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Relating Color Blind Racial Attitudes, Social Dominance Orientation and Just World Beliefs

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CHAPTER ONE
INTRODUCTION

Throughout the history of the United States, White people, as a majority social group, have held positions of power and privilege. As a result of this socialization, many White individuals have unconsciously developed a sense of entitlement to the privileges that racial minority groups have been systematically denied (Sue, 2003). Socialization into a world in which people are afforded such positions of power and privilege may also lead Whites to develop a particular set of attitudes and beliefs about the world. One such viewpoint is that the world is a fair and just place where people get what they deserve. Social psychologists, political scientists, and sociologists have been interested in the construct of social justice and the beliefs that the world is a fair and just place since the 1970’s. Lerner (1977) first introduced the concept of Just World Beliefs (JWB), which asserts that people believe in a world where, in general, good things happen to those who are good and bad things happen to those who are bad. People have a strong desire to believe that the world is a fair and just place where people get what they deserve, so that they can determine their own fate (Hunt, 2000).

Such beliefs play an important function for mental health, because in order to plan their lives or achieve goals individuals need to assume that their actions will have predictable consequences (Lerner & Miller, 1978). Dalbert (1999) proposed three explanations as to why beliefs in a just would have a positive effect on subjective well-
being. The first thing is that having a positively biased view of the world as fair and just would be related to a higher sense of control and competence for individuals. When people view the world as a meaningful and predictable place, they develop a positive outlook about their future, which may be associated with higher self-esteem and subjective well-being. Second, believing that fairness would lead to an individual getting what they deserve allows people to feel relatively sure that they will be treated fairly if they act in a fair manner. Finally, beliefs in a just world can serve a positive function for victims of unjust fate. When they are motivated to defend their beliefs in a just world despite encountering injustice, they are less likely to ruminate on their fate or feel depressed (Dalbert, 1999).

Accordingly, beliefs in a just world are thought to serve adaptive functions. However, the reality of the world is that discrimination, oppression and social inequality exist in everyday life. Therefore, believing in a just world has been viewed as a “positive illusion” (Taylor & Brown, 1988). As people gather information and experiences about themselves and the world, their perceptions lead to the formation of cognitive schemas that filter and influence how they make sense of the world (Dalbert, 1999). These schemas tend to consist of positively biased illusions about the world rather than accurate recollections. Through believing in this positive illusion, just world beliefs allow individuals see the world around them as orderly and meaningful even when it may not be the reality (Dalbert, 2001).

This positive illusion may promote mental health. In fact, research has found that one of the most advantageous aspects of subscribing to strong just world beliefs is its
contribution to a positive sense of well-being (Lipkus et al., 1996). Individuals with high just world beliefs express stronger feelings of control (Clayton, 1992; Hafer & Olson, 1998; Lerner & Miller, 1978; Rubin & Peplau, 1975), less loneliness (Jones, Freemon & Goswick, 1981), higher life satisfaction (Dalbert, 1998; Dalbert & Katona-Sallay, 1996; Dalbert, Lipkus, Sallay & Goch, 2001), and are more optimistic (Littell & Beck, 1999). Furthermore, the more individuals endorsed strong beliefs in a just world, the less threatened they were by injustice (Olson & Hafer, 2001), the lower they endorsed being a victim of discrimination (Lipkus & Siegler, 1993), the less they evaluated their life as unfair (Dalbert, 1996), the less they ruminated on asking “why me?” (Dalbert, 1997), and the more they felt personally responsible for their unjust fate (Dalbert, 1996).

Although this link to positive mental health provides evidence that just world beliefs can be adaptive and protective, unhealthy behaviors and attitudes may develop along with these beliefs. For example, because there is an adaptive aspect to believing in a just world, it can be troubling to encounter evidence that the world is unfair. When this happens, individuals may quickly act to restore their beliefs about justice by convincing themselves that no injustice has occurred or by blaming the victim (Montada, 1998). Furnham and Proctor (1989) argued that beliefs in a just world are maintained by rationalizing that victims deserve their fate. Despite the fact that discrimination exists and people are oppressed, people may still endorse beliefs in a just world because they may deny or minimize the existence of social inequality or derogate its victims (Smith & Green, 1984). Montada (1998) concluded that beliefs in a just world motivate people to
blame the needy for their problems and minimize their existing needs while justifying their own personal privileges.

