# UNEQUAL EQUALITY: THE IMPACT OF DIFFERING PERSPECTIVES ON RACE-BASED CHOICES

## A Dissertation by

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The following faculty members have examined the final copy of this dissertation for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Doctor of Philosophy, with a major in Psychology.

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# DEDICATION

To mom and dad, for encouraging me to recognize injustice, to always stand up for what is right, and to believe that I can make a difference

Standing still is never an option so long as inequities remain embedded in the very fabric of the culture.

- Tim Wise

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#### **ABSTRACT**

The issue of race in the United States is complex at best. Ongoing racial disparities provide confirmation for the ongoing relevance of race in our communities. As racism has shifted from overt to less obvious forms, it has become more difficult to gauge exactly how much progress we have made. Measuring racial biases is even more complicated, especially as racial biases have become increasingly subtle. One way to measure authentic behavior is through the use of field experiments, which include elements of deception.

The present study utilizes field experiment methodology to measure subtle biases in judging a scholarship contest. A fictional scholarship organization was created to examine choice and perceived progress toward racial equality through the lens of prospect theory and the adjustment and anchoring heuristic. Undergraduate students at Wichita State University were randomly selected to participate as judges in a scholarship contest between two fictional finalists who had mixed qualifications. Within-group variance among students who identify as white (N = 655) was examined to view how reference points influence choice.

Results indicate that choices relied on actual information in each profile, with preference for the higher GPA rather than the race of the finalist. Race was a factor when participants viewed progress differently and when they used a future reference point for making an assessment of progress. Several demographic variables also influenced the rating of each finalist.

The findings of the present study provide some support for prospect theory and the adjustment and anchoring heuristic. It is clear that subtle biases are present, although complicated to detect. Implications for future research are discussed, as well as suggestions for interventions that address racial divisions in communities.

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#### CHAPTER I

#### LITERATURE REVIEW

Race relations have changed drastically throughout the history of the United States.

Recent studies indicate that levels of prejudice and incidences of racial discrimination have decreased (e.g., Blank, Dabady, & Citro, 2004; Feagin, 2006), all while conditions have improved for people of color through policies that support equality (Zuriff, 2002). With all of the improvements that have been made, however, many disparities between racial and ethnic groups remain (Blank et al., 2004) and some disparities have become worse over the past few decades (Margellos, Silva, & Whitman, 2004; Moy, Dayton, & Clancy, 2005).

Racial differences exist in nearly every aspect of life. Life expectancy, for example, is impacted by race. Life expectancy for black Americans is 5.1 years shorter, on average, than for white Americans. This disparity is primarily due to instances of heart disease, cancer, stroke, diabetes, kidney disease, hypertension, and liver cirrhosis (Williams & Mohammed, 2008). One of the largest health disparities, however, can be seen in infant mortality rates. Infant mortality rates for black women are 2.4 times the rate for white women, and the rate for American Indian women is 64 percent higher than white women (MacDorman & Mathews, 2011).

Growing gaps in earnings can be seen between whites and all other racial and ethnic groups (Blank, 2001). Over a lifetime, a person of color is much more likely to be in poverty, less likely to build home equity from home ownership, and less likely to accumulate assets than white individuals (Rank, 2009). Educational attainment continues to vary between groups, with differences in high school completion rates widening between Hispanics and whites, and college completion rates becoming wider with both Hispanic and black students (Blank, 2001). In fact, disadvantages tend to build upon one another throughout the lifespan of a person of color (Rank,

2009). This cumulative disadvantage starts in childhood and results in larger disparities in every area later in life.

Residential segregation also remains extremely high. In fact, residential segregation has been found to be one of the leading factors in disparities in socioeconomic status, education, employment opportunities, and physical health (Williams & Collins, 2001). Further, African-American and Latino males are disproportionately represented in the criminal justice system as they are more likely to be profiled and searched by law enforcement officers, have higher arrest rates, higher incarceration rates, and are less likely to be granted release than white males (Crutchfield, Fernandes, & Martinez, 2010). For example, an analysis of traffic stops in Wichita Kansas revealed that black and Hispanic citizens were stopped more frequently, and were also more likely to be searched and arrested than whites (Withrow, 2004). With all of these disparities, it is clear that there is still a racial divide in the United States.

While the research is clear that race is still an important predictor of success in the United States (e.g., Rank, 2009; Williams & Collins, 2001), the perception that equality has essentially been achieved is widespread. Since the election of President Obama, perceptions of equality have increased. This perception that equality has been attained has conversely decreased support for public policies that attempt to decrease disparities, such as affirmative action (Kaiser et al., 2009). Differences in perceptions of progress toward racial equality are also prevalent. In general, white Americans perceive that we have made more progress toward equality than do black Americans (Eibach & Ehrlinger, 2006). These differing perceptions about what is happening in the United States is a source of conflict and a source for increasingly divergent views, especially when it comes to support for policies that promote equality between racial groups. It is important to examine issues regarding perception of contemporary progress of racial

equality to have a better understanding of the cognitive and social dynamics, and how our differing perceptions of progress impact our behaviors.

#### **Racist History in United States**

History tells a story about a tumultuous relationship between race and social structure.

The role that our racist past has had in making the United States what it is today cannot be denied. The role that the racist past has played ensures its place as a continuous source of conflict in the future.

While racism today looks incredibly different from the racism of our past, it is still present. From our history of slavery and the removal of indigenous populations to American concentration camps and Jim Crow laws, to the more recent immigration debates and disparities in health, wealth, education, and incarceration, researchers and theorists contend that race is still a foundational factor in social justice issues (e.g., Dovidio & Gaertner, 1986, Feagin, 2007). At the same time, the claim that racism continues to be an important factor in US society is often met with varying levels of agreement and disagreement. These differing perspectives of progress toward racial equality are a source of contention (Kahn et al., 2009). It is difficult to dispute, however, that progress has been made but more progress needs to be made in our search for racial equality.

#### The Changing Nature of Racism

How racism is manifested today is different from how it was manifested in the distant and even not-so-distant past. Traditional definitions of racism include blatant, personal racism. These more overt forms of racism, however, are no longer as prominent as they were in the past. Holding such a stringent definition of racism tends to overlook more subtle forms of racism that

are more prevalent today. Racism today, while still present, is more subtle and unintended (e.g., Dovidio & Gaertner, 2004; Trepagnier, 2010).

Racism can more accurately be viewed as a continuum that includes both objective and subjective expressions of racism. Different groups, however, often hold different understandings of racism. White Americans typically view racism as feelings, attitudes, and actions, and frequently confuse objective racism with subjective racism (Blauner, 1995). This objective definition of racism causes categorization of "racist" or "not racist." People of color, however, tend to view racism subjectively and as institutional in nature. The differences between these understandings of racism may result from an individual's experiences in society. Individuals who are victims of racism view it with a set of experiences that are unknown to those who are not victims of racism (Trepagnier, 2010). Consequently, it is important to take a more holistic approach when defining and discussing racism.

#### **Defining Racism**

Varying definitions of racism have been used when attempting to discuss and solve broader issues surrounding racism. The definition that is used for the purpose of this literature review was proposed as a common definition that includes fundamental elements of racism while allowing for variance by type. This definition includes racism as more than individual actions, but rather the collective actions of a dominant race group. Racism, therefore, is defined as a combination of race prejudice with the misuse of power by systems and institutions (Barndt, 2007).

In addition to identifying one common definition for racism, it is important to acknowledge the different expressions of racism. Like general racism, the different forms may be expressed along the continuum of "more racist" to "less racist." Maintaining the view that racism

exists on a continuum places the emphasis on the effects of actions rather than on intent of actions (Trepagnier, 2010). Many forms of racism exist, including the more common forms of old-fashioned racism, modern racism, aversive racism, and color-blind racism.

Old-Fashioned Racism. Historically, racism primarily took the form of overt, or old-fashioned, racism. While this type of racism is less prevalent, it is still present to some degree in the United States (e.g., Dovidio & Gaertner, 1986; Feagin, 2007; McConahay, Hardee, & Batts, 1981). Old-fashioned racism operates under the assumption that people of color are inherently inferior to whites. Consequently, old-fashioned racism endorses the belief that separation of the races was needed and that discrimination is a justifiable practice (Hughes, 1997). This is often manifested in direct behaviors that are intended to promote discrimination (McConahay et al., 1981).

Old-fashioned racism has changed, but continues to impact the cognitive component of our racial attitudes (McConahay et al., 1981). Many racist views are held on this hidden level of thought. Examples include an ideology that assumes that many people of color are dependent on welfare or are less intelligent than white Americans. Many individuals define and understand terms such as "family values," "American society," and even "Americans" as white values, white society, and white Americans. These assumptions are remnants of the more blatant racist ideology of the past, but have become an ingrained part of thinking for many white Americans that have led into modern racism (Feagin, 2006).

Modern Racism. Modern racism is embodied by the belief that people of color no longer face discrimination, that current disparities result from of a lack of hard work, and that people of color demand too much and receive a disproportionate share of resources (Sears & Henry, 2003). Modern racism was first studied in the early 1970's. The research was based around voting

behaviors of white Americans in political elections. Through the research, it was discovered that individuals denied having any anti-black sentiments but consistently voted against policies to promote racial equality. Voters rationalized these behaviors by aligning voting patterns with the traditional values of white candidates, particularly the value of individualism (Zuriff, 2002). The early research culminated in coining the term of symbolic, or modern racism. Modern racism is a combination of negative opinions of people of color and traditional, conservative values such as individualism, hard work, and self-reliance (Hughes, 1997).

The belief system underlying modern racism explains how it culminates in a strong opposition to policies such as affirmative action and welfare as liberal, unneeded, and even detrimental policies (Kaiser et al., 2009; Sears & Henry, 2003). Rather than operating on a system of threat, modern racism operates from a system of resentment for people of color, due to a belief that they are receiving more than they deserve. This type of racism, therefore, is unique in that it is frames as a moral belief (Hughes, 1997).

The first studies on modern racism were on political opinions and voting behaviors, but have expanded to include many other topics. Research has been conducted on the impact of television news on white viewers, and the effects of racism on jury panels, and discrimination in hiring practices (Zuriff, 2002). Modern racism does have critics, however, whom state that it is too narrowly focused on individual support for policies, and should focus more broadly on group interests. A more broad focus, critics suggest, would include a consideration of whether opposition to policies for racial equality is related to perceived fate of one's own group rather than individual interests (Bobo, 1983).

<u>Aversive Racism.</u> While modern racism is most commonly seen in political and social conservatives, aversive racism is most commonly expressed by liberal individuals (e.g., Dovidio

& Gaertner, 1986; Zuriff, 2002). Aversive racism is expressed in a much more subtle way.

Aversive racism is expressed through support for more liberal policies that promote racial equality as well as a support for victims of injustice, while still possessing negative feelings about people of color. In contrast to old-fashioned racism which is expressed through hostility or hatred, aversive racism is expressed through discomfort, uneasiness, disgust, or fear (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 2000). As Dovidio and Gaertner (1986) clarify, aversive racism is differentiated from general positive feelings about people of color in that the sympathy for victims of injustice are not paired with respect or friendship. These components, they suggest, are necessary for genuinely favorable attitudes toward people of color.

The expression of aversive racism is done in ways that the individual will not have to directly challenge his or her sense of being nonracist (Dovidio & Gaertner, 2000). The endorsement of values of racial equality causes individuals with an aversive racist framework to respond in a non-prejudiced manner in situations where bias could be obvious. In more ambiguous situations, however, these same individuals will behave in a discriminatory way. The ambiguity of the situation allows the individual to justify behavior on some other factor, allowing the expression of negative feelings toward people of color without challenging the self-image as a person who supports equality (Gaertner & Dovidio, 1986).

Aversive racism is difficult to recognize, as it is often expressed in ambiguous situations. Research on aversive racism has compared self-reported racial attitudes with behaviors in different situations. The first study that led to research on aversive racism compared responses to a phone request for help from an individual with a distinctive black versus a distinctive white dialect. Findings revealed that conservative households were much less likely to help the black-sounding individual than liberal households. Premature hang ups before the need was stated,

however, were more frequent toward black callers than white callers in liberal households (Gaertner & Dovidio, 1986). The research stemming from this study led to a more in-depth examination of behaviors when situations were ambiguous. The bystander effect, for example, is more common when other witnesses are believed to be present when the victim is black than when the victim is white. If the individual is the only witness, however, helping behaviors are equivalent (Dovidio & Gaertner, 2004).

Most studies on aversive racism are done with college students (Zuriff, 2002), and have examined choices made by college students in selection protocols for peer counselors (Dovidio & Gaertner, 2000), college admissions (Hodson, Dovidio, & Gaertner, 2002), and assistance to individuals on tasks (Frey & Gaertner, 1986). All of the studies provide support for the aversive racism framework, as individuals discriminate when situations are more ambiguous, or allow individuals to attribute his or her own behavior to other factors (Zuriff, 2002). College students may be a natural group to study, as aversive racism is most common among well-educated and liberal individuals (Gaertner & Dovidio, 1986). In fact, aversive racism may be a good characterization of the general racial attitude among college students (Hodson et al., 2002).

<u>Color-Blind Racism.</u> Many forms of subtle racism have explained prejudice and discrimination as the result of individual beliefs—conscious or unintentional. Color-blind racism, however, operates on the principle that racism is not a direct result of individual philosophies, but is the result of a racist system that gives privilege to the dominant racial group (Bonilla-Silva, 2003). Color-blind racism is an ideology where individuals are not supposed to notice race (Bonilla-Silva, 2003; O'brien & Korgen, 2007), and emphasizes similarities and deemphasizes differences (Apfelbaum et al., 2010), and therefore determines that racism is no longer a factor in the United States (Barr & Neville, 2008; O'Brien & Korgen, 2007). By downplaying the role that

race plays in the United States, color-blind racism allows whites to appear not racist while defending systemic privilege granted to themselves (Bonilla-Silva & Forman, 2000).

Color-blind racism operates on four main tenants: abstract liberalism, naturalization, cultural racism, and minimization of racism (Bonilla-Silva, 2003). The first tenant, abstract liberalism, uses idealistic language of equality to oppose policies that promote racial equality. By using idealistic language, an individual is able to oppose policies and deny inequality while appearing to be an advocate for equality. The second tenant, naturalization, is an assumption that the status quo is a natural and acceptable way of life. Segregation of neighborhoods and relationships are often explained by this component of color-blind racism as individuals' state that people naturally gravitate toward racially similar individuals. With both abstract liberalism and naturalization, the assumption is that nothing needs to be done to change the status quo.

The third tenant of color-blind racism is cultural racism. Cultural racism is the assumption that people of color are culturally inferior and lacking in traditional family values. This assumption is used as a justification that policies are not the solution to meaningful change, as policy changes would not result in a change of value systems. The fourth and final tenant of color-blind racism is the minimization of racism. Minimization of racism allows the argument that discrimination is a rare occurrence and is an anomaly rather than a common occurrence. The argument also allows individuals to ignore any discrimination that may occur (Bonilla-Silva, 2003). This is further accentuated by differences in perceptions of racism and equality between whites and people of color (O'Brien & Korgen, 2007). Whites tend to perceive more progress toward equality than people of color perceive (Eibach & Ehrlinger, 2006), which can lead to decreased support of policies that promote racial equality by white individuals (O'Brien & Korgen, 2007).

