THE AMERICAN DREAM:
THE EFFECT OF MERITOCRACY BELIEFS OF
WOMEN ON FUTURE EXPECTATIONS OF SEXISM

BY

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Members of stigmatized groups differ in the degree to which they feel that society can be accurately described as meritocratic. Previous research investigated the effects of endorsing or rejecting meritocracy beliefs on women’s predictions of future sexism, and found that after a sexist event, women predicted future sexism at a different company to be less likely when they were high in meritocracy endorsement, compared to low. The current research first investigated mechanisms that might be driving this effect, hypothesized to be either compensatory in nature or generalizing in nature. Second, the current research attempted to examine how attitude certainty might moderate the previous findings. Female participants read a vignette in which they applied to and were rejected from a hypothetical management position, for either an unspecified reason or a sexist reason. Our results indicated that neither of the proposed hypotheses fully explained the findings; this may have been due to the inclusion of measures of attitude certainty. Thus, future research should further examine the role that attitude certainty might play in one’s endorsement (or lack of endorsement) in meritocracy beliefs, and the effects these constructs might have on members of stigmatized groups.
INTRODUCTION

Social psychology has long been concerned with the nature of stereotyping and prejudice and the methods through which the deleterious consequences resulting from these processes may be reduced (e.g., Allport, 1954). To that end, the study of prejudiced individuals and processes that promote stereotyping, prejudice, and discrimination remain a well-researched topics within the domain of social psychology. Additionally, social psychologists are concerned with the negative consequences that may occur as a result of being a part of a “stigmatized group” – a group that frequently experiences widely-known negative stereotyping – as part of an effort to help these individuals cope with the chronic negative stressors of discriminatory events (Pinel, 1999).

These chronic negative stressors experienced by members of a stigmatized group can include events like systematic structural barriers to resources, such as lower pay for women compared to men, as well as interpersonal forms of threat, sometimes as severe as physical violence, which may contribute to generally negative outcomes for some targets of prejudice (Major, Quinton, & McCoy, 2002). Social psychologists are also concerned with psychological stressors such as stereotype threat (e.g., Steele & Aronson, 1995), the increased pressure to succeed experienced by individuals who are performing a task in which they are negatively stereotyped (Brown & Pinel, 2003). Unpleasant and stressful processes such as stereotype threat likely contribute to negative consequences for stigmatized individuals that can be both psychological (e.g., Schmitt, Branscombe, Kobrynowicz, & Owen, 2002; Tajfel & Turner, 1986) and physical in nature (e.g., Eliezer, Townsend, Sawyer, Major, & Mendes, 2011; Shavers & Shavers, 2006; Williams, Yu, Jackson, & Anderson, 1997). For example, women’s blood pressure
increases in response to perceived discrimination based on gender (Eliezer et al., 2011), and perceptions of discrimination harm psychological well-being (life satisfaction, positive affect, etc.) in women, but do not harm well-being in men (Schmitt et al., 2002). These negative outcomes are pervasive and of concern to researchers in the field of stereotyping and prejudice.

Research on this topic has gone through multiple distinct approaches since its inception. For example, early researcher Gordon Allport argued that negative psychological outcomes like poor self-esteem and self-hatred that could come from discrimination were prevalent amongst stigmatized groups (Allport, 1954). However, subsequent research did not necessarily support these early assumptions; individuals from chronically stigmatized groups often reported positive levels of well-being (e.g., physical and mental health) and self-esteem (feelings of self-worth) (Major, Quinton, et al., 2002). Although it is certainly worth considering whether or not these self-report findings reflect the whole picture, nevertheless these findings led to a resilience, adaptation, and coping perspective within the literature (Major, Quinton, et al., 2002). Crocker and Major (1989), for example, proposed three cognitive processes that could explain how group membership in a stigmatized group could actually help protect self-esteem: first, by attributing negative feedback to the discrimination of others, rather than one’s own shortcomings, second, by comparing oneself within one’s group rather than to advantageous group members, and third, by placing extra value on attributes in which one’s group already performs well. So to some extent, targets of prejudice have been shown to be more resilient than was initially thought in the face of chronic, frequent discrimination experiences.
While targets of prejudice have indeed been shown to be more resilient (that is, maintaining or strengthening their well-being) than was initially thought in the face of chronic, frequent discrimination experiences, recent research emphasizes variability in response; that is, it seems more accurate to say that some members of stigmatized groups can show resilience to prejudicial events, whereas others can show vulnerability (Major, Quinton, et al., 2002). In fact, responses to discriminatory events have been shown to vary, differing between groups, within groups, or even within the same individual across different contextual events (Major, Quinton, et al., 2002; Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Pinel, 1999). Some stigmatized groups actually show higher self-esteem on average compared to a non-stigmatized group (e.g., African Americans compared to European Americans), while others show lower self-esteem (e.g., overweight women compared to non-overweight women) (Miller & Downey, 1999; Twenge & Crocker, 2002). Some individuals show different responses to prejudice based on different contexts (e.g., stereotype threat research, such as Steele & Aronson, 1995). And finally, some individuals within the same group seem to be more resilient to prejudice, maintaining positive well-being in the face of discriminatory events, whereas others are more vulnerable (Friedman & Brownell, 1995). Thus, recent research emphasizes that both negative and positive outcomes are common responses to prejudice and discrimination, often attempting to determine the factors that influence targets to either outcome.

Previous research has identified several influential factors that determine whether a target responds to prejudice resiliently or vulnerably. For example, stigma consciousness (the extent to which people expect to be stereotyped) and status-based
rejection sensitivity (the extent to which people expect to be rejected based on group membership) (Mendoza-Denton et al., 2002; Mendoza-Denton, Shaw-Taylor, Chen, & Chang, 2009; Pinel, 1999) are individual difference variables that can influence the way a person reacts to discriminatory events. A growing body of research in this domain has been the study of the effects of worldview, particularly endorsement of meritocracy beliefs, on experiencing discrimination for the targets of prejudice. Endorsement (or lack of endorsement) of meritocracy beliefs may have important implications for the resiliency or vulnerability of individuals in response to discrimination.

**Endorsement of Meritocracy Beliefs**

Worldviews (also sometimes referred to as lay theories or status ideologies) are a type of knowledge structure that, first “reduce[s] epistemic uncertainty by providing understanding, prediction, and control,” and second, are “a structured and coherent system of beliefs, rules, and concepts” (Levy, Chiu, & Hong, 2006, p. 6). Often, studies refer to these lay theories as “legitimizing myths” that exist as a means of justifying and maintaining the existing status quo. One category of lay theories relates to how outcomes (for example, goods or money) are distributed among groups, and of particular interest to this research is endorsement of the status ideology of meritocracy. One’s degree of endorsement of meritocracy beliefs has been shown to have important implications for the targets of prejudice, particularly as a moderator of feelings of threat, well-being, and negative affect (Townsend, Major, Sawyer, & Mendes, 2010).

Early research into principles of fairness and justice suggests that people generally prefer equitable, meritorious methods of distribution (in which one’s outcome is proportional to one’s effort) to principles of equality (everyone gets equivalent
outcomes) and need (those in need get priority), particularly in situations in which productivity is desired (Cook & Hegtvedt, 1983; Deutsch, 1975). Recent research has further examined these concepts, particularly the degree to which individuals believe that meritocracy exists in current society (as opposed to preference for merit principles). This particular lay theory has been termed “meritocracy beliefs,” commonly defined as the belief that achievement in society (i.e., outcomes such as wealth and jobs) is based solely on the principle of merit (Son Hing et al., 2011; Townsend et al., 2010).

A common tenant of meritocracy beliefs is that any individual, regardless of group membership, can be successful if he or she works hard enough and/or is talented enough (Townsend et al., 2010). Another supposition arising from endorsement of meritocracy beliefs is that individuals who are successful are necessarily meritorious in nature. Meritocracy beliefs are thought to be prevalent in American society today, such that they have even been referred to as “the American Dream” (Townsend et al., 2010). Furthermore, meritocracy cues seem to be widely prevalent in American society, existing in media ranging from advertisements to children’s stories; Americans receive a pervasive message from society that hard work and talent are the keys to success (McCoy & Major, 2007).

