them as some of the most fundamental phenomena to social psychology (Gilbert & Malone, 1995; Ross, 1977). Despite the wealth of research attribution theories have inspired, very few studies have focused on why they occur. Instead, much of the existing literature focuses on how they occur. Due to this, there is no widely accepted model for explaining attribution theories. Given the impact and breadth of interest they have sparked within the field of psychology, it is only appropriate that further research focuses on determining the motivations for making attributions.

Attributions

Attribution theories are a collection of biases, errors, and paradigms that utilize similar ideas and produce similar results, yet are distinct phenomena (Gilbert & Malone, 1995). In a general sense, attribution theories describe the ways in which humans perceive and explain the observed behavior of others. Attributions are typically split into two categories: internal and external (Heider, 1958). When a person observes the behavior of another and they begin to ask themselves why that person did what they did,

they will typically explain it in one of two ways: either as a result of internal

characteristics such as a personality trait or as a result of external influences such as peer

pressure. The former is what social psychologists call internal attributions, while the

latter are referred to as external attributions (Gilbert & Malone, 1995; Heider, 1958;

Peturson, Cramer & Pomerleau, 2011; Ross, Amabile & Steinmetz, 1977).

The Fundamental Attribution Error

As previously mentioned, internal and external attributions are key components to

a variety of related theories. Among these theories rest the focus of this study: The

Fundamental Attribution Error (FAE). FAE refers to the tendency for humans to make

internal attributions rather than external attributions when explaining observed behavior

(Eberhardt, 1999; Gilbert & Malone, 1995; Heider, 1958; Ross, Amabile & Steinmetz,

1977; Skitka, Mullen, Griffin, Hutchinson & Chamberlin, 2002). However, even with this

definition, FAE is best understood when put in the context of everyday occurrences. For

example, imagine a person who slipped while walking down a flight of stairs, causing

them to significantly injure themselves. For the sake of this example, it would be

important to note that their accident was due to an uncontrollable yet minor external force

(i.e. the stairs were slick in that one spot, they tripped over something unseen etc.). When

a nearby witness instinctively wondered why that person fell, it would be automatic for

them to assume it was because that person was clumsy. It should be noted that this

process seems to be an instinctive cognitive function that occurs without the observer

deliberately contemplating the event (Gilbert & Malone, 1995; Skitka et al., 2002). FAE

can be extended to a variety of situations, including ones more harmless than our

previous example, such as a student who is ten minutes late to class. Instead of

considering that student may have been the victim of a shoddy bus schedule, a professor and surrounding classmates might assume that student is late because they are lazy or irresponsible.

Although attribution theories have been a prominent topic in social psychology since Fritz Heider (1958) proposed them, FAE was not introduced to the psychological literature for another 20 years (Ross, 1977). The error was initially proposed by Lee Ross following his classic experiment commonly dubbed the quizmaster paradigm (Ross et al., 1977). In this original paradigm, participants completed a mock game show where they were assigned to one of three roles: quizmasters, contestants, and observers. As the names suggest, quizmasters asked ten general knowledge questions from their own knowledge bank, contestants attempted to answer these questions, and observers observed the quiz game. As to be expected, contestants largely failed to answer the questions correctly. However, when asked to rate the intelligence of quizmasters and contestants, observers consistently rated quizmasters as more intelligent than contestants, despite clear situational constraints (Gilbert & Malone, 1995; Ross et al., 1977). The effects of this paradigm are proven to be robust and consistent (Gilbert & Malone, 1995; Krull et al., 1999; Peturson et al., 2011; Skitka et al., 2002 etc.).