The appeal of color-blindness as an approach to diversity is the assumption that eliminating the visibility of race will eliminate prejudices that are formed based on race. The outcome of color-blindness, however, is opposite of the assumption of eliminating racial prejudices (Apfelbaum et al., 2010). Studies that examine the use of the color-blind approach in education settings show that the consequences can be negative. Using a color-blind approach in education settings actually discourages acknowledgement of race, ignores important and relevant cultural differences, increases racial biases (Schofield, 2007), and decreases detection of discrimination and resulting interventions (Apfelbaum et al., 2010). Color-blindness impacts people of color by reducing the perception of being a victim of racially motivated injustices and impacting racial identity development (Barr & Neville, 2008). Color-blind racism can be found in all individuals (Bonilla-Silva, 2003), although white individuals tend to identify with the color-blind ideology more than people of color (Bonilla-Silva, 2003; Ryan et al., 2007).

Regardless of the type of racism that is being considered, it is commonly accepted among researchers that effects of racism are cumulative over a lifetime (e.g., Blank et al., 2004; Rank, 2009). With cumulative disadvantage, small levels of racism create a much larger impact later in life. Cumulative disadvantages may result from only one small inequality, such as an early educational inequality, and impact later areas such later education, job market, and wages (Blank et al., 2004). This can result in significant labor market outcomes, residential segregation, and inherited assets or deficits (Rank, 2009). The effects of cumulative disadvantage demonstrate that regardless of the form of racism, it has a devastating impact on communities.

### **Perceptions of Progress toward Racial Equality**

Racism has changed significantly in recent history. The more subtle forms of racism, for example, encourage an invisibility of the issues surrounding race (e.g., Dovidio & Gaertner,

2004). How people perceive these changes, however, varies significantly depending on the racial group to which they belong (Eibach & Keegan, 2006). How we perceive equality has an important impact on support for public policies and intergroup relations (Brodish, Brazy, & Devine, 2008). The differences between perceptions of progress may explain some of the division and tension between groups and individuals when discussing racial equality.

Consequently, decreasing the gap between perceptions of progress may help to decrease tension and increase cooperation between groups when considering matters of equality (Eibach & Ehrlinger, 2006).

#### **Between-Group Differences**

Perceptions of progress toward any social issue vary depending on an individual's group membership. Members of dominant groups tend to perceive greater progress toward equality than members of historically subordinate groups (Eibach & Keegan, 2006). White Americans, for example, perceive more progress toward racial equality than do people of color (Eibach & Ehrlinger, 2006; Eibach & Keegan, 2006). The differences between perceptions of equality relate to which reference points individuals use when assessing progress. Using the past as a reference point, the present state can appear much more favorable than when comparing the present state to an ideal future state of equality. While both reference points should be considered when assessing progress, many people focus on one reference point more strongly than the other. Initial findings based on qualitative assessments demonstrated that white individuals tend to anchor on the past when considering current issues of racial equality, while people of color tend to focus on the ideal future. Priming individuals for different reference points, however, can change the assessment of progress to a point. When individuals were prompted to assess progress as compared to an ideal future of racial equality, whites' perceptions of progress decreased

significantly while the perceptions of people of color remained the same. Conversely, when individuals were prompted to assess progress as compared to a racist past, the perceptions of people of color increased significantly whereas whites' perceptions of progress remained unchanged (Eibach & Ehrlinger, 2006). In addition to establishing a pattern in which whites tend to focus on the racist past while people of color tend to focus on the ideal future of equality, an important implication of Eibach and Ehrlinger's research is that perceptions of progress can be manipulated by considering other reference points.

Other explanations for the differing perspective of progress should be considered. Attributions, for example, are one potential cause for the difference in perceived progress. If more situational attributions are made, for example, greater progress toward equality is perceived (Reid & Birchard, 2010). Kluegel and Smith (1986) established attributions as one potential explanation for different perceptions of progress. They found that whites typically attribute inequalities to dispositional attribution whereas people of color emphasized situational attributions. Eibach and Keegan (2006) further explored the differences in perceptions of racial progress through a framework of gains and losses. They suggested that individuals assess progress differently based on the perception of whether the group has gained or lost privileges. White individuals, for example, have had to give up some privileges in order for equality to increase. Because of the subjective feeling of loss, white individuals may judge that they have given up a great deal and therefore, have made significant progress toward equality. The subjective feeling of gains and losses can explain how perceptions of progress differ when viewed through the lens of prospect theory, which is explained below.

#### **Within-Group Differences**

While most of the research has focused on differences in perceptions of progress between groups, it is important to look at the variability that is present within groups. Brodish and colleagues (2008) expanded upon the work of Eibach and Ehrlinger (2006) that established the importance of reference points in perceptions of progress. Eibach and Ehrlinger found that these reference points explained between-group variability when it came to differing perceptions of racial progress. Brodish and colleagues, however, have expanded upon this research to examine the variability within groups.

Consistent with research that focuses on between-group variability, reference points also influence the variability found within groups. Within white groups, individuals who focus on the racist past as a reference point believe that more progress has been made. People who focus more strongly on the ideal future of equality, however, believe that less progress has been made (Brodish et al., 2008). These findings show consistency with the original between-group findings and suggest that they may also be consistent within other ethnic groups.

#### **Prospect Theory**

Reference points and anchoring on the past or present greatly impact perceptions of progress. Additionally, perceived gains and losses may be important for perceived racial progress. Both can be further understood through prospect theory, which describes how people make evaluations for risky decisions, or those that result in gains or losses (Kahneman & Tversky, 1984).

Within prospect theory, potential outcomes for any decision can be framed as a loss or a gain as compared to the status quo. How losses and gains are framed, however, are not equivalent. Central to the prospect theory is the concept of loss aversion. With loss aversion, a

loss is viewed as more significant than an equivalent gain. With prospect theory, losses are weighed more strongly than equivalent gains (Kahneman & Tversky, 1984).

Prospect theory also suggests that framing is an important aspect of decision making, as it may lead to an assumption of greater or lesser loss. For example, if an individual is given a choice between a high probability of a great loss and the certainty of a lesser loss, the high probability of a greater loss is preferred significantly more often. This preference is seen because of the small chance of no loss. When zero-loss is a possibility, it will be preferred no matter how small the probability (Kahneman & Tversky, 1984).

As related to prospect theory, progress toward racial equality can be perceived as a gain to people of color. Conversely, increased equality could be perceived as a loss to whites if they believe they must give up some privilege for equality to be attained (Eibach & Keegan, 2006).

### **Adjustment and Anchoring Heuristic**

Perceptions of progress are impacted by the reference points used to anchor judgments of racial equality (Eibach & Ehrlinger, 2006). The adjustment and anchoring heuristic, however, may explain why the use of different reference points makes it difficult to come to an agreement of how much progress toward racial equality has been achieved. With the anchoring heuristic, a starting point, or anchor, is either chosen or appointed. Different starting points provide different estimates, as the reference point is an important consideration in making the judgment (Tversky & Kahneman, 1974).

Not only is the starting point important in an initial judgment, it is important in any adjustments that are made to that judgment. Most adjustments remain in close proximity to the initial estimation made, based upon the point of origin. Minor adjustments typically do not change enough, and responses continue to remain closely aligned with the anchor (Tversky &

Kahneman, 1974). The anchoring and adjustment heuristic therefore suggests that in order to come to an equivalent understanding of progress toward racial equality, individuals must be prompted to start with the same reference points. At the same time, Eibach and Ehrlinger (2006) demonstrated that manipulation of reference points does result in a more equivalent perception of progress toward racial equality.

#### **Perceived Progress and Behavior**

Perceptions of progress toward racial equality are correlated with levels of prejudice. In a study conducted with white participants, individuals were assessed for perceived progress toward equality, reference points, and for responses on the Attitudes Towards Blacks scale. Individuals who scored high in prejudice tended to perceive that more progress had been made toward equality. Conversely, individuals who scored low in prejudice perceived that less progress had been made toward equality. Reference points are also related to scores of prejudice. Individuals who anchored on the ideal future scored lower in prejudice, although individuals who more strongly anchor on the past did not necessarily score higher in prejudice. Individuals who scored higher in prejudice, however, did tend to anchor more strongly on the past than on the ideal future. It seems that in white individuals, the ability to anchor on the future is associated with lower overall levels of prejudice (Brodish et al., 2008).

Reactions to policies for racial equality are not only related to types of racism, as described by modern racism (Sears & Henry, 2003) and aversive racism (Gaertner & Dovidio, 1986), but also by perceptions of progress toward equality (Brodish et al., 2008). Even after controlling for prejudice, perceptions still have a relationship to reactions to policies surrounding racial equality, such as affirmative action. Individuals who perceive less progress, for example, reacted more favorably to affirmative action policies than individuals who perceived more

progress toward racial equality. Additionally, policies were more favored by whites if the costs were low as opposed to when the costs were higher (Lowery et al., 2006). Perceived progress toward racial equality was also related to voting behavior, with an overall increased perception of progress being seen after the election of President Obama (Kaiser et al., 2009). The finding of increased perceptions of progress in response to the election of the first black President of the United States suggested that perceptions of progress may be related to voting behaviors and overall political opinion.

The differences between perceptions of progress toward racial equality may be best explained by how progress is assessed, rather than what is being assessed. Research suggests that individuals are seeing the same present situation, but simply perceive it differently based upon differing reference points (e.g., Eibach & Ehrlinger, 2006; Eibach & Keegan, 2006; Brodish et al., 2008). It is clear, however, that the perspectives of progress are correlated with prejudices and support for policies that support equality (Brodish et al., 2008). It is important to further examine the extent of the relationship between perceived progress and racism, as it may assist in developing interventions that aim to reduce the occurrence of subtle forms of racism. This is the underlying goal of the present research study.

#### **Measuring Progress toward Racial Equality**

The actual extent of progress that has been made toward racial equality is complex. More progress has been made in certain domains than in others, and the reference point is important to consider in determining the actual extent of progress that has been made (Eibach & Ehrlinger, 2006). Regardless of actual progress, groups have different perceptions of the progress that has been made. Measuring perceptions, therefore, may provide more information on the nature of these differences and provide a more detailed view of the current state of equality.

#### **Qualitative Assessment**

The differences in perceptions of equality have been studied more recently in an attempt to explain differences between racial groups in assessing the current state of equality. In an initial study, participants were asked to respond to a series of open-ended questions assessing progress (Eibach & Ehrlinger, 2006). Responses were analyzed based on the reference point and were coded into one of four categories: compared only with the past, compared mostly with the past along with a brief acknowledgement of an ideal future, compared with the past and also with the ideal future, and compared only with the ideal future. Codes were then examined through analysis of variance.

Brodish and colleagues (2008) suggested that using a qualitative approach to determine reference points was a good initial step, but needed a more detailed way to explore the details involved in using reference points. Instead, they developed a scale to use so that the relationship between past and future reference points could be statistically explored.

#### **Survey Assessment of Progress**

An initial study assessing progress toward equality utilized three questions (Eibach & Keegan, 2006). One question required participants to list gains for people of color and rate the difficulty of the gain. The other two questions were evaluations of progress as compared to the past. Each question was rated on a scale of 0 to 7, with different anchors at the two end points for each question. These questions were created to measure the perception of progress, and are used in combination with open-ended questions that assess reference points of the participants.

The questions created by Eibach and colleagues have been expanded upon through further research. Questions have been developed to use in a survey instrument along with the questions that measure perceived progress (Brodish et al., 2008). The new questions were created

in an attempt to measure the reference points that individuals take when assessing progress toward equality with survey, rather than by coding responses to open-ended questions. Two measures were created in this endeavor: one that measures the extent of anchoring assessments on a racist past, and another that measures the extent of anchoring assessments on an ideal future.

The perceptions of progress measure was updated to include five items that are rated on a 7-point scale (very little to a great deal; Brodish et al., 2008). A sample question from this scale is "How much progress has been made toward racial equality?" An average score is then created from responses, with high scores representing higher perceptions of progress and low scores representing lower perceptions of progress. Further scale development eliminated one question to result in a four-item measure for the Perceptions of Progress scale (Brodish & Devine, n.d.). The resulting four questions ask about perceived progress and include reference points. One example is "How much further do you think the United States has to go to create equality for racial minorities in the future?"

Two additional measures were created to assess reference points (Brodish et al., 2008). To assess anchoring on the past, two questions were created and are rated on 7-point scales. The first item is "When I think about racial progress, I think about how much improvement the US has made from the past." The second item is "When reflecting on issues of equality, how much do you think about how far the US has come to create equality for racial minorities?" (Brodish & Devine, n.d.) Scores are combined from the two questions with higher scores representing a stronger tendency to anchor on the past. Reliability scores for anchoring on the past were questionable ( $\alpha = .63$ ). A second measure was created to assess anchoring on the future. Two questions were included that are rated on 7-point scales. The items are "When I think about racial progress, I think about how much improvement the US has to make in the future" and

"When reflecting on issues of equality, how much do you think about how much further the US has to go to create equality for racial minorities?" Scores on this measure are also combined to create an overall index where higher numbers represent a higher tendency to anchor on the future. The measure to assess anchoring on the future had higher reliability scores ( $\alpha = .76$ ) than the first measure. The alpha levels are questionable, however, due to the small number of questions in each measure. The low to moderate reliability of the measures for reference points suggest that further development of the measures is needed.

The survey method for perceptions of progress and reference points may be useful when used in combination with other methods for measuring racism. The combination of methods may provide further insight into the relationships between perceived progress and discriminatory behaviors. Future research should focus on developing a more reliable measure of reference points used when assessing progress toward racial equality.

#### **Measuring Racism**

Many techniques have been used in an attempt to accurately measure racism with varying levels of success. Initially, racism was measured through straightforward methods, such as questionnaires. As racism has become less overt and more subtle, however, it has become more difficult to measure. Research indicates that overt measures of racism can detect overt forms of racism, but overt measures of racism are not able to detect the subtle forms of racism. As a result, more discreet methods have become more common in the measurement of racism (Blank et al., 2004).

## **Survey Methodology**

Evidence of overt racism, which was legal prior to 1964, was initially collected through simple surveys that examined policies or personal incidences of racial discrimination. As racism

has become less overt, it is more difficult to clearly measure racial discrimination through survey methodology. Survey methodology is useful in measuring perceived discrimination, but is no longer effective in measuring the actual prevalence of discrimination (Blank et al., 2004).

Carefully worded surveys may be helpful when measuring racial attitudes. Social desirability, however, is high in responses to questions about discriminatory attitudes (Blank et al., 2004). Self-reported attitudes are especially vulnerable to social desirability. Racial attitudes collected through surveys, for example, were found to be significantly different than attitudes expressed during interviews with the same participants (Bonilla-Silva & Forman, 2000). This is especially common among white respondents (Blank et al., 2004). Social desirability is one reason that information based on survey methodology may be underreported. Regardless, much of our current knowledge of racial attitudes and perceptions surrounding racism come from survey methodology.

Modern Racism Scale. The Modern Racism scale is the most used survey measure of subtle racism. Developed by McConahay (1986), the Modern Racism scale includes questions on modern racism and overt racism. Items on current events are also included as distracter items to disguise the true nature of the scale (Blank et al., 2004). Because of the nature of modern racism, results exist on a continuum, and many individual differences exist in the degree of agreement with modern racism. The scales were designed to detect whether a person has primarily positive, negative, or ambivalent attitudes about people of color (McConahay, 1986).

The Modern Racism scale is comprised of seven modern racism items and seven old-fashioned racism items. Modern racism items are statements such as "over the past few years, blacks have gotten more economically than they deserve," and "it is easy to understand the anger of black people in America." Old-fashioned racism items include statements such as "black

people are generally not as smart as whites," and "generally speaking, I favor full racial integration" (McConahay, 1986, p. 108).

Factor analysis has been done on the Modern Racism scale using maximum likelihood extraction and oblimin rotation in three different samples in 1976 (N = 879), 1977 (N = 709), and 1984 (N = 167). Findings were similar among all three samples, with the same items scoring highly on the same factors of modern racism and old-fashioned racism. Correlation between the two factors was reported at .59 in the 1984 sample, which was down from a .70 correlation in the 1977 sample and a .68 correlation in the 1976 sample. The high correlation was purported to signify the relationship that represents positive, negative, or ambivalent feelings about people of color. The alpha coefficient for the entire scale was .77, but increased to .82 after the inclusion of a seventh item in the 1984 sample (McConahay, 1986).