Despite the commonplace nature of meritocracy-related cues, researchers have found consistent individual differences in endorsement of meritocracy beliefs, both in prejudiced individuals and in the targets of prejudice (Major, Quinton, et al., 2002). That is, people differ in the extent to which they believe that advancement in society is solely a function of merit. Belief in a meritocracy is most frequently measured using survey methodology; items assessing the fairness of society, such as “Our society is an open
society where all individuals can achieve higher status,” are presented to participants, who are asked the extent to which they agree or disagree with such statements (e.g., Townsend et al., 2010). High agreement indicates a strong endorsement of meritocracy beliefs, whereas low agreement with these items indicates a weak or absent endorsement of meritocracy beliefs.

For individuals in high-status groups, a belief that one’s group is better for meritorious reasons supports one’s need to form positive social identities (Sidanius, Devereux, & Pratto, 1992; Tajfel & Turner, 1986). Indeed, some research suggests that belief in meritocracy is related to psychologically beneficial outcomes such as increased ability to cope with threats and an increased sense of control over one’s life (Kay, Gaucher, Napier, Callan, & Laurin, 2008). Perceptions of chaos and randomness can be anxiety-provoking, and perceptions of personal control, structure, and order can help ameliorate these feelings (Kruglanski & Webster, 1996). Thus, endorsing a belief in meritocracy may enhance positive outcomes for high-status groups because it implies that the success common to high-status groups occurs purely as a result of one’s own effort, and not due to randomness (Kay et al., 2008; Townsend et al., 2010). However, for individuals in low-status groups, a belief that one’s group is suffering because of a lack of merit might be a damaging one (Major, Quinton, et al., 2002). Indeed, members of low-status groups are less likely to endorse meritocracy beliefs compared to members of high-status groups (O’Brien & Major, 2005). Thus, while this pervasive message of meritocracy may have beneficial qualities for some individuals, for members of stigmatized groups this message (and personal endorsement of this message) often has deleterious consequences.
Endorsement (or lack of endorsement) of meritocracy beliefs by the targets of prejudice seems to act as a moderating variable for negative outcomes of discrimination. Several studies have found that the endorsement of meritocracy beliefs of targets of prejudice predicts differing responses to discrimination events in several domains, including resting blood pressure (e.g., Eliezer et al., 2011), self-esteem (e.g., Foster & Tsarfati, 2005), well-being (in this study, measured as self-esteem and depressed affect) (e.g., O’Brien & Major, 2005), and perceived discrimination (e.g., Major, Gramzow, et al., 2002). Meritocracy beliefs, in all these cases, seem to make the experience of discrimination worse for the targets of prejudice, decreasing well-being and contributing to negative health outcomes. Further, there is evidence that meritocracy belief concepts can be primed, which may also lead to negative consequences such as self-stereotyping for individuals of stigmatized groups (McCoy & Major, 2007). Thus, extant research suggests that making meritocratic beliefs salient increases justifying inequalities in society, even when those inequalities are detrimental to the self and/or group. Furthermore, endorsing meritocratic beliefs as a member of a stigmatized group leads to more severe negative outcomes, compared to not endorsing or rejecting meritocratic beliefs.

Although it is clear that negative outcomes result from meritocracy endorsement following discrimination, particularly outcomes related to negative affect, threat, and well-being (e.g., Townsend et al., 2010), there is a lack of research examining how more cognitive processes related to prejudice are influenced by meritocracy beliefs – for example, expectancies for how one will be treated in the future. Expectations for future
treatment have an important influence on how an individual is perceived and in turn treated by others (e.g., Chen & Bargh, 1997).

**Expectations in Stereotyping and Prejudice**

It is well known that a person’s expectancies (that is, knowledge structures regarding what is going to happen next, particularly in a social context) can have a profound effect on the behaviors of others, even when they are unstated or unconscious (Chen & Bargh, 1997; Neuberg, 1994). These effects are of particular concern to social psychologists in the field of stereotyping and prejudice; for example, one widely studied expectancy effect is the “self-fulfilling prophecy,” or “behavioral confirmation” effect (e.g., Chen & Bargh, 1997). This phenomenon, in which an expectation is generated by an observer, leading the target to engage in the expected behavior, is thought to be widespread in everyday interactions.

One common source of expectancies is a group stereotype; stereotypes that are activated automatically in the presence of stereotyped-group features can lead perceivers to unconsciously alter their behaviors. For example, previous research has found that priming people with subliminally presented African American faces leads to more hostility in response to a frustrating request (Bargh, Chen, & Burrows, 1996). This type of primed expectancy effect in a perceiver then has a subsequent effect on the target, which can lead a target (in this case, a fellow participant) to respond to the perceiver with greater hostility in turn (Chen & Bargh, 1997). Thus, a perceiver can elicit a stereotypical behavior from a target of a stigmatized group simply by expecting stereotypical behavior in the first place.
A particular category of expectancies is directly relevant to the current research: compensatory expectancies, which often arise in the service of schema maintenance. Schema maintenance refers to attempts to prevent a schema – which includes goals, stereotypes, self-concepts, and other such organizing concepts – from changing. Compensatory expectancies, likewise, refer to the expectation that stereotype-inconsistent actions will be followed by future actions that are stereotype-consistent (C. Seta, Seta, & Goodman, 1998; J. Seta, Seta, & McElroy, 2003). Therefore, before proceeding, it is useful to further examine compensatory expectancies and how they may help some individuals maintain their endorsement of meritocracy beliefs, even when such endorsing such constructs may have negative consequences.

**Compensatory expectancies.** Seta and colleagues have found that one mechanism that contributes to schema and stereotype maintenance is the formation of these compensatory expectancies (J. Seta et al., 2003; J. Seta & Seta, 1993). Previous research indicates that exposure to counterstereotypic behavior can result in the generation of hyperconsistent expectations of conformity on the part of an outgroup member, ultimately helping a perceiver to maintain a stereotype (J. Seta & Seta, 1993). A hyperconsistent expectation is one in which the perceiver expects relatively extreme stereotype-consistent behavior on the part of the group member. It is thought that this expectation of hyperconsistent future behavior is a way of “balancing out” the stereotype inconsistent behavior, leading to an overall maintenance of the existing stereotype, even in the face of disconfirming evidence (C. Seta et al., 1998; J. Seta et al., 2003).

For example, one study found that when a minister had performed a “mildly inconsistent” and transgressive behavior (in this case, looking at sexually explicit
magazines), perceivers were actually more likely to expect that minister to “compensate” for this behavior by donating relatively large amounts of money to charity (J. Seta & Seta, 1993). However, perceivers did not form compensatory expectations regarding a minister who had done something extremely transgressive (in this case, having an affair with a married woman or sexually molesting a child); rather, they expected hyperconsistent charitable behavior from another, unrelated minister (J. Seta & Seta, 1993). This model assumes there are reality constraints that limit the degree to which people can realistically expect a deviant group member to behave in a compensatory manner. Thus, extreme disconfirmatory behavior does change a perceiver’s expectancies for that particular individual, but perceivers then expect hyperconsistent behavior in another, unrelated individual belonging to the same group, ultimately compensating for the deviant group member at the group level and maintaining the overall group norm. This is thought to occur in several different domains, allowing individuals to maintain consistent stereotypes overall without revising their schema entirely when faced with counterstereotypic behavior (C. Seta et al., 1998).

It follows from this model that when women who are high in their endorsement of meritocracy beliefs and expect fair treatment are treated unfairly, they could expect fair treatment in another context as a compensatory mechanism. This could allow them to maintain their endorsement of meritocracy beliefs in the presence of disconfirming evidence. Therefore, at the beginning of our previous research, we hypothesized that compensatory expectancies might be responsible for maintaining endorsement of meritocracy beliefs, even when contradictory evidence is presented in the form of a sexist hiring decision.
First Year Project Research

As discussed above, there is a body of research suggesting that individual differences in meritocracy beliefs moderate some of the consequences of prejudice. We recently conducted a study examining how endorsement of meritocracy beliefs moderated the effect of prejudice on cognitive expectations of future sexism made by the targets of gender-based discrimination (Carper & Seta, 2013). This research has implications for the well-being of the targets of prejudice, as there may be either protective or damaging influences of having negative expectancies of future discriminatory events (Chen & Bargh, 1997). It might be the case that individuals who reject meritocracy beliefs and experience prejudice may experience some kind of “protective” effect of those beliefs (feeling less negative affect, less threat, etc.) compared to individuals who endorse meritocracy beliefs and experience prejudice (e.g., Townsend et al., 2010). On the other hand, people who reject meritocracy beliefs may also be more generally negative when they predict how they will be treated in the future, perhaps leading to more negative outcomes (such as those found in the self-fulfilling prophecy effect, etc.) (e.g., Chen & Bargh, 1997).