Following the introduction of attributions and FAE, a wide array of psychological research has been devoted to understanding their specific mechanisms. However, most of the existing literature investigate how people commit the error, rather than why. Research suggests that people commit FAE instinctively and automatically, meaning that it often occurs without deliberate cognitive effort on the part of the observer (Gilbert & Malone, 1995; Skitka et al., 2002). A prominent overview of the literature regarding general

attribution theories outlines general attributions as occurring in four steps that largely revolve around assessing a situation and determining typical behavior in that situation. If an actor's behavior falls within expected norms, then external attributions will be made. However, if an actor's behavior falls outside of expected norms, then internal attributions will be made (Gilbert & Malone, 1995). In the previously described quizmaster paradigm, observers assessed the situation of the mock quiz game, however they incorrectly assessed the true difficulty of the task contestants were assigned to. Therefore, their incorrect assessment caused them to determine typical behavior from a perception of the situation that did not reflect reality (Gilbert & Malone, 1995). Thus, when a contestant failed to answer most of the questions, observers attributed this to a lack of intelligence due to their fundamental misunderstanding of the situation. Alternatively, research shows that even after an internal attribution has been formed, it can be rejected if there is proper motivation to do so (Skitka et al., 2002).

Deprivation of Control

Now that the process of how people commit FAE has been established, it is time to ask ourselves why people commit it. Although several theories exist to generally explain why attributions are made, very little time has been taken to empirically examine any of these theories in the context of FAE. One commonly proposed, yet largely untested theory, is that of control. It is well established throughout social psychology that people crave control. Thus, depriving them of control causes them to seek out systems and strategies to reestablish it (Heider, 1958; Kelley, 1969; Kelley, 1971; Landau, Kay & Whitson, 2015; Liu & Steele, 1986; Ma, Landau, Narayanan & Kay, 2017; Pittman & Pittman, 1980; Rothbaum, Weisz & Snyder, 1982).

Attributions have been proposed as a strategy for reestablishing control since the inception of attribution theories (Heider, 1958). While Heider agreed that establishing control is a possible explanation (Harvey, Ickes, & Kidd, 1976), one of the most well-known arguments for control as a motivator came from famed social psychologist Harold Kelley (1971). According to him, attributing an outcome to an internal characteristic gives people the notion that the outcome will be repeated, since internal characteristics are presumably constant, and thus can be predicted and viewed as controllable (Harvey et al., 1976; Kelley, 1969; Kelley, 1971). An analysis of the relationship between attributions and control found that people often minimize chance as a contributor to unrelated events and minimize the role of situational constraints to both personal and impersonal predicaments (Wortman, 1976). It must be noted that this study did not investigate attributions regarding observed persons, but the role of self-attributions in establishing environmental control. However, this trend of minimizing chance and situational constraints to avoid unpredictable outcomes provides a fundamental basis for why people form internal attributions.

Expanding on this idea, Pittman and Pittman (1980) found that increasing deprivation of control in participants resulted in more extreme internal attributions. This study provided evidence for the hypothesis that depriving people of control increases the motivation to reestablish control through internal attributions. However, it must be noted that this experiment did not investigate FAE, but a related attribution theory called the observer bias (Gilbert & Malone, 1995; Jones & Harris, 1967; Liu & Steele, 1986; Pittman & Pittman, 1980). Even though both FAE and the observer bias describe how perceived behavior and internal attributions intersect, there is one important difference

that distinguishes them. In the quizmaster paradigm, contestants are constrained by what is called a behavioral constraint (Gilbert & Malone, 1995). In this type of situational constraint, actors behave as they do because their options are limited due to an external factor. Within the quizmaster paradigm, contestants are constrained by the inane questions of the quizmaster. Thus, if the contestant does not know the answer to the question their behavior is limited to answering incorrectly, despite their own wants, feelings, thoughts, or desires (Gilbert & Malone, 1995). The paradigm used by Pittman and Pittman (1980) differs in that participants read a student essay in favor of Fidel Castro, wherein half of the participants were told students were free to choose their stance and the other half were told students were assigned stances by their instructor. Given the effects of attributions, participants in both conditions unsurprisingly believed that the student held pro-Castro beliefs, even with the knowledge that the student had been assigned the position (Jones & Harris, 1967; Liu & Steele, 1986; Pittman & Pittman, 1980). This paradigm relies on what is called a psychological constraint (Gilbert & Malone, 1995). This constraint differs from behavioral constraints in that the situation does not directly limit an actor's options. Instead, it simply changes their perception of those options. Theoretically, the student assigned to the pro-Castro stance could write an anti-Castro essay, however the motivation of obtaining a good grade limits their behavior.