Critics of the Modern Racism scale point out that the items used to measure modern racism still suggest a general dislike for people of color, which may measure a construct that is separate from modern racism (McConahay et al., 1981; Zuriff, 2002). In addition, critics suggest that perceiving more progress for people of color may unjustly cause an individual to score higher on the Modern Racism scale than is deserved. Similarly, some critics argue that the Modern Racism scale may be more reflective of political beliefs of government involvement than of modern racism (Zuriff, 2002). Regardless, responses may be impacted by social desirability, which would result in lower scores on the Modern Racism scale than is actually present. More recently, the items have been critiqued as outdated. Once considered minimally reactive, the items on the Modern Racism scale are now considered more reactive and may be more related to old-fashioned racism than of subtle forms of racism (Blank et al., 2004).

Most individuals are opposed to appearing racist, regardless of the form of racism that is held. Because of the aversion to appearing racist, benefits may be seen by using alternative ways to measure subtle racism. Surveys continue to be useful, however, when used in combination with other techniques, and may be better when used in conbination with other methods (Blank et al., 2004). Surveys have been combined with field experiments (e.g., Brodish et al., 2008; Frey & Gaertner, 1986) and with interviews (e.g., Bonilla-Silva & Forman, 2000; Eibach & Ehrlinger, 2006) to provide a more complete picture of racial discrimination.

#### **Interviews**

Detailed experiences of individuals whom experience racism can be obtained through interviews. The structure of the interview varies with the researcher. Some interviews are semi-structured in which the same questions and probes are asked of all interviewees. Other interviews may be unstructured in which more attention is paid to obtaining rich detail of the experience of the interviewee. There are benefits and drawbacks to each method associated with the interaction with the interviewer and the depth of information obtained (Creswell, 2013). Interviewees may be influenced by the interaction with the interviewer (Blank et al., 2004). Additionally, smaller samples limit the generalizability of information learned from interview methods. Regardless, many studies have used interviews to obtain a more in-depth view of racism (e.g., Bonilla-Silva & Forman, 2000; Spanierman et al., 2007).

Interviews have provided rich information about the prevalence, attitudes, and experience of racism. Discrepancies have been seen in the information learned from interviews and information found in survey methods (Bonilla-Silva & Forman, 2000). While surveys indicate that racism is improving in the United States (e.g., Feagin, 2006; Zuriff, 2002), interviews often

portray persistent, yet subtle, racial biases (Bonilla-Silva & Forman, 2000; Spanierman et al., 2007).

Bonilla-Silva and Forman (2000) obtained information through interviews that clashed with the general belief that prejudiced attitudes have improved in the United States. After conducting a series of surveys, in-depth interviews were conducted with a random sample of participants in the survey study. A total of 41 interviews were conducted, in which the responses to the surveys were compared with information obtained in the interview. General findings indicated that the survey responses of the subsample differed significantly with views that were expressed during the interview. Support for interracial marriage, for example, dropped from 90 percent in the survey subsample to 30 percent support in the interviews. This significant drop in approval was also reflected in other racial attitudes. Participants made statements that denied racism such as "I am not a racist but..." in an attempt to maintain an image of tolerance. The interview method of this study made it possible to detect racist attitudes that were not detected in a self-report measure.

Interviews are also useful for examining understandings of and responses to racism. Support for the mentality of blaming the victim has been found through qualitative work where participants supported the meritocracy of the economic system and attributed economic disadvantages to the failure of the individual (Feagin & O'Brien, 2003). More information has also been learned about the impact of racism through in-depth interviews. Interviews have revealed that racism does not only have a positive impact on whites through privilege, but also has negative connotations through cognitive and behavioral costs (e.g., Bowser & Hunt, 1996; Spanierman et al., 2007). The depth of information gained from interviews has contributed to the richness of the literature on racism.

## **Implicit Association Test**

Subtle racism is assumed to operate below the level of awareness. It is assumed that our cognitive networks process words and/or images more rapidly when they are associated with one another. Implicit association tests have been developed to measure this unintentional type of racism (Zuriff, 2002).

A typical implicit association test includes the presentation of an image of a black person or a white person. These are then followed by positive target words (e.g., love, honest) or negative target words (e.g., failure, hatred). Participants respond to the words and images by using computer keys to categorize face images as black or white, and words as "good" or "bad." Reaction times in the hundredths of a second are measured and indicate whether a person has either a positive association with the image or a negative association with the image (Cunningham, Preacher, & Banaji, 2001).

Cunningham and colleagues (2001) conducted a series of Implicit Association Tests in combination with the Modern Racism scale in order to examine correlations between implicit and explicit measures of racism. Findings indicated a moderate correlation between implicit and explicit constructs, r = .45, p < .01. The findings of the study suggest that implicit and explicit attitudes may be related, although continue to represent two separate constructs: attitudes that are explicitly known and attitudes that are implicit, or below the level of awareness.

Implicit association tests are controversial in practice, as findings have been somewhat conflicted (Zuriff, 2002). Faster reaction times have been observed in different scenarios, which have not been consistent among all studies. Critics also argue that implicit associations may not necessarily be evidence of racism, but rather of salience of concepts (Rothermund & Wentura, 2004). Several experiments conducted by Rothermund and Wentura uncovered direct

associations between reaction times on the Implicit Association Test and salience measures. When the salience was manipulated, implicit effects also changed. Other critics suggest that faster reaction times may be indicative of associations from society rather than personal associations. Another alternative explanation is that cognitive associations may not necessarily be due to prejudice (Arkes & Tetlock, 2004). Regardless of the explanation, Implicit Association Test's remain controversial for use as the only measure of racism.

# **Experimental Design**

In research on discrimination, as with all other disciplines, the ability to determine causality is highly desirable. One difficulty with experimental design is identifying and controlling for all confounding variables. In order to run a successful experiment, however, control is vital. Laboratory experiments and field experiments have both been useful in examining racial discrimination. Both types of experiments follow the traditional experimental design in manipulation of the independent variable and random assignment to conditions (Blank et al., 2004; Graziano & Raulin, 2007). In order to conduct experiments dealing with race, the experimenter must be able to manipulate the apparent race of an individual or a variable that is related to race (Blank et al., 2004).

<u>Lab Experiments.</u> Laboratory experiments conducted in a controlled setting minimize the effects of confounding variables. In laboratory settings, experimenters can manipulate one variable, such as race, or other variables such as friendliness and credentials. Being able to manipulate each variable alone has contributed much to the literature about nuances that impact interactions and attitudes (Blank et al., 2004).

Laboratory experiments have demonstrated that people will impose expectations when interpreting a situation. Darley and Gross (1983) discovered that ratings of academic

performance were highly related to assumed socioeconomic status. When a rater was shown information depicting that a student was of high socioeconomic status, ratings of ambiguous academic performance were significantly higher than when the rater was given information depicting that the student was of low socioeconomic status. The findings of the study suggest that people will rely on stereotypes when ambiguous performance is seen. When applied to race, this subtle bias has important implications. If individuals have subtle racial biases, decisions that are made may often be based upon these biases, specifically in ambiguous situations when credentials are not clear. Consequently, people of color may still be facing an invisible form of racial discrimination.

Many other discoveries have been made through laboratory experiments. The impact of race on helping behaviors (Frey & Gaertner, 1986) and perceptions of aggressive behaviors are a few of the findings that have resulted from experiments (Crosby, Bromley, & Saxe, 1980).

Laboratory experiments have been able to observe more racial bias than is present through survey methodology, and are valuable to the study of racial discrimination (Blank et al., 2004).

One of the weaknesses of experiments is that they are unable to observe changes over long periods of time, which is important to observe when addressing issues surrounding racial biases. In addition, external validity is not as high in laboratory settings, where behaviors are not as authentic as in the field. This is especially true when dealing with controversial topics such as racial discrimination. Hiding the variable of interest is important in order to make lab experiments about race most effective (Blank et al., 2004). While hiding the variable of interest is helpful, it does not completely solve the problem of social desirability influencing the results. When a sensitive topic, such as race, is included in a study, responses may be impacted simply by it being part of research study (e.g., Barrera & Simpson, 2012; Blank et al., 2004; Evans et al.,

2003). Regardless of the cautions about laboratory studies with the topic of race, they continue to be a highly valuable method for discovering subtleties that lead to discriminatory behavior (Blank et al., 2004).

*Field Experiments.* Field experiments are highly desirable in the study of racial discrimination, as the ability to make inferences exists with this design (Blank et al., 2004). Additionally, field experiments are more generalizable than laboratory experiments due to the natural setting of the study. One of the limitations of field experiments, however, is the cost and extensive preparation required for effective implementation of the design.

Field experiments are advantageous for studying racial discrimination, as they are able to uncover more information than many other methods. One of the first experiments about race, conducted by LaPiere (1934), demonstrated the discrepancy between reported attitudes and actual behaviors. In this groundbreaking study, questionnaires were sent to hotels and restaurants to ask if they would serve a person of Chinese descent. In nearly all cases, the response was no. LaPiere then went to 251 of the businesses to observe interactions with a Chinese couple. In practice, the couple was turned away only one time. The discrepancy between the predicted behavior and the actual behavior suggested that findings from surveys might not reflect actual behaviors. This finding has been verified by later experiments. Laboratory and field experiments consistently undercover more bias than is reported in survey methodology, purportedly because of the more subtle nature of racism (Crosby et al., 1980). Field experiments have been used to study areas such as suspicion of shoppers (Schreer, Smith, & Thomas, 2009), response rates of politicians to constituents (Butler & Broockman, 2011), automotive purchases, labor market, job market, helping behaviors, lending behavior, and even obtaining a taxicab (Blank et al., 2004).

Field experiments have gained credibility as a valuable way to research racial discrimination, especially that of subtle forms of racism (Blank et al., 2004).

<u>Design</u>. Field experiments typically follow one of two designs: audit testing or correspondence testing (Bursell, 2007). Audit testing uses in-person methodology where several individuals are used to measure differential behavior (Riach & Rich, 2002). In this design, individuals (auditors) are paired after being matched on characteristics such as socioeconomic status, education, and other personal characteristics (Blank et al., 2004). The pair is comprised of an individual of each race of interest, typically one white auditor and one black auditor. They are then trained to behave in a similar fashion and are given identical or nearly identical documents. In audit testing designs, the auditors go to numerous locations to receive services or apply for employment or housing. Differences in outcomes are examined in terms of a propensity score, which is an index of similarity. Audit testing is used largely in studies of racial discrimination in the housing market and the labor market, and many of these occur in face-to-face settings. Some, however, occur through phone correspondence in which control is slightly higher (Riach & Rich, 2002). Critiques of audit testing typically involve the extent of matching the auditors. Critics have cited poor selection, poor design of training protocol for pairs, and poor control of audit testing designs as potential sources of error in field experiments (Heckman, 1998).

Correspondence testing uses written material to examine treatment of individuals based on race. This design was first used in 1969 when researchers sent out carefully matched job applications to companies (Bursell, 2007; Riach & Rich, 2002). The research was able to discover discrimination that was present in the interview selection stage of the job hiring process. Researchers discovered that this method allowed them to match the applicants on every variable

except race, which provided an added element of control that is not as strong in audit testing. The design of correspondence testing involves closely matching two applications. The applications in this design are not typically identical, however, as the study must remain below the level of detection. In order to counter this, the studies are designed to alternate race on each of the applications. This increases control, as any intended bias will be balanced between groups (Riach & Rich, 2002). As a method, correspondence testing has been identified as the strongest opportunity to form statistical inferences (Bursell, 2007).

The written nature of correspondence testing makes it important to make race as explicit as possible without stating it on written materials. In order to do this, most studies have used the applicant name as the independent variable, as certain names are more common among certain racial groups (e.g., Bertrand & Mullainathan, 2004; Hanson & Hawley, 2011). Riach and Rich (2002) further suggest using descriptors in the interest section of applications to make race explicit, through involvement in activities associated with black Americans. Primary concerns associated with this method are whether other characteristics are associated with the names involved in the study (Blank et al., 2004).

More recently, the Internet has been used as a tool for conducting field experiments.

Evans and colleagues (2003) discovered that the differences between reported attitudes and actual behaviors decreased when individuals completed measures via the Internet outside of a laboratory setting. When the same measures were completed in the presence of a researcher, responses were significantly different. The indications of this study are that racial biases can be most effectively studied in the context of field experiments, specifically through the Internet.

<u>Ethics of Field Experiments.</u> With field experiments, it is important to maintain a level of deception so that behaviors are genuine and are not impacted by knowledge of being in a study (Riach & Rich, 2002). With any research involving deception, however, ethical concerns are raised. The deception necessary in field experiments has led to controversy over whether the technique is ethical (Bursell, 2007).

Riach and Rich (2004) engaged in a critical analysis of the ethics involved with field experiments. Social scientists have engaged in deception in research due to the inability to accurately study racial discrimination in any other way. Field experiments offer an opportunity to gain valuable information on discriminatory effects that are not available through any other method. The justification of deception in the study of discrimination is not only an attempt to gain greater scientific accuracy. Deception itself, Riach and Rich argue, is justified because of the nature of discrimination. When discriminatory actions occur, they are producing great harm to society. Deception, therefore, is engaged in to counter the harmful effects of the discrimination. Finally, field experiments ensure complete confidentiality and minimal inconvenience to participants. Any costs are outweighed by the valuable information provided about discrimination that cannot be gathered any other way. The potential to gain information that can be used to limit harm to society makes field experiments an ethical and necessary way to study racial discrimination (Riach & Rich, 2004).

Results of Field Experiments. Many studies have utilized field experiments to study racial discrimination. Field experiments have been conducted in the United States and other countries to explore the impact of employment discrimination. Many field experiments have found evidence of persisting discrimination against people of color in rates of employment (Riach &

Rich, 2002). Correspondence testing is especially useful with this research, as equivalent applications can be sent to potential employers. Results from these studies indicate that differences exist in the amount of callbacks that are received between the two applicants (e.g., Bertrand & Mullainathan, 2004; Bursell, 2007; Firth, 1981). Audit testing has also been used to examine the employment discrimination (Blank et al., 2004; Pager, 2007). In studies where matched pairs applied for jobs, significant discrimination was seen in the amount of callbacks received by applicants. In fact, black and Latino applicants were half as likely to receive a callback as a comparable white applicant in an entry-level job, and just as likely as white applicants with a prison record (Pager, Western, & Bonikowski, 2009).

Detailed research has also been conducted on the housing market using field experiments. Correspondence testing has been used to communicate with renters via email about housing units. Names are the variable of interest, as names that are highly associated with a specific racial identity are chosen for the studies. In general, African American names were discriminated against the most in response rates to the email inquiry (e.g., Carpusor & Loges, 2006; Hanson & Hawley, 2011). Similar findings have been reported by researchers in other countries, including discrimination against Arab names in Sweden (Ahmed & Hammarstedt, 2008). Even when additional personal information is provided, the discrimination does not decrease (Ahmed, Andersson, & Hammarstedt, 2010). Racial discrimination in housing tends to disappear, however, when the individual is assumed to be of higher social class (Hanson & Hawley, 2011).