In our recent research on this topic, based on methodology used in previous research by Townsend et al. (2010), we first measured women’s endorsement of meritocracy beliefs, then manipulated reasons for their rejection from a hypothetical managerial job for either an overtly sexist reason or for a meritorious reason (Carper & Seta, 2013). Our participants then indicated their expectancies of experiencing sexism in the future, both at that company and at a different, also hypothetical company (Carper & Seta, 2013). Results from this study indicated that when women were rejected from a
hypothetical management job for a sexist reason (compared to an ostensibly meritorious one), the effect of meritocracy beliefs on future expectancies depended on whether they were predicting sexism within that same sexist company or at another hypothetical company (Carper & Seta, 2013).

Women who were low in their endorsement of meritocracy beliefs saw no significant difference between the sexist company and another hypothetical company, whereas women who highly endorsed meritocracy beliefs felt that sexism was more likely at the sexist company compared to another hypothetical company (Carper & Seta, 2013). In other words, low meritocracy participants expected sexism in both the same context (the sexist company) and in a different context (the hypothetical company), whereas high meritocracy participants expected less sexism in the different company context than in the same company context.

This effect did not occur when women were rejected for an ostensibly meritorious reason: in this case, women low in meritocracy beliefs generally predicted more sexism compared to women high in meritocracy beliefs. Thus, these results suggest that endorsements of meritocracy beliefs do moderate the expectancies generated by individuals who are targets of prejudice. These expectancies may have further negative implications for members of stigmatized groups, given that previous research has linked endorsement of meritocracy beliefs to negative outcomes following a discriminatory event (Townsend et al., 2010).

One question suggested by this research was: what are the mechanisms that led to the generation of these expectancies? A possibility was that the expectation of sexism at another hypothetical company beyond the rejecting context might have resulted from a
generalization on the part of women who are low in endorsement of meritocracy beliefs (i.e., after perceiving sexism in one company, they generalized to an unknown hypothetical company), whereas women high in meritocracy endorsement are using a more “innocent until proven guilty” schema to predict future discriminatory events. That is, women high in endorsement of meritocracy beliefs may not have predicted sexism unless provided with specific evidence that sexism was likely to occur. According to this perspective, high meritocracy participants did not generalize the sexist rejection to a different company, whereas the low meritocracy participants did generalize this rejection to a different company. This explanation would lead us to expect that the expectations for another company of high meritocracy participants after a sexist rejection would have been equivalent to the expectations of comparable women that did not read about sexist rejection and rated the other company, had such a condition been included in the study. This view also suggests that, in contrast, the expectations of low meritocracy participants would have been higher than this hypothetical no sexism control group.

An alternative explanation for these effects is that they are part of a compensatory mechanism on the part of women who are high in endorsement of meritocracy beliefs (i.e., after perceiving sexism in one company, they expect less sexism at an unknown hypothetical company as a way of maintaining their belief in a meritocracy). Indeed, perhaps the obvious manipulation of sexism used in our previous research (i.e., “…like most girls, the other applicant is probably too emotional and won’t be a good leader.”) was so extreme that compensatory mechanisms did not operate in expectancies regarding that same company, leading participants to instead lower their expectancies of sexism at another company as a compensatory mechanism (Carper & Seta, 2013). According to
this perspective, the prejudice expectancies of high meritocracy participants for another company after a sexist rejection would be predicted to be lower than those of comparable women that did not receive sexism rejection information. Thus, in order to test which hypothesis better explained our previous findings, we developed the current study.

**Current Research**

The primary aim of our present research was to investigate the two hypothesized mechanisms. In order to accomplish this goal, we used the same materials and procedures as in the previous research, but this time included a control condition instead of a “meritorious rejection” condition. In this control condition, the participant was rejected from a hypothetical management position, but no reason was given for this rejection, and no mention was made of sexism as a possible explanation. Participants in this condition were told they had lost a hypothetical job opportunity, but not why they lost the job. Based on the cognitive expectancies of future sexism generated by participants in this control condition, we expected one of two possible outcomes to our study.

**Hypotheses.** First, it could be the case that the results of our previous research were because participants high in meritocracy beliefs were not generalizing sexism rejection possibilities beyond the immediate context in which sexism was explicitly experienced. If this was the case, we expected that in both the control condition and the sexism condition, women high in their endorsement of meritocracy would not expect sexism at the different company, because there was no information provided that would suggest that another company would be sexist. Thus, high meritocracy participants would show heightened expectations of sexism only for the rejecting company (i.e., the
same company context) in the sexism rejection condition. In contrast, women low in meritocracy beliefs might not use this “innocent until proven guilty” strategy and would therefore predict sexism to be more likely in another company following information about a sexist rejection. This would reflect a generalization of the sexist rejection to a context beyond the explicitly presented information. Furthermore, these participants might also be more likely (compared to high meritocracy participants) to expect sexist rejection motives in a control rejection context in which no reason for rejection was provided, as a part of a generalization of their relatively more negative worldview. This would result in a main effect of meritocracy beliefs, see Figure 1.

Figure 1: Predicted Results for the Generalization Hypothesis for Another Company

Fig. 1. We predict that if the generalization hypothesis is supported, when participants are predicting sexism for another company we will see the above pattern of results.

Another possibility was that high meritocracy participants would be motivated to generate compensatory expectations in response to the information that they were rejected for a sexist reason. Thus, if participants high in meritocracy beliefs expected
significantly lower levels of sexism at another company (i.e., a different company context) after experiencing a sexist rejection, compared to when they experience a neutral control rejection, this would suggest that compensatory mechanisms are operative in this situation. In contrast, because participants low in meritocracy endorsement have no motive to maintain a meritorious worldview, they would be unlikely to generate compensatory expectations in the sexism condition. This perspective leads to a different predicted pattern for expectancies of sexism regarding another company, see Figure 2.

Figure 2: Predicted Results for the Compensatory Hypothesis for Another Company

![Graph](image)

*Fig. 2.* We predict that if the compensatory hypothesis is supported, when participants are predicting sexism for another company we will see the above pattern of results.

We also predicted that we would replicate findings from previous research: there would be a simple two-way interaction of meritocracy endorsement and company in the sexism condition, such that people low in meritocracy endorsement did not perceive a difference between the two companies, but people high in meritocracy endorsement
perceived the same company as likely to be more sexist compared to the other company (Carper & Seta, 2013).

Another important research question was: how are the effects of rejection information on expectancies moderated by attitude certainty? An attitude is a person’s evaluation of something, but we can also examine a person’s subjective sense of conviction about an attitude, independent of objective reality (Tormala & Rucker, 2007). Attitude certainty has thus been shown to be important in understanding the durability and impact of that person’s attitude: strong attitudes are more likely to influence behavior compared to weak attitudes, in addition to being more likely to resist influence attempts and to persist over time, relative to weakly held attitudes (Petrocelli, Tormala, & Rucker, 2007; Tormala & Rucker, 2007).

Thus, in our research, we expected that our hypothesized results would be strongest for people who were more certain of their beliefs regarding the existence of a meritocracy. People who are more certain in their attitudes regarding the existence of a meritocracy may find it more salient to use those beliefs when predicting future events, and also be more motivated to maintain those beliefs, whereas we expected uncertain people to be less likely to use their meritocracy beliefs when making cognitive judgments about their social surroundings.

In sum, the purpose of the present research was to assess the mechanisms operative in developing expectations of future sexist discrimination. To accomplish this, we asked women who varied in the extent to which they endorsed meritocracy beliefs to read a vignette in which they applied to and were rejected from a hypothetical management position, for either an unspecified reason or a sexist reason. We then
assessed their expectations that they would experience discrimination in the same context (i.e., at the same company) and in a different context (i.e., at a different company).
METHOD

Participants

Participants were 120 female undergraduate students who were part of the Introductory Psychology subject pool and participated in the study in exchange for partial course credit. They received a credit of .5 hours in exchange for participation. Participants were not preselected on any criteria.

Materials

Endorsement of Meritocracy Beliefs scale. This 6 item scale was taken from Study 2 of Townsend et al. (2010), and was designed to assess the degree to which participants endorse meritocracy beliefs, see Appendix A. Sample items include “Advancement in our society is possible for all individuals” and “It is unfair that certain groups in society have less than other groups” (reverse scored). Participants were asked to indicate their agreement with each item on a 7 point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Negative items were reverse scored as appropriate, and the 6 items were averaged to create a meritocracy beliefs score. Higher scores on this scale represent stronger endorsement of meritocracy beliefs.