Empirical research found that just world beliefs predicted prejudiced attitudes towards a range of disadvantaged groups, including the poor (Furnham & Gunter, 1984), persons with AIDS (Connors & Heaven, 1990), the elderly (Lipkus & Siegler, 1993), the unemployed (Reichle, Schneider & Montada, 1998), and refugees (Montada, 1998). Therefore, despite many personally healthy functions related to beliefs about the world as just, these beliefs may also lead a person to deny or minimize inequality, and engage in victim derogation.

Early research on just world beliefs used global measures and definitions of just world beliefs. However, as researchers continued to study the link between beliefs in a just world and mental health as a “double-edged sword” (Sutton & Douglas, 2005, p.638), they began to question the utility of a unidimensional model, arguing that a multidimensional understanding of beliefs in a just world would make the most sense. Studies discovered that the more personal an experience of injustice, the more threatening and the more it would be denied (Dalbert & Yamauchi, 1994; Farwell & Weiner, 1996; Taylor et al, 1990). Building upon this knowledge, researchers began to focus on the relationship between just world beliefs and subjective well-being with the distinction between seeing the world as just personally versus globally or generally. Today, this bidimensional model of personal and global is used when studying just world beliefs.

In establishing this personal-general distinction between beliefs in a just world, Lipkus, Dalbert & Siegler (1996) discovered that people believe the world is more just
for them personally than in general. Furthermore, Lipkus et al. (1996) found evidence that beliefs in a personal just world were more important in predicting psychological well-being than general beliefs in a just world. Believing that the world is personally fair was predictive of less depression, less stress, and greater life satisfaction, and individuals viewed themselves as less neurotic, more emotionally stable, extraverted, and open. Dalbert (1999) confirmed these initial findings, reporting that personal and general beliefs in a just world should be differentiated, and that personal JWB better predicted subjective well-being and self-esteem than general JWB. Therefore, we currently understand just world beliefs as a bidimensional model with both an adaptive function for well-being as well as potentially leading to prejudiced attitudes.

*Purpose of the Study*

Given what has been stated about just world beliefs, several conclusions can be drawn. First, we know that people tend to believe that the world is fair and just for them personally, and are motivated to protect this belief. It is also clear that examining the concept of beliefs in a just world has led to the discovery of important information about the way that personal beliefs about justice may relate to mental health. Third, the research has shown that endorsing general beliefs can lead to negative beliefs towards others where victims are blamed. However, while there is a vast amount of research available on the positive effects of personal just world beliefs on mental health, research about the negative effects of general just world beliefs is sparse. In addition, research on general just world beliefs has generally examined outcome-based results rather than developing an understanding of factors that may be associated with these beliefs. Given that victim
derogation and discrimination may relate to negative attitudes towards individuals as well as preventing increased social equality, it is important that we come to understand factors involved with general beliefs in a just world.

As the field of psychology continues its movement towards multiculturalism, studying constructs related to social justice is important, especially when it comes to understanding those factors that may limit movement towards social equality. Despite the healthy functions of personal JWB, endorsing general JWB may be related to social discrimination and conformity to the status quo (Begue & Bastounis, 2003). Therefore, it is important to further understand what factors are associated with general beliefs about justice. Therefore, the purpose of the present study is to explore constructs that may be related to just world beliefs.

What is known about general just world beliefs is that individuals with high beliefs tend to blame victims, deny the reality of social inequality, and hold prejudiced attitudes (Begue & Bastounis, 2003; Dalbert, 1999). On the other hand, personal just world beliefs have been shown to predict positive mental health, life satisfaction, and self-esteem (Dalbert, 1999). Similar to general just world beliefs, color-blind racial attitudes and social dominance orientation are two constructs related to attitudes and behaviors that promote racism, discrimination and victim derogation. Color-blind racial attitudes, generally defined as “the belief that race should not and does not matter” (Neville, Lilly, Duran, Lee and Browne, 2000, p. 60), have been linked to racial prejudice and racist ideology (Carr, 1997; Neville et al., 2000). Like general beliefs in a just world, color-blind racial attitudes deny social inequalities. When a person denies the importance
of race, a distortion and minimization of racism occurs leading to greater levels of racial prejudice (Neville, Coleman, Falcomer & Holmes, 2005). Social dominance orientation (SDO), or “the extent to which one desires that one’s in-group dominate and be superior to out-groups” (Pratto, Sidanius, Stallworth and Malle, 1994, p.742), predicts prejudice and discrimination against members of out-groups (Heaven, Greene, Stones, & Caputi, 2000). Just world beliefs and social dominance orientation both represent ideological beliefs about group inequality. Those who are relatively high in JWB are likely to be motivated to view social inequalities as fair and legitimate. Similarly, those with high SDO have generally positive attitudes towards group-based inequalities (Oldmeadow & Fiske, 2007). In sum, color-blind racial attitudes and social dominance orientation have been linked to negative social consequences similar to those that are associated with endorsing general just world beliefs. Therefore, the current study will examine the relationships between beliefs in a just world, color-blind racial attitudes, and social dominance orientation. It is likely that these constructs will be related to one another and to general just world beliefs. This is the first study that is attempting to empirically link these three variables for White, American individuals.