Discrimination in selection decisions made by undergraduate students was studied in detail by Hodson and colleagues (2002). In this study, students were recruited under the guise of assisting in selection decisions for admission to their university. Several scenarios were presented, along with a photo of a fictional applicant. Qualifications of the applicants were

demonstrated through high school achievement scores and college entrance exam scores. Several situations were presented: one with consistently high scores, one with consistently low scores, and two with mixed scores (high in one area but low in the other). The photos were rotated so that each photo was associated with each scenario by different participants. A measure of prejudice was also administered to participants. Overall, high-prejudice scoring individuals showed more discrimination in decisions when the applicant's qualifications were ambiguous. This finding had a large effect size at  $\eta^2 = .16$ . That is, race became a factor when mixed test scores were provided on the applications. Discrimination was not present when qualifications were consistently high or low. The higher presence of discrimination in ambiguous situations is one of the most important findings of the study. This supports the framework of aversive racism, which is present in well-educated and liberal individuals. Aversive racism is especially strong in ambiguous situations (Gaertner & Dovidio, 1986). Further research should be done among this population to expand upon the findings of Hodson and colleagues (2002).

## **Summary**

Traditional interventions for discrimination operate under the assumption that changing victims of racism will result in equality. This, however, imposes a blaming the victim mentality. Instead, more programs are needed for white Americans. Implementing programs that focus on changing the power relationships between white society and people of color are needed for meaningful and lasting change to result (Barndt, 2007). In addition, more accurate measures for progress toward equality are needed. Surveys indicate that racial equality has improved significantly in the United States (Blank et al., 2004; Feagin, 2006), but perceptions of these improvements differ greatly depending on whom you ask (Eibach & Ehrlinger, 2006).

Alternative methods contribute to this confusion by painting a much less optimistic picture when

measuring equality. Overall, the more subtle forms of racism that are prevalent in the United States are difficult to measure. One way this can be accomplished successfully is through the use of field experiments (Blank et al., 2004).

# **Present Study**

The present study is an attempt to examine how perceptions of progress toward equality are related to racial discrimination. It will attempt to build upon the work of Hodson and colleagues (2002) by examining the discrimination present among undergraduate students when making selection decisions between finalists with ambiguous qualifications. Ambiguous situations will be used as they reveal more subtle racial discrimination than in situations where qualifications are clear. Research associated with perceptions of progress toward racial equality will also be examined, as the literature suggests a relationship between differences in perceived progress and personal levels of racism (Brodish et al., 2008; Eibach & Ehrlinger, 2006). The study will operate under the framework of aversive racism and prospect theory.

Undergraduate students are an excellent population with which to study the relationship between aversive racism and perceptions of progress toward equality. Aversive racism tends to be higher among well-educated and liberal individuals (Dovidio & Gaertner, 2004), which is descriptive of college students. In addition, diversity initiatives that exist and are expanding in higher education have demonstrated the importance of understanding the current climate of racial attitudes among undergraduate students. Developmentally, undergraduate students are at a unique point where separation from family enhances the process of developing a unique set of values and attitudes (Spanierman et al., 2007). Further understanding of this population could lead to interventions that work to improve racial attitudes and increase cooperation between white students and students of color in higher education settings.

The Internet has been found to decrease the difference between attitude and behavior that is displayed in the presence of experimenters (Evans et al., 2003). The Internet will therefore be used to obtain more accurate results from the student sample. The design for the present study will be that of a field experiment utilizing correspondence testing via the Internet. Students will be asked to select a finalist to receive a scholarship, not being aware they are actually part of an experiment. Ambiguous qualifications will be used, based on the design of Hodson and colleagues (2002) to obtain maximum variance in subtle discrimination. A component on perceived progress will provide information about the perceptions of racial equality of each participant.

## **Hypotheses**

<u>Hypothesis 1.</u> The white finalist will be chosen more frequently in the ambiguous conditions than the black finalist.

<u>Hypothesis 2.</u> Progress is perceived differently between participants who choose the white finalist and participants who choose the black finalist.

<u>Hypothesis 3.</u> Participants who anchor strongly on the past will perceive more racial progress than those who anchor strongly on the future.

<u>Hypothesis 4.</u> Participants who anchor more strongly on the ideal future will choose the black finalist more often than the white finalist in all conditions.

<u>Hypothesis 5.</u> A participant's reference point and perception of progress toward racial equality will interact to discriminate between which finalist will be chosen.

### CHAPTER II

#### **METHOD**

## **Participants**

Wichita State University is a diverse, urban university in Kansas. The undergraduate student population of 12,243 students (total enrollment of 15,100 students) is comprised of 6,561(54%) females and 5,682 (46%) males. The average age of Wichita State University undergraduate students is 25 years of age. Self-reported racial demographics include: 7,932 white (65%), 871 Hispanic (7%), 858 black (7%), 143 American Indian or Alaska Native (1%), 770 Asian (6%), 8 Native Hawaiian or other Pacific Islander (.07%), 221 two or more races (2%), and 678 unknown or not reported (6%; Wichita State University, 2011). Primary analysis of data was conducted among white/ Caucasian participants to study the within-group variance of perceived progress toward racial equality and aversive racism.

Participants were randomly selected from the Wichita State University Office of Institutional Research, from a list of all undergraduate students. The selection process initially identified 8000 students to contact, as average email response rates have been reported as variable as 19% to 72% (Sheehan, 2001). Selected students received an initial email notifying them that they had been selected for the judging process. The initial email included a link to the online instrument and a brief description of the process with a strict deadline of two weeks after the initial email. The email informed participants of the incentive drawing and included a description of the process and the time remaining to complete the judging process.

The present study received a total of 1068 responses from students, including 660 white (62%), 73 black (7%), 98 Asian (9%), 65 Hispanic (6%), 17 American Indian or Alaska Native (2%), 4 Native Hawaiian or other Pacific Islander (.4%), and 113 multiracial or other (11%). Due

to the goals of this research, participants in this study included 655 undergraduate students at Wichita State University who identify as white. Participants included 242 males (37%) and 411 females (63%) who ranged in age from 18 to 63 years of age (M = 26, SD = 8.49). Full time students were the majority of the sample with 555 (85%) full-time students and 91 (14%) part-time students. Of all participants, 87 (13%) were freshman, 114 (17%) were sophomores, 176 (27%) were juniors, and 271 (41%) were seniors. Political affiliation included 139 (21%) Democrat, 176 (27%) Independent, 208 (32%) Republican, 44 (7%) other political affiliation, and 87 (13%) unaffiliated. Religious affiliation included 328 (50%) Christian, 113 (17%) Catholic, 29 (4%) other religious affiliation, and 182 (28%) no religion.

### **Procedure**

Participants received an initial email to invite them to participate in the judging process for the scholarship contest. To limit social desirability, the research design utilized correspondent testing in which the scholarship contest was portrayed as a real contest to participants, rather than a research study. As an incentive to participate in the judging process, participants were entered into a drawing for a Google Nexus 7. Two weeks after the initial email invitation, the online judging process was closed to new participants.

Participants were directed to an online instrument to complete the judging process for the scholarship competition. Upon entering the instrument, participants saw a description of the fictional scholarship foundation and information on the judging process. After choosing to participate, participants completed a judge information form and registered for the drawing before being shown the profiles of the two finalists. Participants were instructed to review each profile, rate the strength of the recommendation for each, and make a final recommendation as to the scholarship winner.

When the participants were finished with the judging process, they were asked to complete a short one-page survey. The survey was framed as a program requirement for the previous scholarship winner, "Matthew Hayes." The survey addressed perceptions of progress on a number of social issues. The issue of interest was the perception of progress toward equality for African Americans. Two other topics, recycling and public transportation, were included as distracter topics. A demographic form was the last screen presented to participants. The entire process took approximately 10 minutes to complete. The survey was closed two weeks after the survey opened to participants. Debriefing forms were distributed to all individuals who completed the survey at that point.

### **Instruments**

The Robert C. Lupit Foundation Scholarship was a fictional scholarship designed to obtain data without social desirability. Accordingly, each aspect was designed to appear as if the scholarship was real.

## **Selection Emails**

Selection emails for the scholarship judges were designed to recruit college students to judge between two scholarship finalists. An email address was designed specifically for this study from the domain of www.lupitfoundation.org. The selection email included a notification that the participant had been selected from a list of university students, a brief description of the scholarship, incentive information, and a link to the online instrument. As an incentive, participants were given an entry into a drawing for a Google Nexus 7.

To increase the response rate, key words such as *win*, *offer*, and *help* were avoided so as not to get caught in the spam filter (Rubin, 2012). The subject line of "Invitation to judge a scholarship contest" was modeled after emails with high response rates (MailChimp, 2012) while

remaining descriptive (Eridon, 2012). The body of the email was designed to be personal with a name, description, and remained short to increase response rates (Jensen, 2013). The email address, subject line, and email wording are included in Appendix A.

## **Online Instrument**

The online instrument included a number of elements, including an information screen, judge information form, incentive information screen, finalist profiles, survey on progress with social issues, and a demographic form.

Information Screen. The information screen (see Appendix B) included basic information about the judging process for the Robert C. Lupit Foundation Scholarship. Information about how participants were chosen, the judging process, and the amount of time to complete the judging process were included. At the end of the information screen, participants consented to participate in the process by reading the question "Are you willing to participate in this task?" and selecting yes. Individuals who selected "no" were directed to the end of the survey.

Judge Information Form. The judge information form (see Appendix C) was framed as a way to collect information about the judges of the Robert C. Lupit Foundation Scholarship prior to participation in the judging process. Each participant answered seven initial questions. The first three questions included: Have you applied for the Robert C. Lupit Foundation Scholarship in the past?, Have you been a judge for the Robert C. Lupit Foundation Scholarship in the past?, and Are you 18 years of age or older? Since the scholarship was fictional, all participants answered the questions about past involvement with the scholarship in a negative manner.

Since this judging stage of the scholarship was framed as being judged by college students, the next four questions on the judge screening form consisted of education-related questions. These questions asked about the participant's registration status, class standing, current major, and cumulative GPA.

Incentive Information Screen. The incentive information screen (see Appendix D) allowed participants to sign up for a chance to win a Google Nexus 7. This form collected the participant's name and email address. The information collected from this section was stored separately from the study data. Participants were informed that the information was not associated with the selections made during the judging process or for any reasons outside of the incentive giveaway.

<u>Finalist Profiles.</u> The profiles of the finalists were presented as the primary component of the judging process. Participants were told that the profiles were only two of the scholarship finalists. The two profiles were presented on the same screen to allow a simple comparison of the finalists. Each profile included four main elements: basic biographical information, high school academic record, college entrance exam scores, and extracurricular information. See Appendix E for a complete profile example.

Biographical Information. The biographical information included name, age and gender. Age and gender will be identical for both profiles, with each finalist identified as an 18-year-old male. Darnel Washington and Brad Schmidt were chosen as names for the finalists, and were used as an indicator of the race of the finalist. Names were chosen using previous correspondent studies and national data. The first names of Brad and Darnel were chosen as they have been used as the independent variable in other correspondent studies. Bertrand and Mullainathan

(2004) used Brad as a traditionally white name, and Darnel as a traditionally black name by examining birth records in Massachusetts and conducting a field survey of the names. These two names were identified as having a high likelihood that a name is associated with only one race. Likewise, Hanson and Hawley (2011) used the names of Brad and Darnel as variables in their experiment. Surnames used in this study were chosen based on national data. The surname of Schmidt was chosen as the white surname in this study. Schmidt is the 171<sup>st</sup> most common surname in the United States. Of individuals with the surname of Schmidt, 96.48% are non-Hispanic white and only 0.28% are non-Hispanic black individuals. The surname of Washington was chosen as a black surname for this study. Washington is the 138<sup>th</sup> most common surname. Of all individuals with this surname, 89.87% are non-Hispanic black and 5.16% are non-Hispanic white individuals. While Washington is the 18<sup>th</sup> most common name for non-Hispanic blacks in the United States, it has the highest occurrence of being associated with only one race (Butler, 2012).

The two names were tested for association with a racial categorization. Forty-two Wichita State University undergraduate psychology students were given a matching worksheet as part of a class exercise. Eight matching scenarios were presented where students were asked to match a name with a category. Seven of the scenarios were distractor scenarios and included categorizations such as old/young, female/male, Christian/Muslim, lawyer/dentist, Republican/Democrat, non-Hispanic/Hispanic, and rich/poor. One scenario was of interest and included the racial categories of white/ Caucasian and black/ African American. Students were asked to match the names of Brad Schmidt and Darnel Washington to one of the racial categories. All 42 students matched Brad Schmidt with the white/ Caucasian category and all 42 students matched Darnel Washington with the black/ African American category. The results

from the name association matching worksheet suggest that the names have strong associations with the intended racial category, and are good indicators of the race variable.

High School Academic Record. The profile for each finalist contained information on high school GPA and class rank. Profiles contained either consistently high scores or ambiguous scores, with one high score and one low score. In ambiguous conditions, high and low GPA scores were counterbalanced with college entrance exam scores to create an ambiguous profile (in which the profile contains both high and low scores). The design was modeled after a similar study by Hodson and colleagues (2002) when they examined aversive racism in college entrance decisions by undergraduate students. An ambiguous profile is able to obtain variance in manipulating the variable of race, whereas profiles with clearly positive scores does not show variance by race. In the study, they determined that the GPA for high scholastic achievement reflecting the top 15% of college applicants was 3.90 with a class rank in the top 5%.

Conversely, a GPA reflecting relatively low scholastic achievement (the bottom 15% of applicants) was 3.10 with a class rank of 50%. The same scores were used for the two profiles in the present study for ambiguous conditions. For the consistently high condition, GPA scores of 3.90 and 3.92 were used.

College Entrance Exam Scores. College entrance exam scores were used in the profiles. The scores contained either consistently high scores, or both high and low scores that were paired with a GPA to create an ambiguous profile. The scores came from predetermined high and low score ranges for SAT exams provided by Hodson and colleagues (2002). High scores were determined to be 700 plus or minus 50 points and low scores were determined to be 520 plus or

minus 50 points. For the present study, the scores of 680 (93<sup>rd</sup> percentile) for verbal and 730 (97<sup>th</sup> percentile) for quantitative were chosen as the high scores, and the scores of 510 (51<sup>st</sup> percentile) for verbal and 570 (66<sup>th</sup> percentile) for quantitative were chosen as the low scores. In the condition with consistently high scores, verbal scores of 680 (93<sup>rd</sup> percentile) and 660 (91<sup>st</sup> percentile) were used and quantitative scores of 750 (99<sup>th</sup> percentile) and 730 (97<sup>th</sup> percentile) were used.

Extracurricular Information. Each profile included extracurricular information, which included employment, academic club membership, and community service activities. Both profiles contained the same number of activities and were pretested to achieve equivalence in preference for each profile. The pretest included 50 respondents (23% male, 77% female) who were asked to choose between profile A and profile B. Eight (16%) respondents chose profile A, eight (16%) chose profile B, and 34 (68%) believed both profiles were equivalent. The activities of Allenton High School Black Student Union, Black Business Students Association, and Computer Design Club were paired with Darnel Washington. The activities of Fairmount High School Leadership Council, Fairmount High School Newspaper, and Science Club were paired with Brad Schmidt.

<u>Conditions.</u> Three conditions with variations of applicant information were presented. In the first condition, both profiles had consistently high scores in all areas: GPA and SAT scores. In the second and third conditions, the profiles were ambiguous in that the scores were mixed. In the second condition, Darnel Washington was associated with high SAT scores and a lower GPA, whereas Brad Schmidt was associated with lower SAT scores and a high GPA. In the third

condition, the names were switched so that Darnel Washington was associated with lower SAT scores and a high GPA, whereas Brad Schmidt was associated with high SAT scores and a lower GPA (see Table 1). The order that each profile was presented was balanced in each of the conditions, with Darnel appearing first 50% of the time and Brad appearing first 50% of the time.