Attitude Certainty scale. This 7 item scale was adapted from Petrocelli et al. (2007), and was designed to assess participants’ attitude certainty regarding their endorsement of meritocracy beliefs, see Appendix B. Sample items include “To what extent is your true attitude on the Group Status Questionnaire (i.e., the Endorsement of Meritocracy Beliefs scale) clear in your mind?” and “How certain are you that your attitude on the Group Status Questionnaire is the correct attitude to have?” Participants were asked to indicate their agreement with each item on a 7 point Likert scale ranging
from 1 (very unclear/uncertain) to 7 (very clear/certain). The 7 items were then averaged to create an overall attitude certainty score ($\alpha = .85$). Higher scores on this scale represent a higher degree in certainty in one’s attitudes.

This scale can also be divided into two subscales, with the first 4 items assessing attitude clarity (i.e., knowing what one’s true attitude on a topic truly is), and the last 3 items assessing attitude correctness (i.e., belief that one’s attitude is not only correct, or valid, but also that other people should also possess that attitude; for example, “To what extent do you think other people should have the same attitude as you on this issue?”). Two subscales were calculated, and attitude clarity ($\alpha = .92$) and attitude correctness ($\alpha = .74$) were separately used as different measures of attitude certainty.

**Job Applicant Vignette.** This vignette, written in the second person, instructed participants to imagine themselves in the scenario described: applying for a hypothetical management position at a company, see Appendix C. This scenario was adapted from the manipulation in Study 2 of Townsend et al. (2010).

The vignette described a situation in which the participant arrived for a job interview to find another (male) applicant, named Chris. Both applicants filled out a brief “leadership ability” questionnaire that they were told had been developed by the Stanford Graduate School of Business, and would be given to the interviewer. Then both applicants interviewed with the boss of the company, Jones (also male). When the reader returned home, she had received an accidentally sent email from Jones. This email informed the reader that although she and Chris were equally qualified, she was probably not going to get the job. Jones gave one of two possible reasons for this. In the sexism-based rejection condition, the reader was told that Jones thought that women are too
emotional to be good leaders, and thus Chris would be offered the job. In the control rejection condition, the reader was simply told that Jones was recommending that Chris get the job, but no reason for this was given.

**Expectancy of Future Sexism items.** Two items were used to assess the degree to which participants felt that they were likely to experience sexism in the future, see Appendix D (items 1 and 2). These items assessed both the same hypothetical company that was described in the Job Applicant Vignette and another (also hypothetical) company not described in the scenario. Each item was rated on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely). Higher ratings on these items represent a stronger belief that sexism would be likely to occur in the future.

An additional three items were also presented, see Appendix D (items 3, 4, and 5). Item 3 was used to assess the degree to which participants believed that sexism was involved in the hiring decision described in the Job Applicant Vignette. Items 4 and 5 were identical to items 1 and 2, except that they assessed how likely participants thought they might be denied a position for any reason, rather than due to sexism. Again, each item was rated on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).

**Additional follow-up items.** Several follow-up questions were also presented, in order to assess participants’ perceptions of the Job Applicant Vignette, see Appendix E. Items asked how upset participants would feel in the scenario, how easy it was for them to put themselves in the scenario, and how realistic participants believed the scenario to be. Answers were reported on a sliding scale from 0 (not at all upset/very easy/very unrealistic) to 100 (extremely upset/very difficult/very realistic).
The last three follow-up questions asked for political affiliation (overall, on social issues, and on economic issues). Answers were reported on a 7 point Likert scale ranging from 1 (very liberal) to 7 (very conservative).

Procedure

Participants first arrived at the lab in groups of no more than 14 and each signed an informed consent form if they agreed to participate. They then accessed the study materials using Qualtrics Survey Research Suite, an online survey distribution program. Each participant worked at her own pace to complete the questionnaires.

Participants first completed the Endorsement of Meritocracy Beliefs scale and the Attitude Clarity and Correctness scale. Participants next read the Job Applicant Vignette; after the manipulation, participants answered several free response questions that included a manipulation check (e.g., “What was the boss’s name?” and “Why didn’t you get the job?”). Next, participants completed the Expectancy of Future Sexism items, assessing their future expectancies regarding their job prospects both at that company in the future and at another company (both due to sexism and for any reason), in addition to the degree to which they believe that sexism was involved in the hiring decision described in the Job Applicant Vignette. Finally, participants completed the follow-up items and then waited quietly until every participant had completed the survey. At that time, the researcher stated that the participants were finished, and thanked the participants for their participation.
RESULTS

Preliminary Analyses

**Meritocracy endorsement and attitude certainty.** Reliability of our assessment of meritocracy beliefs was relatively high ($\alpha = .74$), corresponding to what we found in our previous research ($\alpha = .83$). This also conforms to previous research ($\alpha = .72$) that has used this scale of meritocracy belief endorsement (e.g., Townsend et al., 2010).

Degree of endorsement of meritocracy beliefs among our participants approached normality (skewness = -0.18, kurtosis = -0.89), with the median value being 4.00 ($M = 3.87, SD = .94$). Participants were thus equally divided into two groups, high ($M = 4.64, SD = .46$) and low ($M = 3.09, SD = .58$) endorsement of meritocracy beliefs, based on a median split of our meritocracy belief scale.

Participants’ overall attitude certainty regarding these meritocracy beliefs was, on average, high (median = 5.00, $M = 5.03, SD = .78$). Participants also rated their attitude clarity (median = 5.50, $M = 5.42, SD = .93$) significantly higher than their attitude correctness (median = 4.33, $M = 4.50, SD = .91$) regarding their endorsement of meritocracy beliefs, $t(119) = -10.19, p < .001$. Participants were divided into two additional groups (high and low) for both subscales, based on median splits of attitude clarity and attitude correctness.

Analyses revealed that there was not a significant difference between participants who were high ($M = 4.94, SD = .70$) and low ($M = 5.11, SD = .85$) in meritocracy beliefs in their overall attitude certainty, $t(118) = 1.243, p = .216$, nor was there a difference between high ($M = 5.40, SD = .84$) and low ($M = 5.44, SD = 1.02$) meritocracy belief participants in attitude clarity, $t(118) = .196, p = .845$. However, women who were low
in endorsement of meritocracy beliefs ($M = 4.68$, $SD = .90$) felt that their attitude was significantly more correct compared to people who were high in endorsement of meritocracy beliefs ($M = 4.32$, $SD = .88$), $t(118) = 2.251$, $p = .026$. These findings further support previous research indicating that two distinct components of attitude certainty exist and can be differentiated: attitude correctness and attitude clarity (Petrocelli et al., 2007).

**Vignette appraisals.** We examined participants’ perceptions of the situations described in the materials in order to assess whether we effectively communicated the conceptual information that underlies this study. First, we checked to be sure that the vignettes were not different in terms of realism or ease of processing. We found that there was no difference between the sexism-based rejection condition ($M = 34.13$, $SD = 26.77$) and the control rejection condition ($M = 39.73$, $SD = 23.17$) on ratings of easiness to put oneself in the situation, $F(1, 116) = 1.505$, $p = .222$, or between the sexism condition ($M = 63.07$, $SD = 22.81$) and the control condition ($M = 68.28$, $SD = 21.43$) on ratings of how realistic the situation was, $F(1, 116) = 1.677$, $p = .198$. Endorsement of meritocracy beliefs did not moderate any of these findings. Thus, participants in both conditions perceived the situations to be equally plausible.

Next, we assessed whether we were successful in conveying the different reasons for rejection in the sexism and control conditions. As expected, participants in the sexism-based rejection condition ($M = 87.27$, $SD = 12.44$) indicated that they would be more upset than participants who did not get the job in the control condition ($M = 72.85$, $SD = 17.60$), $F(1, 116) = 26.394$, $p < .001$. Furthermore, when participants were asked to what extent they believed sexism was involved, participants in the sexism condition ($M =$
6.47, $SD = .85$) were significantly more likely to think sexism was involved compared to
participants in the control condition ($M = 4.85, SD = 1.42$), $F(1, 116) = 56.613, p < .001.$
Again, endorsement of meritocracy beliefs did not moderate any of the above findings.
Thus, these analyses confirm that we successfully manipulated rejection condition.