Although this difference may seem pedantic, it is an important distinction that separates FAE and the observer bias as two different paradigms that produce similar results. Thus, while ample literature exists to suggest control could be a motive for committing FAE, no studies exist that specifically and empirically investigate their relationship. Assuming control is a motivation for making internal attributions, the main

hypothesis of this study is that when people are deprived of a personal sense of control they will be more likely to make more extreme internal attributions in the context of FAE.

If this hypothesis is not rejected, then this research will provide a working theory to explain one of social psychology's most fundamental phenomena. Much analysis surrounding attributions have theorized control as an explanation, but little experimental research exists to confirm this and no research specifically investigates FAE. This study aims to correct the gap in the current literature and solidify the theory of control as a viable explanation for why attributions are spontaneously created.

Racial Stereotyping Biases

With a viable hypothesis established for why we ask why, its time to investigate the different contexts that may affect the strength of internal attributions. A secondary aim of this study is to analyze the ways racial stereotypes and internal attributions intersect within the context of FAE. It is well-acknowledged within the psychological field that black people are commonly stereotyped as unintelligent (Devine & Elliot, 1995; Kobach & Potter, 2013; Steele, 1997; Steele & Aronson, 1995; Yoo & Pituc, 2013). Additionally, research suggests that most contemporary racial stereotypes are expressed through implicit racism, or racism that is unconscious and often masked by mitigating factors (Banaji & Greenwald, 2013; Dovidio, Kawakami & Gaertner, 2002; Fiske, 2000; Greenwald & Banaji, 1995) In the context of FAE, this means that observers who watch a mock quiz game involving a black contestant and a white quizmaster might be motivated by racial stereotypes to rate black contestants as exceptionally unintelligent when compared to a white contestant. However, instead of attributing their low ratings of black

contestants to racial stereotypes, observers can highlight the contestants' inability to answer questions in a distinct example of implicit racism. Although no research to my knowledge exists that examines the effect of racial stereotypes on FAE, several studies have found evidence for a general link between racial stereotypes and attributions (Hart & Morry, 1996; Lukyste, Waite, Avery & Roy, 2013; Miller, Baer & Staggenborg, 1977).

Similarly, research suggests that FAE and gender stereotypes intersect. In fact, when observers are presented with gender minorities and aren't aware they might be relying on stereotypes, observers will be more likely to rate female contestants as less intelligent than comparable male contestants (Peturson et al., 2011). Due to the literature which links attributions and racial stereotypes, there is no reason to think racial stereotypes and FAE would interact differently than gender stereotypes and FAE.

Although FAE is a convenient model for participants to express implicit racism, it does not explain why participants might rely on stereotypes when making internal attributions. One prominent explanation is the idea of salience. Research shows that changing the prominence of a point of view can cause people to attribute more importance to and be more reliant on what is visually salient in that point of view (Duval, Duval & Neely, 1979; Storms, 1973). Moreover, observers tend to make more extreme attributions about stimuli that has been made more salient (McArthur & Solomon, 1978; Morry, 1996; Taylor, Fiske, Etcoff & Ruderman, 1978). This can further be applied to the salience of race. In terms of racial biases, psychologists theorize that observers find members of outgroups (i.e. racial minorities) to be more salient when compared to ingroup members (Fiske, 2000). Thus, given the impact salient features can have on point of view and the evidence for race as a salient feature, evidence suggests that participants

would emphasize the importance of race in black contestants participating in the quizmaster paradigm. This may trigger implicit stereotypes of unintelligence regarding black people observers hold, therefore causing participants to rate black contestants lower than white contestants.