TABLE 1

GPA AND SAT SCORES IN EACH CONDITION

-		Brad Schmidt				Da	rnel Wash	ington
		GPA	SAT-V	SAT-Q		GPA	SAT-V	SAT-Q
Condition 1	Category	High	High		High	Hi	gh	
	Value	3.92	680	730		3.90	660	750
Condition 2	Category	High	Lo	)W		Low	Hi	gh
	Value	3.90	510	570		3.10	680	730
Condition 3	Category	Low	Hi	gh		High	Lo	OW
	Value	3.10	680	730		3.90	510	570

Finalist Recommendation. After reviewing the finalist profiles, participants were asked to evaluate each finalist and make a recommendation for the scholarship (see Appendix D). First, participants were asked how strongly they would recommend each of the finalists for the scholarship on a 5-point Likert scale (1 = not at all, 5 = strongly recommend). Research on Likert scales has indicated that reliability increases up to 5 points and decreases after 7 points (Alwin & Krosnick, 1991). A 5-point Likert scale was therefore chosen for this study to get the maximum variance and reliability. After the participant answered the question for each of the two finalists, the participant was asked to make a choice of one finalist as the recommended scholarship recipient. After the recommendation was made, participants were asked to rank each of the distinct profile elements (academic record, college entrance exam scores, and extracurricular activities) according to how important each element was in making the decision (1 = most important, 3 = least important).

**Progress Survey.** After the participant completed the profile recommendation section, they moved to a one-page survey. The participant read a brief description that framed the survey as a nine-question survey on progress with social issues that meets a scholarship requirement for a former scholarship recipient, Matthew Hayes. The survey contains questions that have been adapted from the Perceptions of Progress scale, which evaluates a respondent's perception of progress, and the Reference Points scale, which evaluates a respondent's anchoring or reference point for understanding racial progress (Brodish et al., 2008; Brodish & Devine, n.d.).

Original Scales. The Perceptions of Progress scale included four items on a 7-point Likert scale. A sample item from this scale was "How much progress has been made toward equality for racial minorities in the United States?" Another question replaces the phrase "progress has been made toward" with the phrase "improvement has there been in". The two remaining questions use similar wording, but change the perspective to a future orientation (e.g., "how much further" and "how much improvement"). The Reference Points scale includes four items on a 7-point Likert scale. Two items assess the extent to which participants judge progress based on how far the United States has come from the past. A sample item from this index includes "When I think about racial progress, I think about how much improvement the United States has made from the past." Two additional items assess the extent to which participants judge progress based on how far the United States has to go to create racial equality in the future. A sample item from this index is "When I think about racial progress, I think about how much improvement the United States has to make in the future (Brodish et al., 2008; Brodish & Devine, n.d.).

Present Study. For the present study, three questions have been included from the Perceptions of Progress and Reference Points scales. The wording in the original scales was found to be confusing and repetitious for pilot test participants for the present study. Due to the repetition of items, three overall questions were chosen for inclusion in the study. The first question included was from the Perceptions of Progress scale and was edited to read "How much progress has been made toward equality for African Americans in the United States?" The second and third questions were taken from the Reference Points scale and are "When thinking about racial progress, I think about how much improvement the United States has made from the PAST" and "When thinking about racial progress, I think about how much improvement the United States has to make in the FUTURE." The progress item used a 5-point Likert scale from "none" to "a great deal." The two reference point questions used a 6-point Likert scale from "strongly disagree" to "strongly agree." The choice of 6-point Likert scale was made to force a response and eliminate the neutral option used in the original 7-point Likert scale.

To attempt to maintain the hidden nature of the construct being studied, two distractor topics were included to provide the appearance that the survey was about progress on social issues in general, rather than strictly about racial equality. The distractor items used the same wording as the three items about progress toward racial equality, replacing the key phrases of "equality for African Americans" and "racial progress" with distractor topics of recycling and public transportation. The distractor items expanded the total number of questions to nine, with the original three items as the items of interest. The full progress survey can be found in Appendix F.

<u>Demographics</u>. The demographics section was the final section of the online instrument and included basic demographics questions for gender, age, and race/ ethnicity. Participants were

also asked additional demographic questions about political affiliation, and religious affiliation.

The complete demographics section can be found in Appendix G.

# **Debriefing Form**

The debriefing form informed participants that they were involved in a research study. Participants were told that the Robert C. Lupit Foundation was a fictional organization created for the purposes of the study. Also included on the debriefing form was the purpose of the study, confidentiality information, how to obtain a final report, and contact information (researcher, Department of Psychology, and Office of Research Administration). See Appendix H for the entire debriefing form.

### **CHAPTER III**

### **RESULTS**

# **Demographics**

Demographic data on class standing, race, gender, age, political affiliation, and religious affiliation was collected for this study. For the purposes of this study, only data from white respondents was included to obtain within-group differences. The sample included 655 participants who identified as white. Participants included 242 males (36.9%) and 411 females (62.7%) with ages ranging from 18 to 63 (M = 25.94, SD = 8.49). Most of the sample included full time students (N = 555, 84.7%) with some part time students represented (N = 91, 13.9%), with 87 freshman (13.3%), 114 sophomores (17.4%), 176 juniors (26.9%), 271 seniors (41.4%), and 6 other (0.9%). Table 2 displays the political affiliation of participants and Table 3 displays the religious affiliation of participants, both separated by gender.

TABLE 2 POLITICAL AFFILIATION BY GENDER (N = 650)

	Male		Fer	male	To	Total		
	$\overline{N}$	%	$\overline{N}$	%	N	%		
Democrat	44	18.1	93	22.6	137	21.1		
Independent	78	32.6	97	23.8	175	26.9		
Republican	75	31.0	133	32.4	208	32.0		
Uncertain	22	9.1	65	15.8	87	13.4		
Other	22	9.1	21	5.4	43	6.6		

TABLE 3 RELIGIOUS AFFILIATION BY GENDER (N = 650)

	N	Male		emale	To	Total		
	$\overline{N}$	%	$\overline{N}$	%	$\overline{N}$	%		
Christian	111	46.1	217	53.2	328	50.5		
Catholic	37	15.4	76	18.5	113	17.4		
None	89	36.9	91	22.2	180	27.7		
Other	4	1.7	25	6.1	29	4.5		

### Variables of Interest

Ratings for each finalist were made on a 5-point Likert scale ranging from not at all to strongly recommend. Recommendations of finalists varied within each condition. Refer to Table 1 (p. 42) for descriptions of each condition.

Overall ratings were similar for Brad Schmidt (M = 4.34, SD = .76) and Darnel Washington (M = 4.32, SD = .78). In condition 1, comparable ratings were given to Brad Schmidt (M = 4.63, SD = .58) and Darnel Washington (M = 4.63, SD = .61). In condition 2, Brad Schmidt was rated more highly (M = 4.33, SD = .76) than Darnel Washington (M = 4.04, SD = .86). In condition 3, Darnel Washington received higher ratings (M = 4.30, SD = .72) than Brad Schmidt (M = 4.07, SD = .82).

An independent samples t test revealed significant differences with a small effect size for the rating of Brad Schmidt, t(436) = -2.83, p = .005, d = .23, and Darnel Washington, t(652) = .42, p = .01, d = .21, between men and women. A one-way analysis of variance detected significant differences with a small effect between Democrats and Republicans on the rating of Darnel Washington, F(4, 650) = 2.58, p = .04, r = .12. The average rating was higher among Democrats (M = 4.50, SD = .67) than among Republicans (M = 4.22, SD = .85). This difference was also seen on ratings of Darnel Washington, F(3, 649), p = .02, r = .12, between Christians

(M = 4.36, SD = .73) and Catholics (M = 4.12, SD = .94). The rating of each finalist with participant demographics is displayed in Table 4.

TABLE 4

FINALIST RATING BY GENDER, POLITICAL AFFILIATION, RELIGIOUS AFFILIATION, AND CLASS STANDING

		Brad S	chmidt	Darnel W	ashington
	N	$\overline{M}$	SD	$\overline{M}$	SD
Gender					
Male	241	4.22	.84	4.23	.81
Female	410	4.41	.71	4.38	.74
Political Affiliation					
Democrat	138	4.33	.82	4.50	.67
Independent	176	4.29	.75	4.30	.72
Republican	208	4.38	.74	4.22	.85
Uncertain	87	4.33	.71	4.28	.80
Other	43	4.38	.91	4.45	.63
Religious Affiliatio	n				
Christian	326	4.37	.76	4.36	.73
Catholic	113	4.27	.82	4.12	.94
None	182	4.31	.77	4.34	.71
Other	29	4.41	.57	4.52	.69
Class Standing					
Freshman	87	4.40	.76	4.37	.70
Sophomore	114	4.29	.75	4.35	.76
Junior	176	4.36	.81	4.27	.85
Senior	269	4.33	.75	4.32	.73
Other	6	4.17	.41	4.50	.55

Each participant also chose a preferred finalist as the winner of the scholarship. Overall, more participants chose Darnel Washington (N = 339, 51.7%) than Brad Schmidt (N = 315, 48.2%). In condition 1, more participants chose Darnel Washington (N = 109, 52.4%) than Brad Schmidt (N = 98, 47.6%). In condition 2, more participants chose Brad Schmidt (N = 125, 55.3%) than Darnel Washington (N = 101, 44.7%). In condition 3, more participants chose Darnel Washington (N = 129, 58.4%) than Brad Schmidt (N = 92, 41.6%).

No significant differences were detected among choice of finalist with demographic variables, but several patterns emerged. As a group, Republicans chose Brad Schmidt more often than they chose Darnel Washington, who was preferred by all other groups. Similarly, Catholics chose Brad Schmidt more often than Darnel Washington, who was more preferred by all other groups. Complete results of finalist choice and participant demographic are displayed in Table 5.

TABLE 5

FINALIST CHOICE BY GENDER, POLITICAL AFFILIATION, RELIGIOUS AFFILIATION, AND CLASS STANDING

		Brad Schmidt		Darnel W	Vashington
	N	N	%	$\overline{N}$	%
Gender					
Male	241	114	47.3	127	52.7
Female	407	197	48.4	210	51.6
Political Affiliation	l				
Democrat	136	53	39.0	83	61.0
Independent	175	81	46.3	94	53.7
Republican	207	114	55.1	93	44.9
Uncertain	87	41	47.1	46	52.9
Other	43	22	51.2	21	48.8
Religious Affiliatio	on				
Christian	327	154	47.1	173	52.9
Catholic	112	64	57.1	48	42.9
None	180	80	44.4	100	55.6
Other	29	13	44.8	16	55.2
Class Standing					
Freshman	86	45	52.3	41	47.7
Sophomore	114	54	47.4	60	52.6
Junior	173	85	49.1	88	50.9
Senior	269	126	46.8	143	53.2
Other	6	1	16.7	5	83.3

Participants responded to questions about how much progress we have made toward racial equality (5-point Likert scale), and to what extent their assessment is anchored from past reference points or from future reference points, each rated on a 6-point Likert scale. Overall,

participants perceived a high amount of progress toward equality, M = 4.25, SD = .74. Participants tended to anchor more on the past (M = 5.13, SD = .89) than on the future (M = 4.26, SD = 1.34).

A one-way analysis of variance detected significant differences with a small effect between sophomores and juniors, and between sophomores and seniors, in perceived progress toward equality, F(4, 648) = 3.12, p = .02, r = .14. Sophomores in this sample perceived greater progress (M = 4.44, SD = .68) than juniors (M = 4.19, SD = .73) and seniors (M = 4.20, SD = .72). Significant differences with small effects were also detected in political affiliation for perceived progress, F(4, 648) = 4.49, p < .001, r = .16, and for future reference points, F(4, 647) = 4.55, p < .001, r = .17. For perceived progress, Republicans perceived significantly more progress (M = 4.38, SD = .68) than Democrats (M = 4.10, SD = .79) and Independents (M = 4.16, SD = .74). Democrats had a significantly higher consideration of future reference points (M = 4.59, SD = 1.16) than Republicans (M = 4.02, SD = 1.37). An independent samples t test revealed a significant relationship with a small effect size between gender and the extent of considering future reference points, t(649) = -2.67, p = .01, d = .22. Females (M = 4.37, SD = 1.27) had a higher average rating of future reference than males (M = 4.08, SD = 1.44) in this sample. A description of average ratings by participant demographic is presented in Table 6.

TABLE 6

PERCEIVED PROGRESS AND REFERENCE POINTS BY GENDER, POLITICAL AFFILIATION, RELIGIOUS AFFILIATION, AND CLASS STANDING

		Prog	ress	Past Re	ference	Future R	eference
	N	M	SD	$\overline{M}$	SD	$\overline{M}$	SD
Gender							
Male	241	4.30	.72	5.10	.96	4.08	1.44
Female	406	4.23	.75	5.17	.84	4.37	1.27
Political Affiliation							
Democrat	137	4.10	.79	5.21	.81	4.59	1.16
Independent	174	4.16	.74	5.08	.92	4.40	1.37
Republican	206	4.38	.68	5.14	.94	4.02	1.37
Uncertain	87	4.31	.69	5.25	.84	4.18	1.27
Other	43	4.42	.79	5.00	.87	4.00	1.54
Religious Affiliation							
Christian	328	4.33	.73	5.16	.93	4.18	1.35
Catholic	111	4.26	.68	5.25	.69	4.28	1.37
None	179	4.15	.76	5.07	.92	4.38	1.36
Other	29	4.03	.82	4.97	.94	4.48	1.02
Class Standing							
Freshman	86	4.26	.83	5.20	.76	4.33	1.21
Sophomore	113	4.44	.68	5.27	.94	4.21	1.41
Junior	173	4.19	.73	5.07	.95	4.26	1.35
Senior	269	4.20	.72	5.11	.87	4.27	1.35
Other	6	4.67	.82	5.50	.55	4.33	1.63

# **Hypothesis One**

Hypothesis one predicted that the white finalist would be chosen more frequently in the ambiguous conditions than the black finalist. This hypothesis was tested by performing a chi-square goodness of fit test. A non-significant chi-square association was expected as it would indicate choice being made by name rather than by qualifications in the ambiguous conditions.

As can be seen by the frequencies cross tabulated in Table 7, there is a significant relationship with a relatively small effect size between the condition that was presented and which profile was chosen  $\chi^2$  (2, N = 655) = 8.43, p = .02, Cramér's V = .11. The specific profile

determined the choice rather than the name that was associated with the profile. In condition 2, when Brad was paired with the high GPA and the low SAT scores, Brad Schmidt was chosen more often (N = 125, 55%) than Darnel Washington (N = 101, 45%), who was paired with a low GPA and high SAT scores. In condition 3, the profiles were reversed. When Darnel Washington was paired with the high GPA and the low SAT scores, he was chosen more often (N = 129, 58%) than Brad Schmidt (N = 92, 42%), who was paired with the low GPA and high SAT scores. A visual representation of which choice was made in each condition can be seen in Figure 1.

TABLE 7
FREQUENCIES AND PERCENTAGES OF FINALIST CHOICE IN EACH CONDITION

	Brad So	chmidt	Darnel W	ashington
	%	N	%	N
Condition 1	47.6	98	52.4	109
Condition 2	55.3	125	44.7	101
Condition 3	41.6	92	58.4	129

*Note*. In condition 1, both finalists had high GPA and high SAT scores. In condition 2, Brad Schmidt had high GPA/low SAT and Darnel Washington had low GPA/high SAT. In condition 3, Brad Schmidt had low GPA/high SAT and Darnel Washington had high GPA/low SAT.

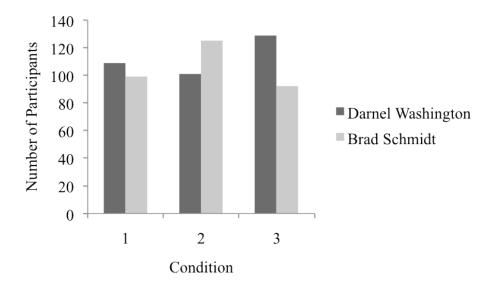


Figure 1. Choice of finalist by condition.