Expectation Analyses

The conceptual variable of primary interest in our study was the extent to which
measured and manipulated variables influenced women’s expectations of sexism within
hiring contexts. In order to address this question, our primary analysis was a $2 \times 2 \times 2$
mixed factor ANOVA including rejection condition (sexism-based rejection, control
rejection) and endorsement of meritocracy beliefs (low endorsement, high endorsement)
with the within-subjects factor of rating context (same company, different company).
The primary dependent variable was expectancies of sexism. Descriptive statistics are
presented in Table 1.

<table>
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<th>Table 1</th>
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<tr>
<td>Expectations of Sexism for Both the Same and Another Company</td>
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<td>Another Company</td>
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<td>Sexist Control</td>
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<td><strong>High Merit</strong></td>
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Table 1. Means and standard deviations of participants’ expectations of experiencing
sexism in different contexts, depending on their rejection condition (sexist, control) and
endorsement of meritocracy beliefs (low, high). Expectations of sexism were measured
on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).
We found a significant main effect of company context, $F(1, 116) = 73.314, p < .001$, in which participants rated the same company ($M = 5.34, SD = 1.50$) as significantly more likely to be sexist compared to the different company ($M = 4.43, SD = 1.25$). There was also a significant main effect of rejection condition, $F(1, 116) = 5.612, p = .019$, such that participants in the sexism-based rejection condition ($M = 5.15, SD = 1.07$) rated sexism as more likely compared to participants in the control rejection condition ($M = 4.63, SD = 1.34$). Additionally, we found a marginally significant main effect of meritocracy endorsement, $F(1, 116) = 3.902, p = .051$, whereby women high in meritocracy beliefs ($M = 4.66, SD = 1.38$) rated sexism as being less likely compared to women low in meritocracy beliefs ($M = 5.10, SD = 1.04$).

The ANOVA further revealed a significant two-way interaction between rejection condition and rating context, $F(1, 116) = 15.052, p < .001$, whereby women had increased expectations of sexism for ratings of the same company ($M = 5.82, SD = 1.41$) relative to a different company ($M = 4.48, SD = 1.07$) in the sexism condition, $F(1, 116) = 78.985, p < .001$. There were also increased expectations of sexism for ratings of the same company ($M = 4.87, SD = 1.46$) relative to a different company ($M = 4.37, SD = 1.41$) in the control condition, $F(1, 116) = 10.997, p = .001$. This simple effect suggests that sexism is an accessible attribution for why women would be rejected in a business context even in the absence of explicit information. However, this effect of context was stronger for women in the sexism condition compared to women in the control condition. No other effects obtained traditional levels of significance, all $Fs < 1$.

Because we had two a priori hypotheses, we conducted planned comparisons assessing these hypotheses using the error term for the contrasts that was obtained in the
ANOVA described above. The first hypothesis was a generalization hypothesis, in which women high in their endorsement of meritocracy would not expect sexism at another company in either rejection condition, whereas women low in meritocracy beliefs would predict sexism to be more likely at another company in both conditions. Our second hypothesis was that compensatory mechanisms were responsible for our previous results; if that is the case participants high in meritocracy would expect lower levels of sexism at another company after experiencing a sexist rejection (compared to the control rejection).

We found a marginally significant difference between ratings of high meritocracy people within the two conditions, $F(1, 116) = 3.345, p = .070$, such that participants in the sexism condition ($M = 4.45, SD = 1.15$) rated sexism more likely at another company compared to participants in the control condition ($M = 4.06, SD = 1.55$). This reflects the opposite pattern expected by the compensatory expectation hypothesis, and supports neither of our two a priori predictions, see Figure 3. Further, there was no significant difference, $F(1, 116) = .636, p = .427$, between low meritocracy participants’ ratings of another company in the sexism ($M = 4.52, SD = 1.00$) or control ($M = 4.69, SD = 1.20$) conditions.

We also examined expectations of sexism at the same company, and found that participants expected more sexism in the sexism condition ($M = 5.59, SD = 1.52$) compared to the control condition ($M = 4.58, SD = 1.63$) when they were high in meritocracy beliefs, $F(1, 116) = 22.436, p < .001$, and in the sexism condition ($M = 6.03, SD = 1.28$) compared to the control condition ($M = 5.17, SD = 1.20$) when participants were low in meritocracy beliefs, $F(1, 116) = 16.267, p < .001$. 

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Fig. 3. We did not find support for either of the proposed hypotheses. Although we did find a significant difference between high meritocracy participants in the sexism and control conditions regarding the other company, it was in the opposite direction compared to what was predicted by the compensatory expectancies hypothesis.

Finally, we examined expectancies in the sexism-based rejection condition as a function of high compared to low meritocracy endorsement. We expected an interaction such that women high in meritocracy beliefs would expect a different company to be less sexist compared to the same company, but people low in meritocracy beliefs would expect them to be equally sexist. The planned contrast between low and high meritocracy individuals in their ratings of the other company was not significant, $F(1, 112) = .026, p = .862$. Rather, participants in the sexism rejection condition, regardless of their meritocracy beliefs, consistently predicted sexism to be more likely at the same company compared to the other company, $F(1, 112) = 77.238, p < .001$. Thus, the pattern of results found in this study did not replicate our previous research, nor conform to our predictions. Due to this pattern of results, and the fact that we were also interested in
how attitude certainty measures might change people’s expectancies, we investigated whether examining our measures of attitude certainty might help us understand this unexpected pattern of results.

**Attitude Certainty Analyses**

As previously reported, we found significant differences between women who were high and low in their endorsement of meritocracy beliefs concerning their perceptions that their meritocracy beliefs were correct. Women low in meritocracy beliefs felt their attitudes were more correct than women high in meritocracy beliefs. Thus, we can infer that there was less certainty in the attitudes of some of the high meritocracy participants. If factors related to motives to maintain belief systems are operative in this setting, as hypothesized, we would expect that attitude certainty factors would interact with the measured and manipulated variables’ effects on expectations of sexism. If this is the case, it is possible that we would find one of the previously hypothesized patterns of results (that is, either compensatory mechanisms or generalization mechanisms), but only for people who are relatively certain of their beliefs and attitudes regarding meritocracy endorsement. In order to investigate this possibility, we conducted a series of analyses where we differentiated between participants who indicated that their attitudes regarding meritocracy endorsement were highly correct and less correct, and between people whose attitudes were highly clear and less clear. These analyses are reported below.

**Attitude correctness.** In order to simplify the interpretation of the analysis, we analyzed the dependent variables of expectations about the same and different company separately in two 2 (correctness: high, low) x 2 (meritocracy endorsement: high, low) x 2
(condition: sexism, control) between-subjects factorial ANOVAs. Descriptive statistics for the ANOVA on expectancies regarding the different company are presented in Table 2. We found a marginally significant main effect of meritocracy beliefs, $F(1, 112) = 3.020, p = .085$, whereby women low in their endorsement of meritocracy beliefs ($M = 4.60, SD = 1.09$) rated sexism more likely to occur at another company compared to women high in their endorsement of meritocracy beliefs ($M = 4.25, SD = 1.37$). There was also a marginally significant three-way interaction present when looking at ratings of the other company, $F(1, 112) = 3.857, p = .052$.

When women were high in their attitude correctness ratings, planned contrasts revealed that women high in meritocracy endorsement rated the other company equally likely to be sexist in the sexism condition ($M = 4.00, SD = 1.05$) compared to the control condition ($M = 4.43, SD = 1.60$), $F(1, 112) = .724, p = .397$. However, it should be noted that although this effect was not significant, it was in a direction that would be consistent with the compensatory mechanisms hypothesis; furthermore, it would be consistent with our hypothesized interaction of attitude certainty, whereby our predicted results only occur in women who are high in attitude certainty. Planned contrasts also revealed that women low in their endorsement of meritocracy beliefs (but high in their attitude correctness) did not report a different expectation of sexism, $F(1, 112) = .001, p = .981$, in either the sexism condition ($M = 4.59, SD = .94$) or in the control condition ($M = 4.58, SD = 1.12$).

In contrast, a simple two-way interaction emerged, $F(1, 56) = 4.186, p = .045$, when women were low in their attitude correctness ratings. Contrasts revealed that women high in meritocracy endorsement (and low in attitude correctness) rated sexism to
be more likely in the sexism condition ($M = 4.68, SD = 1.16$), than in the control condition ($M = 3.76, SD = 1.48$), $F(1, 112) = 4.969, p = .028$. On the other hand, women low in meritocracy endorsement (and low in attitude correctness) did not perceive sexism to be differentially likely at another company, $F(1, 112) = .865, p = .354$, regardless of whether they were in the control condition ($M = 4.90, SD = 1.37$), or in the sexism condition ($M = 4.43, SD = 1.09$). Thus, the marginally significant three-way interaction was likely due to this pattern of results.