Given the existing literature, it is expected that when participants view the mock quiz game devised by Ross et al. (1977) with a white quizmaster and black contestant, they will make more extreme internal attributions regarding the intelligence of the black contestant when compared to a white contestant. Although research suggests that FAE can be affected by gender stereotypes, very little data similarly links racial stereotypes and FAE. If this study finds support for this link, then this will showcase the widespread impact of implicit racial biases.

Current Research

The culmination of the current research suggests control as a viable motivator for creating internal attributions, with racial stereotypes acting as a secondary effect. The present study thus investigates the legitimacy of the control hypothesis using the previously described quizmaster paradigm. Participants completed a manipulation which either deprived them of self-control or had no effect on their self-control before viewing a video of a quizmaster scenario. Additionally, participants either viewed a video with a black contestant or a white contestant. I hypothesize that participants who are deprived of control will be more likely to make extreme internal attributions regarding the contestant. Similarly, participants who observe a black contestant will be more likely to make extreme internal attributions regarding the contestant when compared to those who observe a white contestant. Finally, I hypothesize that these two variables will interact

and participants who were deprived of control and viewed a black contestant will be the

most likely to make the most extreme internal attributions.

Method

Participants

377 participants (M_{age} = 19.15, SD = 2.49, age range: 18-53 years) were recruited

from a pool of University of Arkansas students enrolled in an introductory psychology

course. As compensation for participating, they received credit to fulfill a course

requirement. The majority of participants were female (71.7%) and White (78.8%).

However Hispanic (7.1%), Black (5.3%), Asian (3.2%) and Native American (1.9%)

participants were also present. A total of 3.4% participants additionally identified as

"Other".

Construction of Stimuli

The four videos utilized in this study were modeled after Ross' quizmaster

paradigm (1977) and were constructed using participants from a previous study.

Participants (N = 14) were University of Arkansas students enrolled in an introductory

psychology course and were selected from a prescreening survey. Participants were

recruited through email and were only selected if they marked their race as either White

or Black in the prescreening survey. Upon entering the lab, participants were paired with

a confederate who was consistent among all sessions. Participants were then assigned to

the role of the contestant, while the confederate was assigned to the role of the

quizmaster. Participants were led to believe that the roles of quizmaster and contestant

were randomly assigned. Following role assignments, the research assistant explained

that the session would be videotaped and, after obtaining audible consent, began

videotaping the remainder of the session. The research assistant proceeded to explain the format of the trivia scenario and the quizmaster and contestant roles. The research assistant instructed the quizmaster to generate ten general knowledge questions. However, the ten questions were consistent across all sessions. Following this, the research assistant instructed them to ask the contestant all of their questions within a ten-minute time period. If the contestant did not answer the question correctly, the research assistant instructed the quizmaster to give the correct answer.

Following the conclusion of the trivia scenario, the research assistant stopped the video recording, dismissed the confederate and debriefed the participant. Participants were informed that their video might be used in a future study and their verbal consent was obtained. Finally, participants were asked to not reveal any of the study's details before being thanked for their time.

From the videos obtained from these sessions, four were ultimately chosen. Two of the videos showed a black contestant and the remaining two videos showed a white contestant. All the videos were selected based on time of the video, clarity of the video, clarity of contestant race, and mood of the contestant. In order to ensure the videos were consistent across these variables, two of the videos chosen included a contestant who answered one question correctly and two included a contestant who answered no questions correctly. Of the two videos with contestants who answered one question correctly, one contestant was black and the other was white. Similarly, between the two videos of contestants who answered no questions correctly, one contestant was black and the other contestant was white. No a priori hypothesis existed regarding the number of

correct answers and preliminary analysis showed no significant effect of this variable. Thus, all further analysis collapses over this variable.

Procedure

This study was a 2 (contestant race; black contestant, white contestant) x 2 (control; deprivation of control, no deprivation of control) between-subjects design. All participants completed an online survey which consisted of a personal control manipulation, a video, several sets of questions, and a symbolic racism scale. The survey began with the personal control manipulation, which was presented as a memory task with two variations. The memory task was originally created by Kay et al. (2008) to manipulate personal control. Participants were asked to "Please try and think of something positive that happened to you in the few months that **was [not]** your fault (i.e., that you had [*absolutely no] control* over). Please describe this event as vividly as you can in 4-6 sentences," (Kay et al., 2008).