The significant chi-square indicates that choice of finalist was not being made based on race, but rather on the qualifications of the profile with the high GPA and lower SAT scores. This was supported by the ranking of the importance of each aspect of the profile; GPA was considered the most important element (N = 288, 43.9%) and SAT scores were considered the least important element (N = 341, 52.0%) in each of the finalist profiles.

An analysis of variance was also performed to test the rating of each finalist within each condition. Again, significance would show a significant difference in how the candidate was rated in a different condition, or when affiliated with different GPA or SAT scores. A lack of significance would assume that the candidate was being rated the same regardless of the condition, or affiliation with different GPA or SAT scores.

A one-way analysis of variance showed a significant difference with a medium effect between condition and the rating of Brad Schmidt, F(2, 651) = 31.68, p < .001, r = .31, and was also significant with a medium effect for the rating of Darnel Washington, F(2, 653) = 35.02, p < .001, r = .30. Follow-up tests were conducted to evaluate pairwise differences among the

means. Levene's test indicated that the population variances were not equal for Brad Schmidt, F(2, 651) = 7.38, p < .001, or for Darnel Washington, F(2, 653) = 3.87, p = .02, so Dunnett's T3 was performed for post hoc analyses. The average rating for Brad Schmidt was significantly different in all conditions, including condition 1 with high GPA/high SAT (M = 4.63, SD = .58), condition 2 with high GPA/low SAT (M = 4.33, SD = .76), and condition 3 with low GPA/high SAT (M = 4.07, SD = .82). Similarly, the average rating for Darnel Washington was significantly different in all conditions, including condition 1 with high GPA/high SAT (M = 4.64, SD = .61), condition 2 with low GPA/high SAT (M = 4.04, SD = .86), and condition 3 with high GPA/low SAT (M = 4.30, SD = .72). The average ratings can be seen in Table 8. The significance among the ratings in all conditions indicates that ratings relied on the condition rather than the name.

TABLE 8

MEANS AND STANDARD DEVIATIONS FOR FINALIST RATING

_	Е	Brad Schmidt			Darnel Washington			
	N	M	SD		N	M	SD	
Condition 1	207	4.63	.58		208	4.64	.61	
Condition 2	226	4.33	.76		226	4.04	.86	
Condition 3	220	4.07	.82		221	4.30	.72	

*Note.* In condition 1, both finalists had high GPA and high SAT scores. In condition 2, Brad Schmidt had high GPA/low SAT and Darnel Washington had low GPA/high SAT. In condition 3, Brad Schmidt had low GPA/high SAT and Darnel Washington had high GPA/low SAT.

## **Hypothesis Two**

Hypothesis two predicted that progress would be perceived differently between participants who choose Darnel Washington and participants who choose Brad Schmidt. An independent samples t test was conducted to evaluate the hypothesis that choice would influence perception of progress. The independent samples t test was significant with a small effect size, t(651) = 2.59, p = .01, d = .20. Overall, participants who chose Brad Schmidt had higher

perceptions of progress toward equality (M = 4.33, SD = .72) than participants who chose Darnel Washington (M = 4.18, SD = .75). Figure 2 shows the distributions for the two groups with data from all three conditions.

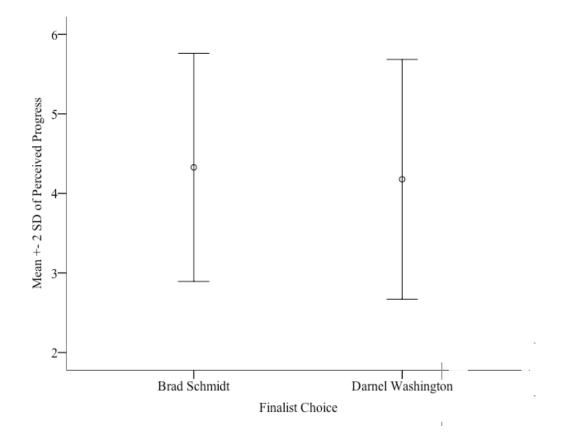


Figure 2. Distributions of perceived progress for finalist choice (N = 653).

An independent samples t test was completed with data from only the ambiguous conditions (condition 2 and condition 3) to determine if perceived progress influenced choice in the ambiguous conditions. The test was not significant in the ambiguous conditions, t(443) = 1.50, p = .13. When condition 1 was examined without the ambiguous conditions, a different trend emerged. The independent samples t test was significant for condition 1 with a small effect size, t(206) = 2.52, p = .01, d = .35. Participants who chose Brad Schmidt in condition 1 had higher perceptions of progress toward equality (M = 4.48, SD = .68) than participants in condition 1 who chose Darnel Washington (M = 4.24, SD = .73). Means and standard deviations

for ratings of progress in each condition can be seen in Table 9. General findings indicate that perceived progress has some influence over race-based choices when there are consistent qualifications, but not when the qualifications are ambiguous.

TABLE 9

MEANS AND STANDARD DEVIATIONS FOR PERCEIVED PROGRESS TOWARD EQUALITY BY FINALIST CHOICE

		Brad Schmi	_	Darr	el Washi	ngton	
	N	M	SD		N	M	SD
Condition 1	98	4.48	.68		109	4.24	.73
Condition 2	124	4.24	.74		101	4.16	.76
Condition 3	92	4.27	.71		128	4.14	.77
Total	315	4.33	.72		338	4.18	.75

Note. In condition 1, both finalists had high GPA and high SAT scores. In condition 2, Brad Schmidt had high GPA/low SAT and Darnel Washington had low GPA/high SAT. In condition 3, Brad Schmidt had low GPA/high SAT and Darnel Washington had high GPA/low SAT.

# **Hypothesis Three**

Hypothesis three predicted that participants who anchor more strongly on the past would perceive more progress toward racial equality than participants who anchor more strongly on the future. Pearson's correlation coefficient was completed to test hypothesis three. Using the Bonferroni approach to control for Type 1 error across the three correlations, a p value of less than .017 (.05/3 = .017) was required for significance.

The results of the correlational analyses presented in Table 10 show that two out of the three correlations were statistically significant. Progress toward equality was positively correlated with past reference points, r = .41, p < .001, which suggests that when someone perceives greater progress toward equality they are more likely to anchor more strongly on the past. A significant negative correlation was also found between progress toward equality and future reference points, r = -.31, p < .001, which suggests that when someone perceives less

progress toward racial equality they more likely to anchor more strongly on the future. Past reference points accounted for 16.6% of the variation in perceived progress, and future reference points accounted for 9.9% of the variation in perceived progress. The correlation between past and future reference points (r = -.06, p = .13) was very low and not significant. In general, the results suggest that reference points are related to perceived progress, but are not related to each other.

TABLE 10

CORRELATIONS AMONG THE PROGRESS AND REFERENCE POINT ITEMS

	Progress	Past Reference	Future Reference
Progress	-		
Past Reference	.41*	-	
Future Reference	31*	06	-

Note. N = 652 for correlation between progress and past reference; N = 651 for correlation between progress and future reference; N = 650 for correlation between past reference and future reference. \*p < .017

## **Hypothesis Four**

Hypothesis four predicted that participants who anchor more strongly on the future reference point would choose the black finalist more often than the white finalist in all three conditions. To measure this hypothesis, an independent samples t test was completed. The test was significant with a small effect size, t(650) = -3.08, p = .002, d = .24. Participants who chose Darnel Washington anchored more strongly on the future reference point (M = 4.41, SD = 1.28) than participants who chose Brad Schmidt (M = 4.09, SD = 1.39).

An independent samples t test was also completed with choice of finalist and past reference point. The test was not significant, t(650) = 1.91, p = .06, indicating that anchoring

strongly on the past as a reference point does not influence choice between the two finalists. While significance was not achieved, a trend was noticed that participants who chose Brad Schmidt anchored more strongly on the past reference point (M = 5.20, SD = .86) than participants who chose Darnel Washington (M = 5.07, SD = .92). Table 11 displays means and standard deviations for each of the reference points by choice of finalist.

TABLE 11

MEANS AND STANDARD DEVIATIONS FOR PAST AND FUTURE REFERENCE
POINTS BY FINALIST CHOICE

	E	Brad Schmidt			Darnel Washington		
	N	М	SD	•	N	М	SD
Past Reference	313	5.20	0.86		338	5.07	0.92
Future Reference	315	4.09	1.39		336	4.41	1.28

## **Hypothesis Five**

Hypothesis five predicted that ratings on perception of equality, past reference point, and future reference point would work together to classify each participant's preference for a finalist. To determine whether the three predictors—progress, past reference, and future reference—could predict the choice of Brad Schmidt or Darnel Washington, a discriminant analysis was completed. The overall Wilks's lambda was significant with a small effect size,  $\Lambda = .98$ ,  $\chi^2(3, N = 648) = 13.07$ , p = .004, indicating that overall the predictors differentiated significantly among the participants who chose each finalist. An eta squared value of .02 was calculated, indicating that the discriminant function accounts for 2% of the variance between groups.

Within-group correlations and the standardized weights between the predictor variables and the discriminant function are presented in Table 12. Based on these coefficients, the future reference point demonstrates the strongest relationship with the discriminant function. Perceived

progress and past reference points demonstrate strong negative relationships with the discriminant function.

TABLE 12
STANDARDIZED COEFFICIENTS AND CORRELATIONS OF PREDICTOR VARIABLES
WITH THE DISCRIMINANT FUNCTION

Predictors	Correlation Coefficients	Standardized Coefficients
Perceived Progress	71	37
Past Reference	50	31
Future Reference	.83	.70

The means for each of the groups on the discriminant function were computed.

Participants who chose Brad Schmidt had a mean of -.15, and participants who chose Darnel Washington had a mean of .14. The discriminant function was able to classify correctly 56% of the participants in the sample. It was able to correctly classify 155 of 314 cases (49%) for Brad Schmidt, and 207 of 334 cases (62%) for Darnel Washington. A kappa coefficient of .11 was calculated to take chance agreement into account, which indicates only a slight level of agreement. The variables of progress, past reference, and future reference do group together in a way that can slightly discriminate choice of finalist among participants. Specifically, participants who perceive less progress toward equality, anchor less on past reference points, and anchor more on future reference points are more likely to choose Darnel Washington. To assess how well the classification procedure would work in a new sample, the leave-one-out technique was used and 55% of the cases were correctly classified.

#### **CHAPTER IV**

#### DISCUSSION

The present study was an attempt to gain more insight into the mechanisms of aversive racism and the connection with perceived progress toward racial equality. A field experiment was used to examine preference between two scholarship finalists when the race of the finalist changed and in conditions where the finalists both had ambiguous qualifications.

Results revealed surprising findings, which were both consistent with and contradictory to the original research hypotheses. The majority of participants chose the finalist with the higher GPA in each of the ambiguous conditions. Further, results indicated that the GPA was rated as the most important aspect of the profile, and college entrance exam scores were ranked the least important in each profile. Perceived progress toward equality was related to choice of finalist only in the condition where both candidates were consistently high, contrary to the prediction that this trend would occur in the ambiguous conditions. Perceived progress was higher when participants assessed progress in comparison with the past, and was lower when they assessed progress in comparison with an ideal future. Participants who more strongly assessed progress in comparison with an ideal future chose Darnel Washington more often, but assessing progress in comparison with the past did not influence choice of finalist. Overall, perceived progress and reference points worked together to account for a small portion of finalist choice.

# **Hypothesis One**

The first hypothesis, that the white finalist would be chosen more in the ambiguous conditions, was not supported by the data. Rather than indicating an overall preference for the white finalist, the participants made a decision that seemed consistent with GPA as the most preferred aspect of the profile. The preference of GPA as the most important aspect of the profile

and the SAT as the least important aspect of the profile was an interesting discovery. The participants in this study were all undergraduate students at Wichita State University. The relevance of GPA is especially prevalent for college students, many who have been submitted to review and placement based on GPA. Students earn points toward the GPA every day and it is a salient indicator of success. While GPA is relevant to each participant, SAT scores may not be. SAT scores may be viewed as more of a biased score and less about motivation and competence. This could have led to the low rating of SAT scores by participants, as the majority of participants rated SAT scores as the least important aspect of the profile. For a portion of the sample, they may have understood that standardized exams are more biased and not consistent predictors of future success (Coleman, 2011), causing them to rate it as the least important aspect of the profile.

The first hypothesis predicted that choices would be influenced in the ambiguous profiles, which did not hold. This finding leads to the possibility that the participants may not have perceived the profiles as ambiguously as intended through design and pilot testing. Since most participants considered GPA to be a more important aspect than college entrance exam scores, the profiles could appear to be uneven, resulting in the preference for the profile with the higher GPA.

Another consideration is that the sample may not have matched a population high in aversive racism, which was predicted due to the well-educated nature of the participants. While individuals who are well educated tend to exhibit higher levels of aversive racism, they also tend to be more liberal (Dovidio & Gaertner, 1986). This specific sample had a higher prevalence of Republican respondents than Democrat respondents, which indicates that the type of racism being examined may not have been as prevalent in this population.

# **Hypothesis Two**

The second hypothesis for this study was that participants who chose Darnel Washington would view progress toward racial equality differently than participants who chose Brad Schmidt. There was a slight tendency for individuals who perceived more progress to choose Brad Schmidt and those who perceived less progress to choose Darnel Washington, which was significant with a relatively small effect size for the overall results and in the first condition, where the qualifications of both finalists were consistently high.

When there are consistently high qualifications, the participants may have been influenced by other mechanisms for making a choice, such as perceived progress toward racial equality. Participants may not have been aware of the influence of perceived progress on decisions, as is indicated in previous literature on the topic. In fact, individuals who are high in prejudice tend to perceive that more progress has been made toward equality (Brodish et al., 2008). In addition, individuals who perceive more progress are less likely to support social policies such as affirmative action, whereas individuals who perceive less progress are more likely to support social programs for equality.

The present study found that individuals who perceive less progress selected the black candidate more often, which agrees with the literature. Individuals who perceive less equality toward racial equality are more likely to support programs that promote equality. A possible cause for this is that these individuals may know that racial disparities still exist and therefore consider the black applicant more strongly. When individuals perceived more progress toward equality, they selected the white candidate more often. Previous research suggests that individuals who perceive greater progress toward equality also see equality-promoting policies

as losses for whites (Eibach & Keegan, 2006). Consequently, the individuals may make choices that protect his or her own group from losses, or choose the white candidate.

The second hypothesis was only supported in the first condition where both finalists had consistently high qualifications, but not in the ambiguous conditions. The small effect may indicate a tendency to rely on this as secondary source of decision-making after considering finalist qualifications. When participants had another viable measure of importance, such as GPA, to rely on to make a decision, they seemed to use that to make a choice instead of race. This could have happened because the profiles were not perceived as equivalent in the ambivalent conditions, which is when most aversive racism can be seen (Dovidio & Gaertner, 1986). When all else is equal, however, individuals do seem to rely on race as a factor.

# **Hypothesis Three**

The third hypothesis predicted that participants would perceive more progress when they rely more strongly on a past reference point when considering racial equality. This hypothesis was supported in the present study. Participants who primarily used a past reference point perceived more progress toward racial equality, and participants who primarily used a future reference point perceived less progress toward racial equality.

Reference points were discovered to be an important determinant for the amount of progress that was perceived by a participant when looking at differences in perceptions of progress between black and white groups (Eibach & Ehrlinger, 2006). Brodish and colleagues (2008) expanded upon the research of Eibach and Ehrlinger to look at differences within a group of white individuals, where they found similar results. The results of the present study support the research done by Brodish and colleagues as well as match the results expected by Eibach and Ehrlinger.

The importance of reference points on our perception of progress makes sense. When individuals use a past reference point for making assessments, the primary focus becomes the changes that have been made and focuses on progress. When an individual uses a future reference point, however, the primary focus is on what still needs to be changed or the areas that still need improvement. With this perspective, areas that are not yet equal are emphasized and progress becomes less visible.