Similarly, this study will explore if color-blind racial attitudes, social dominance orientation, and global just world beliefs can be factored down into a smaller set of overarching constructs, rather than three separate variables. By performing a factor analysis, this research may be able to reduce a complex set of attitudes (beliefs about fairness and justice, racial attitudes, and social dominance) into common, underlying factors that potentially reflects attitudes related to racism and discrimination. For
example, Worthington et al (2008) found moderate relationships between blatant racial issues and institutional discrimination subscales of color-blind racial attitudes and social dominance orientation, and concluded that SDO tends to reflect classic conceptions of overt racism. Factor analysis can help determine if these variables do indeed relate together as a “racism” construct. As the field of counseling psychology focuses on multicultural concepts, factor analysis of these variables will help us to understand how latent constructs might explain or identify themes and content areas that warrant further attention (Kahn, 2006). Factor analysis will potentially allow this study to achieve a more parsimonious explanation of the variables by identifying any common variance. In addition, it will test whether, in fact, just world beliefs should be considered a bidimensional constructs of personal and global just world beliefs as researchers are beginning to argue. This would be only the second study to empirically test the personal versus general just world beliefs distinction.

This study will specifically focus on attitudes endorsed by White individuals rather than including all racial groups. Although all racial groups can hold attitudes and engage in behaviors that deny the importance of race and promote social injustice, White individuals have historically held positions of power and privilege, which make them an integral part of the problem. Racism and discrimination benefit those who hold positions of power because they protect their group interest by maintaining certain racial privileges. In essence, White privilege affords people the opportunity to deny or minimize the fact that racial and ethnic minorities are victims of racism, which fosters victim blaming and derogation (Neville et al., 2005). This, in turn, reinforces the status
quo and perpetuates a system of inequality benefiting Whites and disadvantaging people of color (Neville et al., 2005). Therefore, it is important to examine the just world beliefs, color-blind racial attitudes and social dominance orientation for the racial group that benefits the most from these attitudes.

Studying these constructs would contribute to the literature about just world beliefs by helping to increase the knowledge base about just world beliefs, as well as contribute to the multicultural literature by furthering the understanding of constructs associated with discrimination, prejudice, and racism.

**Research Questions**

This study is driven by the general question: For White individuals, what is the relationship between general beliefs in a just world, color-blind racial attitudes, and social dominance orientation? This research question will be answered by investigating the following:

1. What is the relationship between color-blind attitudes and social dominance orientation?
2. What is the relationship between the racial privilege, institutional discrimination and blatant racial issues subscales on the Color-Blind Racial Attitudes Scale and personal and global just world beliefs?
3. What is the relationship between social dominance orientation and personal and global just world beliefs?
4. Can just world beliefs (personal and global), color-blind racial attitudes and social dominance orientation be reduced into a smaller number of constructs?
CHAPTER TWO
LITERATURE REVIEW

The following selective review of literature will focus on beliefs in a just world, color-blind racial attitudes, and social dominance orientation, and will include a critique of the existing research. This chapter will end with a review of the literature about the relationships between the three factors.

Just World Beliefs

The construct of Just World Beliefs has been extensively studied over the past three decades, and results have shown that JWB are stable and cross-culturally generalizable (Furnham, 2003). Most of these studies have been conducted with college-aged students. Early investigations regarding JWB were mainly concerned with reactions to victims. Montada’s (1998) review of this literature concluded that there is a clear association between JWB and blaming victims, including poor people, the handicapped, AIDS patients, accident cases, rape victims, and cancer patients. In an attempt to understand the behavioral and cognitive reactions to victims, Reichle, Schneider, and Montata (1998) found that JWB motivated people to blame the needy for self-infliction, minimize their existing needs, and justify their own advantages.