Table 2

<table>
<thead>
<tr>
<th>Low Merit</th>
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<tr>
<td><strong>Low Attitude Correctness</strong></td>
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<tr>
<td>Sexist</td>
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<td>$M$</td>
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<tr>
<td>Low Merit</td>
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<td>High Merit</td>
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Table 2. Means and standard deviations of participants’ expectations of experiencing sexism at another company, depending on their attitude correctness (low, high), rejection condition (sexist, control) and endorsement of meritocracy beliefs (low, high). Expectations of sexism were measured on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).

Next, we examined participants’ expectations of prejudice regarding the same company (that is, the second 2 (correctness: high, low) x 2 (meritocracy endorsement: high, low) x 2 (condition: sexism, control) ANOVA); descriptive statistics are presented in Table 3. There was a significant main effect of condition, $F(1, 112) = 11.423, p = .001$, whereby people in the sexism-based rejection condition ($M = 5.82, SD = 1.41$) rated the same company as significantly more likely to be sexist in the future compared to the
control rejection condition \((M = 4.87, SD = 1.46)\). Additionally, there was a marginally significant main effect of meritocracy endorsement, \(F(1, 112) = 3.806, p = .054\), whereby participants low in meritocracy beliefs \((M = 5.62, SD = 1.30)\) rated sexism as being more likely compared to people high in meritocracy beliefs \((M = 5.07, SD = 1.65)\), see Table 3. No other effects obtained traditional levels of significance, all \(Fs < 1\).

| Table 3 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| **Low Attitude Correctness** | **High Attitude Correctness** | | | | | | |
| **Sexist** | **Control** | **Sexist** | **Control** | | | | |
| \(M\) | \(SD\) | \(M\) | \(SD\) | \(M\) | \(SD\) | \(M\) | \(SD\) |
| Low Merit | 6.14 | 1.03 | 5.20 | 1.23 | 5.94 | 1.48 | 5.16 | 1.21 |
| High Merit | 5.63 | 1.67 | 4.41 | 1.73 | 5.50 | 1.27 | 4.79 | 1.53 |

*Table 3.* Means and standard deviations of participants’ expectations of experiencing sexism at the same company, depending on their attitude correctness (low, high), rejection condition (sexist, control) and endorsement of meritocracy beliefs (low, high). Expectations of sexism were measured on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).

**Attitude clarity.** We also analyzed the dependent variables of expectations about the same and different company separately in two 2 (clarity: high, low) x 2 (meritocracy endorsement: high, low) x 2 (condition: sexism, control) between-subjects factorial ANOVAs.

First, we examined the ANOVA conducted on ratings of likelihood of sexism at another company; descriptive statistics for this ANOVA are presented in Table 4. We found that there was a marginally significant main effect of meritocracy beliefs, \(F(1, 112) = 3.633, p = .059\), such that women low in their endorsement of meritocracy beliefs \((M =\)
4.60, $SD = 1.09$) rated sexism more likely to occur at another company compared to
women high in their endorsement of meritocracy beliefs ($M = 4.25, SD = 1.37$).
However, no other main effects or interactions reached traditional levels of significance,
all $Fs < 2.2$, see Table 4.

Table 4

<table>
<thead>
<tr>
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<th>Low Attitude Clarity</th>
<th>High Attitude Clarity</th>
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<tbody>
<tr>
<td></td>
<td>Sextist $M$ $SD$</td>
<td>Control $M$ $SD$</td>
</tr>
<tr>
<td>Low Merit</td>
<td>4.71 1.11</td>
<td>5.18 1.17</td>
</tr>
<tr>
<td>High Merit</td>
<td>4.63 1.12</td>
<td>3.85 1.52</td>
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</table>

Table 4. Means and standard deviations of participants’ expectations of experiencing sexism at another company, depending on their attitude clarity (low, high), rejection condition (sexist, control) and endorsement of meritocracy beliefs (low, high). Expectations of sexism were measured on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).

Second, we examined how participants’ expressed their future expectations of prejudice regarding the same company (that is, the second 2 (attitude clarity: high, low) x 2 (meritocracy endorsement: high, low) x 2 (condition: sexism, control) ANOVA on ratings of sexism); descriptive statistics for this ANOVA are presented in Table 2. There was a significant main effect of condition, $F(1, 112) = 11.251, p = .001$, whereby people in the sexism-based rejection condition ($M = 5.82, SD = 1.41$) rated the same company as significantly more likely to be sexist in the future compared to the control rejection condition ($M = 4.87, SD = 1.46$). Additionally, there was a significant main effect of meritocracy endorsement, $F(1, 112) = 4.042, p = .047$, such that participants low in
meritocracy beliefs ($M = 5.62$, $SD = 1.30$) rated sexism as being more likely compared to people high in meritocracy beliefs ($M = 5.07$, $SD = 1.65$). No other main effects or interactions reached traditional levels of significance, all $F$s < 1, see Table 5.

Table 5

Expectations of Sexism by Clarity for the Same Company

<table>
<thead>
<tr>
<th>Low Merit</th>
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<td>Low Merit</td>
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<tr>
<td>Low Merit</td>
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Table 5. Means and standard deviations of participants’ expectations of experiencing sexism at the same company, depending on their attitude clarity (low, high), rejection condition (sexist, control) and endorsement of meritocracy beliefs (low, high). Expectations of sexism were measured on a 7 point Likert scale ranging from 1 (very unlikely) to 7 (very likely).
DISCUSSION

In our previous research, we found that women who were low in their endorsement of meritocracy beliefs saw no significant difference between the sexist company and another hypothetical company in expectancies of sexism, whereas women who highly endorsed meritocracy beliefs felt that sexism was less likely at another company than the sexist company. In other words, low meritocracy participants expected sexism in both the same context (the sexist company) and in a different context (the hypothetical company), whereas high meritocracy participants expected more sexism in the same context relative to the different context.

These findings then raised the question, what are the mechanisms that led to the generation of these expectancies? One possibility was that there was a generalization of expectations beyond the rejecting context on the part of women who are low in meritocracy beliefs (i.e., after perceiving sexism in one company, they generalize to an unknown hypothetical company), whereas women high in meritocracy beliefs were using a more “innocent until proven guilty” schema to predict future discriminatory events (i.e., women high in endorsement of meritocracy beliefs do not predict sexism unless provided with specific evidence that sexism is likely to occur). However, an alternative explanation for these effects was that they were part of a compensatory mechanism on the part of women who are high in endorsement of meritocracy beliefs; perhaps after perceiving sexism in one company, these women expect less sexism at an unknown hypothetical company as a way of maintaining their belief in a meritocracy.

In order to test these hypotheses, we conducted the current research, in which we further assessed how meritocracy beliefs and attitude certainty moderated women’s
expectancies of sexism by including an ambiguous “control” rejection condition. First, we found that women who experienced rejection with no provided reason generally predicted future sexism based on their worldview; that is, women high in meritocracy predicted less sexism would occur in either context compared to women low in meritocracy beliefs (see Table 1). In the sexism-based rejection condition, however, women generally expected more sexism from the same company than another hypothetical company, and did not have differing expectations depending on their worldview. Thus, in the current study, we did not find the previously obtained interaction effect in the sexism-rejection condition, failing to replicate our previous research.

Next, regarding the two competing predictions of mechanism, we conducted planned contrasts that ultimately did not support either hypothesis (see Figure 3). Regarding participants’ expectancies for another company, we found a (marginally significant) difference between ratings of high meritocracy women, such that participants in the sexism condition rated sexism more likely compared to participants in the control condition. However, there was no significant difference between low meritocracy participants’ ratings of another company in the sexism or control conditions. We also examined expectations of sexism at the same company, and found that high meritocracy belief participants again expected more sexism in the sexism condition compared to the control condition. Finally, participants low in meritocracy beliefs also expected more sexism in the sexism rejection condition compared to the control condition when they were rating the same company.
If we had found support for compensatory mechanisms, we would have expected women high in meritocracy endorsement to rate sexism more likely at another company in the control condition, compared to in the sexism condition; however, our results reflected the opposite pattern. Additionally, if we had found evidence supporting the generalization hypothesis, we would have found that participants high in meritocracy would have rated the other company equally low in sexism expectancies in both the control and sexism conditions; this pattern of results was also not detected. Therefore, neither the generalization hypothesis nor the compensatory hypothesis could be ruled out or supported, given the above findings.