The past and future reference points were not correlated with each other in this study, indicating that they do not influence one another. The lack of a relationship between the reference points suggests that an individual can consider either the past or future more strongly, or may consider both perspectives when assessing current progress toward racial equality. Literature has not determined how an individual comes to rely on certain reference points more strongly. It can be hypothesized, however, that any individual's primary reference point may rely on a number of factors including geographic location, age, immediate culture, amount of exposure to history and current events, exposure to cultures other than one's own, and other factors.

# **Hypothesis Four**

Reference points and the impact on finalist choice was the focus of the fourth hypothesis, which predicted that individuals who anchor more strongly on the future would choose the black finalist, Darnel Washington, more often. Results indicated a significant difference with a relatively small effect size between choice and future reference point. This significance was not found between past reference point and finalist choice.

The significance between choice and future reference point is consistent with past research on reference points. As past research has revealed, anchoring highly on the past is not

necessarily associated with higher prejudice, but anchoring on the future is associated with lower prejudice (Brodish et al., 2008; Eibach & Ehrlinger, 2006). This helps explain why no significance was found between past reference point and choice while it was present for future reference point and choice.

Brodish and colleagues (2008) suggest that the ability to anchor on the future is a critical component for taking the perspective of another group and understanding the perspectives of groups of color. In this study, the ability to anchor on a future reference point was the most powerful in obtaining significant differences in choices. This follows the logic that participants who showed a stronger tendency to consider future reference points empathized with Darnel Washington and thus chose him as the preferred finalist more often.

# **Hypothesis Five**

The final hypothesis of this study was that perceived progress, combined with past and future reference points would be able to predict which finalist would be chosen. A discriminant function was calculated that was significant, but only with a small effect. In other words, the discriminant function was able to combine the three variables in order to create a prediction for which finalist was chosen. This prediction was more accurate at predicting individuals who chose Darnel Washington at 62% accuracy than those who chose Brad Schmidt at 49% accuracy.

The future reference point had the strongest relationship with the discriminant function, reiterating that this predictor is the best at noticing a real difference between which finalist was chosen. The better predictability of which participant would choose Darnel Washington is in part due to the future reference point operating as a better predictor with decision-making than the past reference point, as seen in hypothesis four. The future reference point seems to demonstrate

the ability to take the perspective of other groups and show empathy (Brodish et al., 2008), which enhances the likelihood of choosing the black finalist.

# **Implications**

The findings of the present research lend some support for the theoretical models that formed the foundation for this study. There were some findings, however, that did not support the theoretical bases. Each of the primary theories will be discussed along with implications from the study.

#### **Prospect Theory**

The present study indicates some support for prospect theory, which describes how decisions are made when they involve gains and losses. Prospect theory posits that we are loss averse, and will choose the option that is a gain or minimizes loss to our group. When two options are presented as a loss, the option that is presented with lower probability of occurring will be chosen, even if the loss is greater. In other words, we will choose something that provides a chance for no or less loss, even if the probability favors a less desirable outcome (Kahneman & Tversky, 1984).

In this study, participants who perceived more progress toward racial equality chose the white finalist more often than the black finalist. Viewing these outcomes through prospect theory lends an additional frame of interpretation. Framed in terms of prospect theory, the choice between a white finalist and a black finalist could be viewed as a gain to one's own racial group (choosing the white finalist) or a loss to one's own group (choosing the black finalist). People who perceive more progress toward equality may view any future attempts at progress as losses for their own group, therefore weighing them more heavily. This could explain the tendency of those who perceived more progress to choose the white participant.

Participants who perceived less progress toward racial equality chose the black finalist more often than the white finalist. This finding provides mixed support for prospect theory. If individuals perceive that we have made less progress, a choice of the white candidate could provide a further loss in overall progress. In this case, prospect theory supports the choice of the black finalist, which is the trend that was seen in this study. The participants could also hold a contradictory perception, however. Choice of a black finalist could also be framed as a loss for whites, in which case prospect theory would support the choice of the white finalist. There are several implications for participants choosing the black finalist more often. First, they may not have identified as strongly with white groups at the time of making the choice of finalist. Not identifying with the group would impact the perception of choosing the black finalist as a loss for one's own racial group. Second, participants may not have perceived either choice as a gain or a loss. In this case, prospect theory may not be the best theory for describing these types of decisions.

The original application of prospect theory to perceptions of progress toward racial equality was done by Eibach and Keegan (2006). They discovered that this concept was relevant when describing divergent perceptions of progress between whites and people of color. The same theory appears to be useful in a group of whites. In this group, additional gains for people of color would be framed as losses for whites, especially for those who perceive that we have made more progress toward racial equality. To further assess this theory as it applies to decisions within a group, further studies should be conducted with more priming for potential losses and gains.

# **Adjustment and Anchoring Heuristic**

The anchoring and adjustment heuristic may be the best theoretical basis for describing some of the main findings of the present study. The adjustment and anchoring heuristic explains that a starting point is referred to when providing estimates. The starting, or reference, point is very important as any future evaluations are based on that initial reference. Most estimates remain in close proximity to the reference point (Tversky & Kahneman, 1974).

In the present study, the primary reference point was found to be important in the choice of preferred finalist. This finding was especially powerful for participants who anchored highly on future reference points. These findings can be easily explained by the adjustment and anchoring heuristic. Individuals who anchor on the past have an initial focus on the improvement that has been made from the past. Any judgments will then be made based on this initial judgment and resulting perceptions of progress will focus more strongly on improvement that has been made, resulting in a higher rating of progress. Conversely, individuals who focus on the future will primarily emphasize deficits that need to be changed. When the future is used as a reference point, resulting estimates of perceived progress will be lower as they will focus on deficits.

Research on reference points and perceived progress has indicated that the reference point can explain differences in perceptions of progress between groups of color and whites (Eibach & Ehrlinger, 2006). The same differences that can explain between-group differences can also explain differences within one group. The present study supports the literature by applying reference points to differences in perceived progress within the white group.

Individuals who anchor on the past perceive more progress, and individuals who anchor on the

future perceive less progress toward equality. When it comes to perceived progress, our reference point matters.

Brodish and colleagues (2008) found that levels of prejudice were related to reference points and perceived progress toward equality. Specifically, they discovered that individuals who anchor on the future are lower on measures of prejudice than other individuals. Individuals who are higher on measures of prejudice tended to anchor on the past, although simply anchoring on the past did not indicate higher levels of prejudice. Further, individuals who perceived more progress toward equality tended to be higher on measures of prejudice and individuals who perceived less progress toward equality tended to be lower on measures of prejudice.

The findings of this study supports previous studies on prejudice and reference points.

The future reference point was a good indicator of choice of finalist, with individuals who anchor on the future choosing the black finalist more often. The same significance was not found for individuals who score highly on the past reference point, however. This supports the literature, as the future reference point indicated lower prejudice, while the past reference point was not indicative of higher prejudice.

One final consideration is the extent of the relationship between reference points and choice. While reference points greatly influence perceived progress, only the future reference point was related to choice of finalist. Previous research has been able to successfully manipulate the reference point that is considered, which resulted in more equivalent perceptions of progress toward racial equality (Eibach & Ehrlinger, 2006). This could have important implications in reducing intergroup conflict. Further studies should be conducted to examine how the manipulation of reference points impacts intergroup relations and whether it could have greater implications on overall assessments of finalists and choice of a finalist.

# **General Implications**

The present study reveals the importance of several demographic variables in making assessments between two finalists of a different race. Differences in choice of finalist were not significant, although patterns emerged that were consistent with the existing literature. All demographic groups preferred the black finalist with a few exceptions. Republicans and Catholics chose the white finalist more often than the black finalist, which contradicted the general trend. This pattern, however, is consistent with literature about modern racism. With modern racism, more conservative groups tend to vote against policies that promote racial equality and often choose white candidates in voting patterns (Sears & Henry, 2003). The tendency for the political group that is traditionally conservative to vote in favor of the white candidate supports literature on modern racism. Perhaps unique to this specific sample is the higher proportion of Catholics that identify as Republican, at approximately half of the Catholic sample. This relation could account for part of the tendency for Catholics and Republicans to share a trend of voting for the white candidate.

Significant differences were found in the ratings of finalists between several demographic variables. Males and females differed in the ratings of both finalists, with women rating both finalists more highly than males. The generosity of ratings among women is interesting to note, although it has not been examined in preexisting research on race-based choices. Additionally, political affiliation impacted ratings of the black finalist, with Democrats rating him higher than all other political affiliations. The higher rating for the black finalist among political liberals may lend support for the literature on aversive racism, as political liberals tend to provide more political support for policies that support racial equality (Gaertner & Dovidio, 1986). While the literature also indicates that individuals high in aversive racism would make a prejudiced

decision in more ambiguous situations, the present study may have set up a situation that was more similar to a voting scenario where aversive racism is less prominent and modern racism is more common. Although Darnel was ranked higher among one group, a different pattern emerged between Christians and Catholics. With the religious grouping, the black candidate was not rated significantly higher, but rather was rated significantly lower by Catholics than other religious groups. This finding was perplexing as other Christians and individuals with no religious affiliation had approximately the same rating of the black candidate as individuals with no religious affiliation. This finding may suggest that individuals in the Midwest who identify as Catholic use race as a factor in making evaluations. Further research is needed to examine the extent of the influence of religious affiliation.

Several demographic variables were important in determining which reference points are used, with significant differences between several groups. Overall, Republicans anchored more strongly on the past reference point while Democrats and females anchored more strongly on future reference points. The impact of political affiliation on reference points is not surprising, especially in light of traditional party views on policies that promote social equality, such as affirmative action. The tendency of females to anchor more strongly on the future was an interesting finding. This may have been a tendency that was unique to this specific sample, although women may be uniquely interested in issues of equality. While women are traditionally considered lower in political knowledge, the differences disappear when individuals are asked about female political representation in the national government (Dolan, 2011). As a group that has been historically discriminated against, it is not surprising that women are more focused on their own political representation than other issues. The increased focus on political issues dealing with gender equality may extend to other issues, such as racial equality. Due to historical

discrimination, women may have an orientation that is more similar to groups of color when choosing a reference point.

# **Interventions**

How groups perceive progress toward racial equality is influenced by a number of factors. Previous research suggests that these differences exist between groups based on which reference points are used (Eibach & Ehrlinger, 2006). The present study extends these findings and highlights the importance of reference points within groups as well. Other factors such as political affiliation and year in school were found to show significant differences in the amount of progress that was perceived. Differing perceptions of progress toward equality are important to examine as they influence support for policies that promote racial equality (e.g., Brodish et al., 2008; Eibach & Keegan, 2006; Kaiser et al., 2009), and can serve as a source of conflict between individuals when discussing issues of social equality.

Interventions that attempt to bridge perceptions of progress toward equality could be aimed at adapting similar reference points in making assessments. Complete assessments of progress should use both past and future reference points (Eibach & Ehrlinger, 2006), and priming individuals for this may decrease the gap between perceptions. It is important to examine the impact of interventions that attempt to bridge gaps in perceived progress as these could help reduce intergroup conflict and cases of subtle biases.

Current approaches that attempt to bridge racial divisions should be expanded upon. Eibach and Purdie-Vaughns (2009) discuss the importance for interventions in the current political climate, in which discussions about progress toward racial equality have become increasingly common after the election of President Barack Obama. They suggest that getting individuals to consider both past and future reference points will bridge the gap between

perceptions of equality. While individuals differ in the extent to which they rely on past or future reference points differ when they are spontaneously assessed, assessments change after some discussion or priming to consider multiple reference points. Most individuals agree that while we have made progress, there is still progress to be made.

#### Limitations

The present study lends some, but not full support to the existing literature. Some of the differences between the present study and past research could be attributed to limitations in the study including the sample, the design, and nature of the research.

#### **Sample**

The sample that was used for the present study included undergraduate students at Wichita State University. Wichita State University is an urban university in the Midwest that has a large commuter and nontraditional population. Consequently, the students who were included in the study may have been less similar to traditional students and more similar to the community population. The sample is not entirely representative of the community, however, as attending college sets them apart from the general community population.

While aversive racism is more common among liberal individuals and often occurs in college populations (Dovidio & Gaertner, 1986), this sample included more Republican participants than Democrat participants. In a fairly conservative state, this college sample was more liberal than the community yet more conservative than other traditional student populations. The impact of political affiliation is important to examine in order to identify how subtle forms of biases are influenced by political orientation. The measurement of political affiliation that was used in the present study may be inadequate at assessing liberal versus conservative ideologies. Future research should include more specific measures that examine

political ideology to determine whether political orientation has a larger influence on actions and subtle biases.

# **Design**

The design of this study should be expanded to see if different findings are obtained with a slightly different structure. In the present study, only two profiles were presented to each participant. More profiles should be created and presented to allow further analysis of the extent of preference for certain aspects of the profile, such as GPA and community participation, and account for those preferences. Additionally, several of the measures were limited in their thoroughness and could be developed further. Political orientation and perceived progress toward equality are several areas that should be further developed to capture more subtle differences between participants.

Despite extensive piloting efforts, the two profiles presented to participants may not have seemed as ambiguous as they were intended to be. The preference for GPA over SAT scores makes this a possibility. If the profiles were not perceived as equivalently ambiguous, it may not have been able to detect subtle biases as accurately as if each participant perceived them as ambiguous. The inclusion of more profiles could help account for this limitation, as well as a few subtle changes in the profiles. One such change is a transformation of SAT scores into ACT scores. In the Midwest, students are more familiar with ACT scores. Equivalent profiles should be created with ACT scores to see if this impacts the preference for GPA over college entrance exam scores.

The actual design of the field experiment as a scholarship judging process may have caused some limitations. The inclusion of a short survey and demographics after evaluations of finalists were made, for example, may have caused some participants to figure out that this was a

research study. The questions about perceived progress and reference points may have been influenced by social desirability for some participants who "figured it out." Contamination of participants may also have occurred due to the large number of students sampled. If two individuals worked on the evaluation together or spoke about it, some contamination could have occurred.

# **Field Experiment Methodology**

There are many implications involved with conducting research that involves deception. The difficulty performing deception-based research includes aspects of design, ethical considerations, and reactions from participants. With the design aspect, it is important to design research that is carefully constructed in order to eliminate detection. In the present study, race-related extracurricular activities were used to enhance the perception of one finalist as black in addition to a traditionally black name. Because of the blatantly stated racial categorization and the inclusion of a survey and other demographic questions, some people saw through the deception. This limitation is difficult to eliminate in this type of experiment due to the nature of field research, but should be considered as a potential source of error.

Ethical considerations are always more delicate with any research that involves deception. The institutional review board (IRB) may have concerns that add a significant amount of time to the research design phase. Further, many IRB's may be reluctant to approve any research involving the amount of deception that is necessary for field experiments. With all of the concerns about ethics of experiments, it has become difficult to design experiments that study natural behavior on controversial or delicate topics. Conversations about field experiments must include ethical considerations as well as ways to remain ethical while studying authentic behaviors.

The debate about ethical considerations of research that includes deception has led to a belief in some individuals that there is no longer any deception in research or that there should not be. This belief can lead to negative reactions by some participants after becoming aware of their involvement in this type of research. These negative reactions are a concern in field experiments, and were a limitation for this study. A few participants (6 of 1,074 respondents) chose to have their information removed from the study due to concerns about being involved in a deception-based study. This concern highlights the importance of a well-planned debriefing process in any deception-based study. Inclusion of a description of the ethics of field experiments would enhance a debriefing process and alleviate some participant concerns that may arise. Of course, some negative reactions will persist regardless of the debriefing process.