On the following page, participants read a brief excerpt explaining the trivia scenario they were about to watch. The excerpt explained that the quizmaster and contestant were participants in a previous study and that their roles were randomly assigned. After reading this page, participants viewed one of the four videos. The videos began with an off-screen research assistant giving instructions to the quizmaster regarding question generation. Although the videos showed the quizmaster creating their questions, these sections of the videos were sped up to maintain participant interest. The remainder of the videos followed the procedure outlined previously. Once the quizmaster and contestant finished the trivia game, the videos ended. All the videos lasted in between four minutes and twenty seconds and four minutes and forty seconds.

After viewing the video, participants rated the relative intelligence and general

knowledge of the quizmaster, the contestant, and themselves using a 100 point Likert

scale similar to that used by Ross et al. (1997). It was noted within the instructions that 0

represented an extremely small amount of intelligence or general knowledge and 100

represented an extremely large amount of intelligence or general knowledge. For the

purposes of data analysis, the intelligence and general knowledge items were combined

into composite scores for both quizmasters $r(377) = .435$, p < .001 and contestants

$r(377) = .598$, p < .001. An additional item was presented to participants that asked them

to rate how likely they thought the contestant or quizmaster would succeed at a general

knowledge-based game show on a100 point Likert scale similar to those used for the

previous two items. This question was exploratory and thus was removed from

subsequent analysis. Other items on the questionnaire included several attention checks.

Following the completion of this questionnaire, participants finished the study with the

symbolic racism scale (Henry & Sears, 2002). Typical items on this scale asked

participants to rate how much they agreed with statements such as, "It's really a matter of

some people not trying hard enough; if blacks would only try harder they could be just as

well off as whites," or asked their opinions of statements such as, "Some say that black

leaders have been trying to push too fast. Others feel that they haven't pushed fast

enough. What do you think?" The items on this scale were reverse scored where

necessary and then averaged to form a symbolic racism index ($\alpha = .80$).[1]

The study concluded with a debriefing page that described the research

hypotheses, asked participants to not discuss the details of the study with potential

participants, and thanked them for their time.

Results

First, I hypothesized that the results of this study would replicate the results of Ross et al. (1977); in that study, contestants were consistently rated lower in intelligence when compared to quizmasters (as is the primary expression of FAE). I additionally hypothesized that participants deprived of personal control will be more likely to make stronger internal attributions regarding contestants, as will those who view a black contestant versus a white contestant. Finally, I predicted that the attributes of control and contestant race would interact. Within this interaction, I hypothesized that participants exposed to a black contestant and deprivation of personal control would be the most likely to make the most extreme internal attributions. In order to test the interaction between these variables, a difference score between the composite intelligence scores of quizmasters and contestants was computed and used for analysis.

Attention checks

Attention was successfully held in most participants. Following the items testing perceived general knowledge and intelligence of the quizmasters and contestants, participants were asked to answer several attention checks. The first two of these checks asked contestants to report the race of the quizmaster and of the contestant. Of all the participants, only eight misreported the race of the quizmaster and five misreported the race of the contestant. The third attention check asked participants to report how many questions the contestant answered correctly. Overall, only seven participants significantly misreported the number of questions answered correctly, wherein a margin of error of three questions was considered significant. The final attention check asked participants to

list as many questions as they could from the video. Only twenty-four participants were unable to identify at least five of the ten questions.[2]

Primary Analysis

To test the first prediction, a paired sample t-test was conducted. This analysis supported the original results of Ross et al. (1977), wherein quizmasters (M = 77.63, SD = 13.24) were considered more intelligent than contestants (M = 48.14, SD = 14.34), t(375) = 30.04, p < .01.