Why did we fail to replicate our previous research? It may be the case that the inclusion of the attitude certainty scales influenced participants’ responses to the manipulation. For example, one possible explanation for our differing results is that asking participants to think about the certainty of their meritocracy beliefs relative to consensus information may have made it less likely that they used their worldviews as a foundation for generating their expectancies. Another possibility is that the presence of rather strong contextual information overpowered the influence of the perhaps less salient worldviews of the women in the study. Regardless of these potential explanations for our findings, we believe that the present study provides an impetus for future research on this topic.

One contribution of this research is that we supported previous research by Petrocelli et al. (2007) suggesting there are two distinct components of attitude certainty (attitude clarity and attitude correctness). Our results further suggest that these components are related to levels of meritocracy endorsement and participants’
expectancies of sexism. Regarding attitude certainty, we found that participants were
generally high in their ratings of attitude certainty, but that women low in endorsement of
meritocracy beliefs felt that their attitudes were more “correct” compared to women who
highly endorsed meritocracy beliefs.

Interestingly, we found different effects for participants’ expectancies of sexism
at another company when they felt their attitude was highly correct, compared to when
they felt it was less correct (see Table 2). When participants felt that their attitudes were
highly correct, we did not find any significant effects of either rejection condition or
meritocracy endorsement regarding ratings of another company, although we did find a
descriptive trend that was suggestive of the compensatory mechanisms hypothesis. On
the other hand, when participants were low in their ratings of attitude correctness, women
high in meritocracy beliefs expected more sexism at another company after they had
experienced a sexism-based rejection, compared to when they had been in the control
condition. Women who were low in meritocracy beliefs did not indicate different
expectancies based on the rejection condition they were in. Finally, we found that
attitude correctness did not interact with expectancies of sexism at the same company –
all the participants rated sexism more likely when the company had behaved in an
explicitly sexist way (compared to when there was no explicit sexism), and women who
highly endorsed meritocracy beliefs tended to rate sexism less likely compared to women
who were low in their endorsement of meritocracy beliefs, regardless of their ratings of
attitude correctness (see Table 3).

Women who were low in their endorsement of meritocracy beliefs consistently
rated the “other” company equally likely to be sexist in the future compared to the same
company, regardless of whether they were in the sexism-based rejection condition or in the control rejection condition, or whether they were in lower or higher in their attitude correctness. This may be because women low in meritocracy beliefs are simply more likely to perceive sexism in general, or because they believe that their attitudes are more correct than women are high in meritocracy beliefs (and are therefore less likely to change their attitudes in response to a single event (i.e., our manipulation)). Future studies should investigate this intriguing difference between women who do and do not endorse meritocracy beliefs.

Finally, it is worth noting that even in the control condition, participants still consistently rated sexism to be more likely at the same company, compared to the hypothetical other company. Although we attempted to make an entirely neutral control condition, our vignette was not entirely devoid of cues indicating that discrimination may have been present in the situation, given that participants continued to perceive sexism as more likely there compared to a more generalized “other” company. Furthermore, it is possible (or even likely) that our participants brought their own preconceived expectancies of sexism to our vignette. Thus, while our manipulation was successful in that participants did perceive more sexism in the sexism condition compared to the control condition, these results should be interpreted cautiously, given that ultimately it is difficult to know precisely what expectancies our participants were generating about the same company in the control condition.

**Implications**

Throughout our recent research, we have attempted to investigate a gap in the literature on meritocracy beliefs and worldview by assessing the cognitive expectancies
generated by individuals who are commonly subjected to stereotyping and prejudice in their everyday contexts (Carper & Seta, 2013). Previous research on this topic has primarily been concerned with affective and well-being related consequences of discrimination, and how meritocracy beliefs moderate some of those deleterious effects (Eliezer et al., 2011; Foster & Tsarfati, 2005; Townsend et al., 2010). However, expectancies also play an important role in the experiences of the targets of prejudice (Chen & Bargh, 1997). Thus, our research is the first to examine the effect that endorsement of meritocracy beliefs has on the cognitive expectancies of future sexism in women.

Our research also suggests a possible benefit to endorsing meritocracy beliefs as a member of a stigmatized group, unlike much previous research. If having positive expectancies about the future leads to better outcomes (as in Chen & Bargh, 1997), then expecting less sexism in the future may be a positive result of meritocracy endorsement. However, it may also be the case that expecting less sexism leads to negative outcomes, such as how distress may occur as a result of worldview violations – perhaps expecting less sexism is only beneficial until one actually experiences sexism, when it then becomes harmful, as some research suggests (Foster, Sloto, & Ruby, 2006; Foster & Tsarfati, 2005). More research on this topic will be needed before psychologists fully understand how expectancies interact with outcomes of discrimination.

Our research also attempted to learn more about the mechanisms behind these previously found interactional effects between meritocracy beliefs and context, and our research is among the first to examine how constructs of attitude certainty interact with meritocracy endorsement. Our research indicates that these factors do moderate the
cognitive expectancies generated by individuals who may be subject to discriminatory events. These findings suggest a role for attitude certainty in future experiments involving meritocracy beliefs and other lay theories.

Research currently indicates that some individuals respond to discrimination with positive outcomes, while other individuals respond to discrimination with more negative outcomes (Major, Quinton, et al., 2002). However, psychologists are just beginning to scratch the surface of these issues by attempting to determine which factors lead to resilience, and which to vulnerability. Much previous research has shown that endorsement of meritocracy beliefs is related to negative outcomes in targets of prejudice (e.g., Townsend et al., 2010); however, our research is an indicator that perhaps there are some protective benefits to endorsing meritocracy beliefs when one belongs to a stigmatized group, if indeed predicting less sexism in one’s future leads to resiliency. More research on this topic is needed in order to better alleviate negative outcomes for individuals at risk for deleterious outcomes due to discrimination.

Limitations and Future Directions

One of the primary limitations of our research is our sample. Our participants were female undergraduates from a small, liberal arts university in the South, and primarily identified as white/Caucasian. Thus, our sample was relatively homogeneous in factors such as ethnicity, race, and age. It is important to continue to investigate whether patterns of meritocracy endorsement within a collegiate setting accurately reflect endorsement of meritocracy beliefs among the general population. Our sample may have been an unusually “normal” sample regarding meritocracy endorsement, and sampling from a wider range of individuals may indicate an entirely different typical endorsement
level. Our sample was also relatively homogeneous with regard to attitude certainty, indicating a relatively high degree of certainty in their endorsement of (or lack of) meritocracy beliefs. It is not yet clear the degree to which this is typical – are people in the general population more or less likely to be certain of their endorsement of meritocracy beliefs, and which pattern of results in our study, if any, might best fit the pattern expected from the larger population? Furthermore, to what degree are these results generalizable to stigmatized groups other than women? Future research on this topic should take steps to address these issues.

Another limitation of the current study was that we measured endorsement of meritocracy beliefs and attitude certainty regarding meritocracy beliefs as individual differences. Research in meritocracy beliefs has had some previous success with priming endorsement of meritocracy beliefs (McCoy & Major, 2007), but it may be somewhat more difficult to prime attitude certainty regarding one’s meritocracy beliefs. It would be interesting, however, to examine why differences in correctness were found between people who were low and high in their meritocracy endorsement. What causes such a difference? We might speculate that due to the societal prevalence of meritocracy beliefs, people lower in meritocracy beliefs feel a greater need to justify their somewhat atypical beliefs. However, we must be cautious to not draw any causational conclusions that are unwarranted without more information; future research may attempt to better understand the mechanisms at play for developing, maintaining, and altering one’s certainty regarding meritocracy endorsement.

Finally, as previously noted, we did not replicate our original findings, in which there was an interaction between meritocracy endorsement and ratings of context for
women who have been rejected for a sexism-based reason. We believe that this is possibly due to the inclusion of attitude certainty scales. Interactions between attitude certainty and worldview on the expectancies generated by targets of prejudice have not yet been examined in the worldview literature, and future research should take into account how certain individuals are in their worldviews when examining what the effects are of challenging those worldviews. It might be the case that one’s degree of attachment to a particular knowledge structure may completely alter their response to having it challenged, and possibilities like these are worth exploring in the future in the field of worldview research. The inclusion of questions about attitude certainty, especially those related to the degree to which others think the attitude is correct, may lead to elaborated, thoughtful responses that may or may not reflect the operation of worldview schemata or lay theories.