#### **Future Research**

Future research should focus on an expansion of the present field experiment as well as additional methods to measure subtleties involved in biases and perceptions of progress toward equality. Several of the primary areas of future research are highlighted below.

# **Expansion of the Present Study**

Another study should be conducted that attempts to correct for some of the limitations that were present in the present study. Included in this study would be additional profiles so that participants evaluate more than two profiles. This may also correct for some of the detection of the field experiment. Additionally, ACT scores should be used to see if participants are more familiar with ACT scores and evaluate them more highly. In this expanded version, a follow-up survey will be used in place of the survey that was included at the end of the judging process. The follow-up survey will include questions on perceptions of progress, reference points, and expanded demographic questions such as more questions on political orientation.

# **Gender Differences**

Further examination of the differences between genders is necessary to build upon existing research. In this study, females rated all finalists more highly than did the males. An examination of the differences between genders should focus on whether higher assessments of the finalists impacts choice. Additional factors that influence choice and rating of the finalists could exist among females that do not necessarily exist among males. Conducting analyses of data for female participants may reveal additional tendencies that impact these gender differences.

# **Within-Group Differences Among Groups of Color**

The present study focuses on differences of perceptions and assessments of a finalist within a white population. Previous research has focused on differences between black and white groups (e.g., Eibach & Ehrlinger, 2006; Eibach & Keegan, 2006) and differences within the white population (e.g., Brodish et al., 2008). Future research, however, should focus on withingroup differences in groups of color. Focusing analyses on participants within a specific ethnic group would be beneficial for determining if the reference point explains perceptions of progress for people of color. This research should focus on whether the same patterns emerge as within white groups, or that more support would be given for the finalist of color when individuals anchor more strongly on future reference point and perceive less progress.

#### **Priming for Reference Points**

Priming participants to focus on a specific reference point should be a goal for future research. In future designs, an essay can be used to prime participants and will focus on a specific reference point. Each condition will include an essay that discusses the amount of progress that has been made or the future progress that must be accomplished. This priming

should be introduced in essays before participants are evaluated or a final choice is made.

Priming will allow an assessment of prospect theory, and will evaluate if resulting perceptions of progress will be made with the reference point in mind.

Manipulating the reference points that are used by participants will significantly contribute to the literature. Primarily, this method will be able to detect whether changing reference points will bridge gaps in the amount of progress that is perceived. Additionally, we will be able to determine if manipulating reference points impacts assessments and choice of a finalist when race is involved. This research will have to involve follow-up surveys and interviews to determine if a manipulation of reference point lasts with time or only impacts the immediate situation.

# **Qualitative Examination**

Qualitative methods should be used to assess perceptions of progress toward racial equality and reference points in addition to the survey questions that are used in the present study. Using an interview method would provide more detail about the extent to which people think we have progressed toward equality. In addition, qualitative measures would be more effective at assessing at which point in history people tend to anchor. For example, some people may focus on the progress we have made compared to slavery, while others may focus on the progress we have made compared to the Jim Crow era. While both of these examples anchor on the past, they anchor on different historical points and may have different implications for assessments of overall progress. Likewise, people may anchor on different future points, which could impact assessments of progress.

# **Application to Other Social Issues**

Field experiments have traditionally been conducted with issues surrounding racial equality (Blank et al., 2004). This method is very effective at uncovering subtle biases and natural behaviors that are not apparent through other methods. Field experiments should be expanded to examine other social issues, such as gay rights, immigration, and religious discrimination. Initial research in these domains should be modeled after existing field experiments, and can later be expanded to study additional factors and subtle behaviors.

The present study can be applied to other issues surrounding marginalized groups in addition to racial equality, especially between socially advantaged and socially disadvantaged communities. For example, the current political climate includes tense discussions and legal battles surrounding immigration and equal rights in the LGBT community. The applied sciences must focus on how these changing issues will be influenced by subtle biases, similar to those that have continued to persist surrounding racial issues.

#### Conclusion

The existence of significant racial disparities in our communities—with some disparities increasing (Margellos et al., 2004; Moy et al., 2005)—is alarming. More alarming, perhaps, is the denial by many members of our communities that these disparities exist. The lack of acknowledgement of disparities is symbolic of the more subtle forms of racism that have become so prevalent in the United States (e.g., Dovidio & Gaertner, 2004; Trepagnier, 2010), and the disagreement over exactly how much progress we have made toward racial equality (Eibach & Ehrlinger, 2006). The lack of acknowledgement of disparities and subtle racism provides the unintended consequence of reconfirming the cycle of prejudice that creates the disparities in the first place.

It is difficult for the social sciences to contribute to these areas since it has been limited significantly in the ability to do the type of research that will examine authentic responses in daily situations. The persistence of racial disparities in the United States and the failure to notice these disparities by so many members of the community, however, highlight the urgency of addressing the gaps in perceived equality. The social sciences must overcome the barriers and negative stigma of performing deception-based research in order to adequately research these complicated and delicate issues.

In our communities, the issues revolving around race are critical to address. Race is present in every community, political, and organizational setting and in every community issue. Often, however, the burden of addressing and changing these issues are placed on communities of color, who have significant barriers for influencing the policies that so negatively impact them. Community Psychology and Applied Social Psychology have a lot to contribute to these areas, as they are in the best position to work with the sensitive nature of racial disparities and biases in our communities. Specifically, interventions must be created that address the white populations and take the burden of change off of communities of color. Interventions that focus on changing the understanding of white groups toward issues of race are important for creating lasting change.

Ongoing attention is needed for issues of racial equality to address the role of the racist past while acknowledging the promise of an ideally equal future. When gaps in perceived equality are bridged, communities will finally be able to come together to fight issues of inequality and work for the promise of a free and just future.

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**APPENDICES** 

# APPENDIX A

# SELECTION EMAIL

Email address: scholarship@lupitfoundation.org
Subject line: Invitation to judge a scholarship contest
Dear,
You have been randomly chosen from the Wichita State University student body to be a judge for the Robert C. Lupit Foundation Scholarship. The Robert C. Lupit Foundation is an organization that funds promising high school students. The foundation awards 100 scholarships in the amount of \$5,000 every year to be used toward college tuition, room & board, or textbook expenses for college.
As a current college student, you have a unique perspective on the characteristics necessary to succeed in the college environment, which is why you have been selected as a judge. The applicant pool has been narrowed to the finalists for the 2013 award. Your participation will involve reviewing two of the applicant profiles.
If you participate, you will be entered into a drawing for a Google Nexus 7.
The following link will lead you to the judging form, which will take about 10 minutes to complete.
To complete the form click Scholarship Judging Form
Or copy and past the URL below into your Internet browser: << <url>&gt;&gt;</url>
Please complete the form no later than midnight, Friday, March 22. If you have any questions, feel free to contact us at <a href="mailto:scholarship@lupitfoundation.org">scholarship@lupitfoundation.org</a> .
Thank you for your help and continued commitment to academic excellence!
Sincerely,
Robert C. Lupit Foundation

#### APPENDIX B

#### INFORMATION SCREEN

# Thank you for your interest in being a judge for the Robert C. Lupit Foundation Scholarship!

You have been randomly chosen from the Wichita State University student body to be a judge for the Robert C. Lupit Foundation Scholarship. The Robert C. Lupit Foundation is an organization that funds promising high school students. The foundation awards 100 scholarships in the amount of \$5,000 every year to be used toward college tuition, room and board, or textbook expenses for college.

As a current college student, you have a unique perspective on the characteristics necessary to succeed in the college environment, which is why you have been selected as a judge. The applicant pool has been narrowed to the finalists for the 2013 award. Your participation will involve reviewing two of the applicant profiles.

One hundred judges are asked to choose between each pair of finalists. Please review the profiles for both finalists presented and answer the questions provided. The online judging process should take approximately 10 minutes to complete. All responses will remain confidential. If you exit, you will not be able to return to the judging form.

Are you willing to participate in this task?

- a. Yes
- b. No

### APPENDIX C

# JUDGE INFORMATION FORM

Please complete the following questions about yourself.

1.	. Have you applied for the Robert C. Lupit Foundation Scholarship in the p	
	a.	Yes

- b. No
- 2. Have you been a judge for the Robert C. Lupit Foundation Scholarship in the past?
  - a. Yes
  - b. No
- 3. Are you 18 years of age or older?
  - a. Yes
  - b. No
- 4. What is your current registration status?
  - a. Full time
  - b. Part time
- 5. What is your current class standing?
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. Graduate Student
  - f. Other
- 6. What is your current or intended major?
- 7. What is your cumulative GPA?

# APPENDIX D

# INCENTIVE INFORMATION SCREEN

As a token of appreciation, you will be entered into a drawing for a Google Nexus 7.

Would you like to be included in the drawing for the Nexus 7?

- a. Yes
- b. No

If "yes," display the following:

Please enter your information. We will contact you to claim your prize if you win. Your personal information will not be used outside of the purposes of the incentive drawing.

- a. First Name
- b. Last Name
- c. Email Address

#### APPENDIX E

# FINALISTS (CONDITION 2)

Profiles of two of our finalists appear below.

Each profile has been summarized for your review. Please review each profile and rate them according to the categories provided.

#### Profile 1:

Name: Darnel Washington

**Biographical Information** 

Age: 18

Gender: Male

### Academic Record

GPA: 3.10

Class Rank: Top 50%

# College Entrance Exams (SAT)

- Verbal: 680 (93<sup>rd</sup> percentile)
  Quantitative: 730 (97<sup>th</sup> percentile)

#### Extracurricular Activities:

- **Employment: Kroger Food Store**
- Selected Academic Clubs:
  - 1. Allenton High School Black Student Union
  - 2. Black Business Students Association
  - 3. Computer Design Club
- Community Service:
  - 1. Cedarbrook Nursing Home
  - 2. Food Pantry Volunteer
  - 3. Meramec River Cleanup

How strongly would you recommend Darnel Washington for the Robert C. Lupit Foundation Scholarship?

1 = Not at all 2 = Slightly recommend 3 = Somewhat recommend 4 = Moderately 5 = Strongly Recommend

# Profile 2:

Name: Brad Schmidt

**Biographical Information** 

- Age: 18

- Gender: Male

#### Academic Record

- GPA: 3.90

- Class Rank: Top 5%

# College Entrance Exams

- Verbal: 510 (51<sup>st</sup> percentile)

- Quantitative: 570: (66<sup>th</sup> percentile)

#### Extracurricular Activities:

- Employment: Walgreens
- Selected Academic Clubs:
  - 1. Fairmount High School Leadership Council
  - 2. Fairmount High School Newspaper
  - 3. Science Club
- Community Service:
  - 1. Carl Nettifee Memorial Animal Shelter
  - 2. Martin County Public Library
  - 3. Meals on Wheels

How strongly would you recommend Brad Schmidt for the Robert C. Lupit Foundation Scholarship?

1 = Not at all 2 = Slightly recommend 3 = Somewhat recommend 4 = Moderately 5 = Strongly Recommend

Which finalist do you recommend as the recipient of the Robert C. Lupit Foundation Scholarship?

- o Darnel Washington
- o Brad Schmidt

Rank the following in order of importance for your decision (most important at the top). Drag the most important to the top.

- o Academic Record
- o College Entrance Exam Scores
- o Extracurricular Activities

#### APPENDIX F

#### PROGRESS SURVEY

# **Survey on Progress with Social Issues**

Please take a few moments to complete a short survey by Matthew Hayes, the 2011 recipient of the Robert C. Lupit Foundation Scholarship who attends Memphis University. Your responses will help him to fulfill the requirements of the Robert C. Lupit Foundation Scholarship.

The following questions are about how people view progress with social issues in the United States. Please answer all of the questions.

How much <u>progress</u> has been made toward recycling in the United States?

- None
- Very Little
- Some
- Quite a Bit
- A Great Deal

When thinking about recycling progress, I think about how much <u>improvement</u> the United States <u>has made from the PAST.</u>

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

When thinking about recycling progress, I think about how much <u>improvement</u> the United States still <u>has to make in the FUTURE.</u>

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

How much progress has been made toward equality for African Americans in the United States?

- None
- Very Little
- Some
- Ouite a Bit
- A Great Deal

When thinking about racial progress, I think about how much <u>improvement</u> the United States <u>has</u> made from the PAST.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

When thinking about racial progress, I think about how much <u>improvement</u> the United States still <u>has to make in the FUTURE</u>.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

How much <u>progress</u> has been made toward public transportation in the United States?

- None
- Very Little
- Some
- Quite a Bit
- A Great Deal

When thinking about progress with public transportation, I think about how much <u>improvement</u> the United States <u>has made from the PAST</u>.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

When thinking about progress with public transportation, I think about how much <u>improvement</u> the United States still <u>has to make in the FUTURE</u>.

- Strongly Disagree
- Moderately Disagree
- Slightly Disagree
- Slightly Agree
- Moderately Agree
- Strongly Agree

Select "continue" to proceed to the last screen.

#### APPENDIX G

# **DEMOGRAPHIC QUESTIONS**

Finally, please answer a few questions about yourself.

- 1. What is your gender?
  - a. Male
  - b. Female
- 2. In what year were you born?
- 3. How would you best describe your race/ ethnicity? Select all that apply.
  - a. White/ Caucasian
  - b. Black/ African American
  - c. Asian
  - d. Hispanic or Latino
  - e. Native Hawaiian or Other Pacific Islander
  - f. American Indian or Alaska Native
  - g. Other:
- 4. Generally speaking, do you consider yourself to be a(n):
  - a. Democrat
  - b. Independent
  - c. Republican
  - d. Don't Know
  - e. Other:
- 5. What is your religious affiliation?
  - a. Protestant Christian
  - b. Catholic Christian
  - c. Evangelical Christian
  - d. Jewish
  - e. Muslim
  - f. Hindu
  - g. Buddhist
  - h. No religious affiliation
  - i. Other:

Select "continue" to submit your judging form.

#### APPENDIX H

#### **DEBRIEFING FORM**

# Debriefing Form for Participation in a Research Study Wichita State University

You recently participated as a judge for a scholarship contest for the Robert C. Lupit Foundation. We are writing to inform you that your participation was part of a research study, not a scholarship contest.

# Purpose of the Study:

Earlier in our correspondence we informed you that your participation was to assist with judging a scholarship competition. In actuality, our study examined factors that people consider when making these types of judgments based on personal characteristics of the finalists.

Unfortunately, in order to properly test our hypotheses, we could not provide you with all of these details prior to your participation. This ensures that your reactions in this situation were spontaneous and not influenced by prior knowledge of being in a research study. Many past research studies predict that awareness of being involved in a study would impact authentic decisions for a majority of participants. We hope you understand.

# **Confidentiality:**

Please note that all information collected through this process is confidential and anonymous. All information from this study will be kept at Wichita State University on a secure network. All data will be dissociated with your name, and any records with your name will be removed from our database. It is impossible for anyone, including the researchers, to know your responses.

Now that you know the true purpose of our study and are fully informed, you may decide that you do not want your data used in this research. If you would like your data removed from the study and permanently deleted please contact Ashlee Lien, at axkeele-lien@wichita.edu.

# Final Report:

If you would like to receive a copy of a summary of the findings when it is completed, please feel free to contact us through email.

#### **Useful Contact Information:**

If you have any questions or concerns regarding this study, its purpose or procedures, please feel free to contact the researcher, Ashlee Lien, at axkeele-lien@wichita.edu.

If you have concerns or would like to speak with someone please contact Dr. Greg Meissen, professor of Psychology and coordinator of the Community Psychology Program, at greg.meissen@wichita.edu.

If you have any questions concerning your rights as a research subject, you may contact the Office of Research Administration at Wichita State University, Wichita, KS 6726-0007, (316) 978-3285.

\*\*\*Please keep a copy of this form for your future reference. Thank you for your participation in this study!\*\*\*