In order to test the remaining hypotheses, three separate Race (black contestant, white contestant) x Control (deprivation of control, no deprivation of control) analysis of variances (ANOVAs) were conducted.[3] The first of these ANOVAs used the composite intelligence score for the quizmaster. Between the two main effects of Race and Control, no significant difference was found for either, F(1, 373) = 1.66, p < .20 and F(1, 373) = .344, p < .56 respectively. Additionally, there was no significant interaction between Race and Control, F(1, 373) = .035, p < .86. When participants were deprived of control, they did not rate quizmasters different when viewing white or black contestants (M = 78.77, SD = 13.18) and (M = 77.27, SD = 12.16) respectively. Similarly, when participants were not deprived of control, quizmasters were rated similarly across both the white and black contestant conditions (M = 78.23, SD = 14.10) and (M = 76.12, SD = 13.53) respectively.

The second ANOVA used the composite score of contestant intelligence. Similarly, no main effects were found for either of the variables of Race or Control, F(1, 372) = 1.26, p < .27 and F(1, 372) = .001, p < .98 respectively. Additionally, no significant evidence was found to suggest an interaction between Race and Control, F(1,

372) = .011, p < .92. Participants who were deprived of control did not rate white or black contestants differently, (*M* = 48.87, *SD* = 14.89) and (*M* = 47.36, *SD* = 13.29) respectively. Participants who were not deprived of control also did not rate white or black contestants differently, (*M* = 49.07, *SD* = 14.29) and (*M* = 47.25, *SD* = 14.98) respectively.

The third ANOVA used the difference score between quizmasters and contestants. Again, no main effects were found for either Race or Control, $F(1, 372) = .002, p < .97$ and $F(1, 372) = .183, p < .669$ respectively. No significant interaction was found between the variables of Race and Control, $F(1, 372) = .002, p < .97$. Participants who were deprived of control did not significantly rate contestants higher or lower than quizmasters when presented with a white or black contestant, (*M* = 29.90, *SD* = 18.13) and (*M* = 29.92, *SD* = 19.93) respectively. Similarly, participants who were not deprived of control did not rate contestants higher or lower than quizmasters when presented with either a white or black contestant, (*M* = 29.16, *SD* = 19.89) and (*M* = 28.97, *SD* = 18.41) respectively.

Discussion

In this study, I explored the intersections and the effect of personal control and racial stereotyping on the expression of internal attributions. To my knowledge, this study is one of the first to investigate the relationship between racial stereotyping and FAE. In addition, it is the first to analyze the relationship between personal control and FAE specifically. It is also the first to investigate possible interactions between control and racial stereotyping.

In line with Ross et al. (1977) and the existing literature, the quizmaster paradigm was shown to be robust. Participants consistently and significantly rated quizmasters as more intelligent than contestants, despite clear situational constraints. However, the results of this study stand in contrast to the proposed hypotheses in all other aspects. While some evidence suggests that depriving participants of control will lead to them creating more extreme internal attributions within the observer bias (Liu & Steele, 1986; Pittman & Pittman, 1980), this effect was not found in the context of FAE. Participants who described a positive event they had no control over did not significantly rate contestants any lower or higher than participants who described a positive event they had control over.

Two secondary hypotheses also explored the effect of racial biases and whether Race and Control would interact to affect the internal attributions made regarding contestants. The results of this study do not support either of these secondary hypotheses. When participants were presented with black contestants, they were not more likely to rate them lower in intelligence than participants presented with white contestants. This lack of difference between perceptions of white and black contestants contrasts with results from a previous study, which showed that biases against marginalized communities could elicit a difference in contestant ratings (Peturson et al., 2011). Furthermore, no evidence was found to support an interaction between Control and Race. Participants who experienced both the control manipulation and a black contestant were no more likely to rate contestant intelligence lower than other participants.

Explaining the Results

    In conclusion, the results of this study did not support any of the proposed

hypotheses, aside from confirming the quizmaster paradigm. These results provide a

contrast to the existing studies that investigate how these variables affect internal

attributions (Liu & Steele, 1986; Peturson et al., 2011; Pittman & Pittman, 1980).