Another possible direction for new research is examining the potential outcomes of either expecting sexism in the future or not expecting sexism. We might see effects similar to the self-fulfilling prophecy effect, indicating that expecting sexism and predicting negatively for the future might actually cause one to receive poorer treatment in the future. Or, it might also be the case that expecting sexism and predicting negatively might have some self-protective benefits, such that one is “ready” for a sexist event when it does occur. Some research suggests that women experience as many as two impactful sexist incidents per week (Swim, Hyers, Cohen, & Ferguson, 2001), and being prepared for these incidents may offer some degree of psychological protection. More research into these possibilities is needed in order to fully understand the effects of expectancies on future outcomes for women in this domain.
Future research in this field may also wish to more clearly differentiate between a general preference for merit principles and a belief that merit principles are currently in effect in society. Recent research on this topic suggested that these are actually two separate constructs (in one study, termed “prescriptive” and “descriptive” meritocracy beliefs), with only endorsement of “descriptive” beliefs predicting, for instance, preferences for maintaining the status quo (Son Hing et al., 2011). Although the current research has focused on the endorsement of the belief that a meritocracy currently exists in society, it is important to consider other constructs, and whether they might differently predict future expectancies of sexism.

Conclusions

In the current study, we investigated how women depend on both their worldview and their certainty in that worldview when generating expectancies about future events related to discrimination. Our findings suggest that a person’s degree of certainty in their worldview moderates their motivation to maintain those worldview-consistent beliefs. Future research should attempt to further examine how factors such as worldview and attitude certainty influence outcomes for targets of prejudice, both individually and in combination.
REFERENCES


APPENDIX A

Endorsement of Meritocracy Beliefs Questionnaire/Group Status Questionnaire

INSTRUCTIONS: Please select the number that best represents your feelings or beliefs on the item.

1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neither Agree nor Disagree, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree

1. Differences in status between groups in society are fair.
2. Differences in status between groups in society are the result of injustice.
3. It is unfair that certain groups in society have less than other groups.
4. Our society is an open society where all individuals can achieve higher status.
5. Advancement in our society is possible for all individuals.
6. Individual members of certain groups are often unable to advance in our society.
APPENDIX B

Attitude Certainty Questionnaire

INSTRUCTIONS: For the next set of questions, consider the attitude you expressed above, on the GSQ.

1 = Very Uncertain/Unclear, 2 = Uncertain/Unclear, 3 = Somewhat Uncertain/Unclear, 4 = Neutral, 5 = Somewhat Certain/Clear, 6 = Certain/Clear, 7 = Very Certain/Clear

1. How certain are you that you know what your true attitude on the Group Status Questionnaire is?

2. How certain are you that the attitude you expressed on the Group Status Questionnaire really reflects your true thoughts and feelings?

3. To what extent is your true attitude on the Group Status Questionnaire clear in your mind?

4. How certain are you that the attitude you just expressed on the Group Status Questionnaire is really the attitude you have?

5. How certain are you that your attitude on the Group Status Questionnaire is the correct attitude to have?

6. To what extent do you think other people should have the same attitude as you on this issue?

7. How certain are you that of all the possible attitudes one might have regarding the Group Status Questionnaire, your attitude reflects the right way to think and feel about the issue?
APPENDIX C

Job Applicant Vignette

INSTRUCTIONS: Please read this story about applying for a job carefully. After you finish, you will be asked questions about your opinions of the situation you have just read. Put yourself in the position of this job applicant as you read.

You are interviewing for a management position you hope to receive. When you arrive at the office, you see one other interviewee already there, who introduces himself as Chris. An HR representative then enters the room, and asks both you and Chris to fill out a brief “leadership ability” questionnaire about your management styles, stating that “These will be scored using a scoring system developed by the Stanford Graduate School of Business, and will be given to your interviewer for review to use in his decision.” You both fill out the questionnaire and hand it back, along with a copy of your resume.

After waiting for several minutes while Chris interviews first, you are then asked to proceed to the boss’s office. He introduces himself as Jones, and you sit down in front of his desk to begin the interview. After finishing the interview, you return home. When you check your email, you find an email from the boss, addressed to an HR representative, containing information about the interview process – it seems to have been accidentally sent to you via the “reply all” function.

The email reads: “After interviewing both applicants, they seem to be equally qualified for this position. However,

a) I’d have to say that at this point I would pick Chris for the managerial position. I think he will make a better manager, since like most girls, the other applicant is probably too emotional and won’t be a good leader.”

b) I’d have to say that at this point I would pick Chris for the managerial position. I think he will make a better manager.”

Please take my recommendation into account when making your decision.

Sincerely,
Jones
APPENDIX D

Expectancy of Future Sexism Items

INSTRUCTIONS: Please select an answer to the following questions based on the story you just read.

1 = Very Unlikely, 2 = Unlikely, 3 = Somewhat Unlikely, 4 = Undecided, 5 = Somewhat Likely, 6 = Likely, 7 = Very Likely

1. How likely is it that you will be denied a position involving leadership at another company in the future based on sexism?

2. How likely is it that you will be denied a position involving leadership in the same company in the future based on sexism?

3. To what extent do you think that sexism was involved in this hiring decision?

4. How likely is it that you will be denied a position involving leadership at another company in the future for any reason?

5. How likely is it that you will be denied a position involving leadership in the same company in the future for any reason?
APPENDIX E

Additional Items

INSTRUCTIONS: Please select an answer to the following questions based on the story you just read.

Answers were reported on a sliding scale from 0 (Not at all Upset/Very Easy/Very Unrealistic) to 100 (Extremely Upset/Very Difficult/Very Realistic).

1. How upset would you feel if you were in this situation?
2. How easy was it to put yourself in this situation?
3. How realistic do you think this situation is?

INSTRUCTIONS: Please select the choice that best represents your feelings or beliefs on the following questions.

1 = Very Liberal, 2 = Liberal, 3 = Somewhat Liberal, 4 = Moderate, 5 = Somewhat Conservative, 6 = Conservative, 7 = Very Conservative

1. Overall, I would describe myself as:
2. On social issues, I would describe myself as:
3. On economic issues, I would describe myself as:
EDUCATION

Wake Forest University
Master of Arts in Psychology Candidate
- Advisor: Dr. Catherine E. Seta
- GPA: 3.92/4.0

Birmingham-Southern College
Bachelor of Science in Psychology
- GPA: 3.93/4.0, summa cum laude
- Phi Beta Kappa; Dean’s List (inclusive)

PROFESSIONAL PRESENTATIONS


Carper, S., Jasser, M., Sack, K., & Pitts, S. (May 2011). Traits associated with the accurate perception of sexual orientation in male faces. Presentation at BSC Honors Day Convocation, Birmingham-Southern College, Birmingham, AL.

RESEARCH EXPERIENCE

Graduate Master’s Thesis, Wake Forest University
Project: The effects of meritocracy beliefs on the targets of prejudice
Advisor: Dr. Catherine E. Seta

Research Assistant, WFU, The Character Project
Primary Investigator: Dr. William Fleeson

Research Assistant, BSC
Advisor: Dr. Heather Meggers-Wright
RESEARCH EXPERIENCE (continued)

Undergraduate Senior Thesis, BSC
Project: Traits associated with the accurate perception of sexual orientation in male faces
Advisor: Dr. Shane Pitts

September 2010 – December 2010

Research Assistant, University of Alabama in Huntsville
Advisor: Dr. Marita A. O’Brien

May 2010 – August 2010

TEACHING EXPERIENCE

Lab Instructor, WFU, Research Methods in Psych II
Advisors: Dr. Wayne E. Pratt & Dr. Eric R. Stone

August 2012 – Present

Teaching Assistant, BSC, Research Methods
Advisor: Dr. Lynne Trench

February 2010 – May 2010

AWARDS AND HONORS

• Graduate assistantship and tuition waiver, Wake Forest University
  August 2011 – May 2013
• Summer research funding, Wake Forest University
  Summer 2012
• Kurt Lewin/Richard McCallum Award in Psychology
  Spring 2011
• Psi Chi Psychology Honor Society
  Spring 2010
• Donald C. Harrison Honors Scholar, Birmingham-Southern College
  Fall 2007 – Spring 2011

SKILLS

• Proficient in SPSS
• Proficient in Microsoft Office (Word, Excel, Powerpoint)
• Proficient in SONA Experiment Management System
• Experienced with Qualtrics Survey Research Suite