As researchers began to find evidence that beliefs about justice serve an adaptive and protective function in terms of psychological well-being, important developments over the last decade have shifted to examining JWB as a positive and healthy coping
mechanism (Furnham, 2003). Indeed, JWB have been shown to be highly functional as individuals with high just world beliefs expect they will be rewarded for their good actions, experience less stress of daily hassles and depression, and show more well-being after traumatic events (Dalbert, 1998). In addition, other studies have demonstrated that JWB play an important role in coping with stress. Tomaka and Blascovich (1994) concluded that JWB help an individual to cope with stressful situations by buffering emotional stress, protecting physical health, and improving motivation for achievement. Furthermore, JWB were associated with stronger internal attributions for personal control (Hafer & Corey, 1999), and were helpful in long-term goal planning (Hafer, 2000). These studies demonstrate the positive benefits of holding JWB and explain why people are resistant to changing these beliefs since they serve as an effective coping strategy (Furnham, 2003).

Although there has been movement from focusing on victim derogation to positive coping, which has been seen as providing an explanation for why people seek to maintain JWB, research should not lose its focus on the unhealthy aspects of justice beliefs. Recent research has begun to acknowledge the distinction between personal versus general just world beliefs. Personal beliefs in a just world can be defined as the belief that events in one’s life are just, whereas general just world beliefs reflect the belief that, basically, the world is a fair and just place (Dalbert and Stoeber, 2006). Lipkus et al.’s (1996) study on the importance of differentiating between personal and general just world beliefs stressed that personal beliefs were more important in explaining mental health, while individuals with general just world beliefs were associated with blaming victims, denial of the reality
of social inequality, and holding prejudiced attitudes. Early studies on JWB did not differentiate personal and general beliefs, and, therefore, made general statements about just world beliefs that most likely really only applied to personal beliefs.

The positive impact of personal JWB is independent of general JWB (Lipkus, Dalbert & Siegler, 1996). Therefore, understanding just world beliefs as serving a healthy and adaptive function should be interpreted with this in mind. The JWB research have largely been focused on understanding the positive functions of just world beliefs, while there is a dearth of information about general just world beliefs as it is related to prejudice and discrimination. Gaining a further understanding about general just world beliefs will be an important step in the advancement of social justice and equality.

Research suggests that race is the single most important factor in shaping beliefs about justice and inequality in the United States today (Hunt, 1996). Studies on just world beliefs have overwhelmingly examined the beliefs of Whites, and thus knowledge about JWB is seen as reflecting White experiences (Hunt, 2000). In fact, it is only within the last decade that studies have begun to examine how just world beliefs may differ according to race. These studies have concluded that White individuals endorsed higher just world beliefs than their Black counterparts (Hunt, 2000; Calhoun & Cann, 2001). There has been mixed evidence supporting gender differences in relation to just world beliefs. Several researchers found that males endorsed just world beliefs more highly than females (i.e. Begue & Bastounis, 2003; Hunt, 2000; Umberson, 1993). On the other hand, a meta-analysis of studies on just world beliefs concluded no gender differences (O’Connor et al., 1996). Taken together, these demographic findings on race and gender
may indicate that relatively advantaged persons have a greater motivation to see the world as fair and just both to explain their own positions, and the positions of less privileged groups (Umberson, 1993).

Just world beliefs is a main construct of study in the present research. Given what has been previously stated about the bidimesional nature of this variable, it is therefore vital that this study differentiates between personal and global just world beliefs as this research attempts to understand how they relate to one another and color-blind racial attitudes and social dominance orientation. Rather than exploring just world beliefs as a singular variable, personal and global just world beliefs will be examined separately.

Although there is no expectation that personal just world beliefs would be related to color-blind racial attitudes or social dominance orientation as evidenced by its positive impact on mental health, due to the fact that research has relatively recently begun to focus on the bidimensional model of personal and global just world beliefs, personal just world beliefs will be included along with global just world beliefs in this study to further contribute to the understanding of this personal-global distinction.

In addition to examining the relationships between variables, this study will further contribute to the literature by examining if personal and global just world beliefs are indeed two separate concepts as stated by Dalbert (1999), Lipkus et. al (1996) and Sutton & Douglas (2005). Furnham and Proctor (1989) first argued for the benefit of understanding the distinction between viewing the world as just or unjust for the self versus for others. Initial studies used the terms beliefs in a just world for self (S) and others (O), and measured them using modified existing just world beliefs scales. Lipkus
et al. (1996) empirically tested this distinction as it relates to psychological well-being, but used separate factor analyses on the BJW-S and BJW-O scales and found that the two were weakly correlated \((r < .30)\). Sutton & Douglas (2005) confirmed these original findings that these constructs are independent of one another by conducting a factor analysis on the 16 items from the two scales. The EFA revealed a two-factor solution, with items loading onto a BJW-Self factor, as well as a BJW-Other factor.