However, the current study differs from these previous studies in fundamental ways

which may explain our results.

    In regards to the control manipulation, this study utilized a different methodology

than what was used by Pittman and Pittman in 1980 and later replicated by Liu and Steele

(1986). This study replicated a survey item used by Kay et al. (2008) in a study

examining how control and religious beliefs interact. Although that study does not relate

to the attribution theories investigated here, it seemed to provide a statistically significant

control manipulation that fit well with this study's methodology. Whereas the control

manipulation used by Pittman and Pittman (1980) required multiple research assistants

and a significant amount of time, the chosen manipulation lent itself well to an online

survey format and was compatible with study sessions that ran multiple participants at

once. Before continuing with this explanatory discussion, it should be noted that the

Pittman and Pittman (1980) manipulation and the Kay et al. (2008) manipulation were

derived from two distinct psychological approaches regarding control. Whereas Pittman

and Pittman (1980) relied on the learned helplessness approach, Kay et al. (2008) relied

on compensatory control. However, simply because their manipulations were derived

from different approaches does not mean that they cannot provide a similar effect in

participants. In fact, no research to my knowledge exists that suggests these two

approaches might produce different worldviews.

Despite the previously stated factors and evidence, further investigation indicates that the chosen manipulation may not have been effective in depriving participants of control. A manipulation check for control was not included in the measures participants completed, thus subsequent implications are drawn from extrapolations of the data. A closer look at the data reveals that the instructions for the control manipulation may have been unsuccessful. By instructing participants to write "4-6 sentences" about their experiences, this introduced an unpredicted level of variability. Participants who met the bare minimum of four sentences may have done so with four brief sentences that may not have invoked descriptive enough thoughts of the situation to affect feelings of control. Due to this variability, even a participant who wrote six such brief sentences may not have been impacted by the manipulation as much as a participant who wrote four lavishly detailed sentences. Thus, instructing participants to answer based on a number of sentences was not a standardized approach. Due to the lack of standardization, participants may not have been as immersed in their past experiences as needed to evoke the desired effect.

Alternatively, attention checks suggest that the Race manipulation was successful. As previously stated, only five out of all participants misreported the race of the contestant. It is likely that inattention can account for the small number of participants who misreported contestant race, rather than ambiguity or confusion of their race. Thus, it is reasonable to believe that the Race manipulation was successful. Despite robust literature which suggest stereotypes regarding black intelligence are ingrained in American culture (Devine & Elliot, 1995; Kobach & Potter, 2013; Steele, 1997; Steele & Aronson, 1995; Yoo & Pituc, 2013), there are several mitigating factors which may

explain the results pertaining to the Race variable. First, due to constraints involving the

videos available for selection, participants only viewed female contestants. It is possible

that using only female contestants may have affected the expression of stereotyping

attitudes. There is no study to my knowledge that analyzes possible differences between

stereotypes of black women and men or that specifically investigates stereotypes of

intelligence regarding black women. Rather, much of the existing literature focusing on

black women revolves around perceptions of sexuality and emotional depth (Cooley,

Winslow, Vojt, Shein & Ho, 2018; Rosenthal & Lobel, 2016; Smith, LaFrance &

Dovidio, 2017). In addition, research suggests that the intersection of gender and race in

black women plays an important role in creating new stereotypes. In other words, the

stereotypes applied to black women are unique and more than simply a combination of

the stereotypes typically applied to black men and white women (Ghavami & Peplau,

2013). Thus, it is possible that contestant ratings did not differ between black and white

contestants due to different stereotypes associated with black men and women.

Another explanation of the results lies in the concept of individuating information.

Individuating information relies on the idea that people tend to rely on stereotypes when

they lack individual information about a target. However, when distinct and unique

information about this target is acquired, people are less likely to rely on stereotypes

(Fiske, Lin, & Neuberg, 1999; Singletary & Hebl, 2009). In terms of racial biases, this

concept applies in that negative racial stereotypes will be more strongly and frequently

endorsed when ambiguity is present (Dovidio & Gaertner, 2000). For example, when

employers were asked to rate black and white candidates for a job, there was no

difference between their ratings of the two racial groups when looking at exceptionally

weak or strong applications. However, implicit racial bias became apparent when researchers compared ratings of average black candidates and average white candidates (Dovidio & Gaertner, 2000). This phenomenon is due to exceptionally weak or strong applications acting as individuating information for those candidates. However, when neither high nor low performance existed to individuate the black candidate, raters resorted to stereotypes. This model may also be applied to the quizmaster paradigm. When participants viewed black contestants answering less questions than expected, this may have had a similar effect as a weak black candidate for a job. In other words, their poor performance may have individuated them, thus mitigating the expression of negative stereotypes.

Limitations

It is important to remain aware that the findings of this study are limited to the context of the chosen methodology. As outlined above, the control manipulation and videos were inherently limited in their scope. The lack of a standardized word count on the control manipulation and the use of only female contestants are both factors which may have limited the results of the study, as did a lack of a manipulation check. Furthermore, the quizmaster paradigm presents a highly specific context for the existence of FAE, which may not be generalizable to everyday occurrences. Due to this, this study cannot attest to how often FAE is committed or how generalizable it is.

It is also important to note that the source of the participant pool additionally limits the study. All participants were college students, with the mean age around nineteen years old. This inherently limits the generalizability of the results to more diverse populations in terms of age, gender, and race.

Implications

Despite the null results regarding Race and Control, this study highlights the robustness of FAE and internal attributions. Even under a modified version of the quizmaster paradigm, participants consistently rated quizmasters as more intelligent than contestants. This adds to the existing support for internal attributions, which are held up by a strong tradition of psychological research. Attribution theories were proposed over sixty years ago, yet their importance within social psychology has persisted. The various phenomena that attribution theories encompass have withstood multiple replications and have been applied to a wide variety of subfields, including clinical, cognitive, and evolutionary psychology (Gilbert & Malone, 1995; Jones & Harris, 1967; Liu & Steele, 1986; Peturson et al., 2011; Pittman & Pittman, 1980; Ross et al., 1977;).

Despite the importance and widespread application of attribution theories, our grasp of their mechanics is still limited. Given the null results of this study, this may be attributed to the complexity of the mechanisms involved in attribution theories. In their extensive literature review, Gilbert and Malone proposed that the control hypothesis alone was insufficient in explaining attribution theories (1995). Instead, the authors mused that perhaps it was a combination of control and culture that created the intersections of control and attributional theories. According to them, humans have many methods for reestablishing control, however internal attributions seem to be the method preferred by Western cultural norms (Gilbert & Malone, 1995).

Admittedly, the addition of culture to the control hypothesis does not directly explain this study or its results. The majority – if not all – of the participants in this study were products of Western cultural norms. However, it adds a level of depth to the original

control hypothesis that naturally leads to the following question: are attribution theories more complicated than we originally thought? For years following their inception, hypotheses regarding their causality were neat and self-contained. The control hypothesis was included among these neat theories. However, perhaps attribution theories cannot be explained with one neat theory, but instead exist at the intersection of multiple, complex variables.

Given the multiple theories that exist and the little robust empirical evidence to support them, further research should be devoted to the causality of attribution theories. On one hand, perhaps internal attributions can be explained by the original control hypothesis and the null results of this study are purely a result of an ineffective manipulation. On the other hand, perhaps internal attributions are caused by several variables which interact at varying levels. Without further research, there is no way to determine the truth. This gap in the literature should be remedied, especially considering the prominence attribution theories hold in social psychology.

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Footnotes

[1] The Symbolic Racism Scale was an exploratory item. Analysis showed that the index created from this scale did not intersect or interact with the data in any significant way. Due to this, this item is not discussed further in the text.

[2] More Stringent standards, where those who missed these checks were excluded from analysis, did not alter the findings in any way.

[3] As a reminder to the reader, all subsequent analysis collapses across the number of questions contestants answered correctly.