Dalbert (1999) described the distinction as differences between personal and general beliefs in a just world rather than as self versus others, and replicated Lipkus et al.’s main findings using validated scales for general and personal JWB. Factor analyses of the two just world belief scales items revealed that a two-factor model provided the best fit, with items loading onto a personal factor and a general factor. This analysis was replicated two more times with the same results. Furthermore, these studies found that the two scales were significantly correlated between .37 and .54.

These studies point to the fact that personal and general just world beliefs have been empirically shown to be psychometrically distinct factors. The research was conducted with psychology students in the United States (Lipkus et al, 1996) and Kingdom (Sutton & Douglas, 2005), and college students with various majors in Germany (Dalbert, 1999). None of these studies reported any racial or ethnic data of the participants, and all three groups collapsed their research across gender. The present investigation will be only the second study to research the factor structure of just world beliefs with students in the United States, and will be the first study to examine this structure specifically with White individuals. In addition to attempting to replicate the
findings for general and personal just world beliefs, this study will also be the first to
explore how color-blind racial attitudes and social dominance orientation may factor with
just world beliefs.

In summary, several conclusions can be drawn from the research on just world
beliefs. First, just world beliefs has been studied with college students in various
countries around the world, and has been shown to be reflective of experiences of White
individuals. Second, just world beliefs are seen as both adaptive for psychological well-
being as well as associated with victim derogation and discriminatory attitudes. In
addition, researchers have recently shifted focus from studying just world beliefs as a
singular construct to understanding how individuals differ in personal and general just
world beliefs. Finally, there is mixed evidence related to male and female differences in
just world beliefs.

On the other hand, some aspects about just world beliefs have not been studied.
although much research has been devoted to understanding the concepts of victim
blaming and distributive justice by those who endorse JWB, researchers have yet to
examine how other variables associated with discriminatory attitudes relate to just world
beliefs. In addition, because the personal and global distinction is a relatively new
concept, researchers have just begun to empirically test this bidimensional model.
Furthermore, research has not specifically examined personal and global just world
beliefs for a White, American sample. Solely White samples have either been examined
in countries other than the United States, or have been examined in studies comparing
White individuals to other racial/ethnic groups. Therefore, this research will further our
knowledge about just world beliefs by studying personal and global just world beliefs as they relate to one another and other variables associated with discriminatory attitudes with White, American individuals.

**Color-blind Racial Attitudes**

Initially a construct mainly investigated in the field of constitutional law, color-blind racial attitudes have received growing attention among social scientists as an emerging racial ideology (Neville, Coleman, Falconer & Holmes, 2005). Color-blind racial attitudes refers to “the belief that race should not and does not matter” (Neville, Lilly, Duran, Lee & Browne, 2000, p. 60). This definition of color-blind racial attitudes is based on the notion that “all men are created equal”. Therefore, when an individual ascribes to this belief, they are effectively denying the “individual, institutional and cultural manifestations of racism and believe that race has little meaning in people’s lives” (Burkard & Knox, 2004, p. 388).

Color-blind racial attitudes are described by Neville and colleagues (2000, 2001) as consisting of three parts: (a) the denial of White privilege, (b) the denial of institutional racism, and (c) the denial of discrimination. These authors also exert that color-blind racial attitudes are similar yet different from racism. Whereas overt racism endorses beliefs about racial superiority and social inequality, color-blind attitudes represent a lack of awareness about racism. In fact, color-blind attitudes have been described as a reflection of contemporary racism (Bonilla-Silva, 2003; Neville et al, 2000). This conceptualization states that believing that race does not matter is problematic because it ultimately perhaps inadvertently perpetuates racism. The American Psychological
Association (1997) critiqued holding color-blind attitudes by stating that this perspective ignores research showing that race is prominent in people’s “everyday attitudes and behaviors”. Yet, people who endorse color-blind beliefs will deny the role of race and its influence on people’s lives, which may result in actions consistent with racial prejudice (Neville et al 2001). Specifically, Neville et al.’s (2000) validation study of the CoBRAS found that participants denied that racism and White privilege exists, as well as rejected the belief that social policies should be created to eradicate consequences of institutional racism. Furthermore, they reported that the CoBRAS showed good concurrent validity with two measures of racial prejudice. The authors concluded that although color-blind racial attitudes are not the same as racism per se, color-blind racial attitudes imply that one embraces an inaccurate or distorted view of racial and ethnic minorities and race relations. Therefore, similar to racism, the consequences of color-blind racial attitudes may unwittingly promote racial discrimination (Jones, 1997).

With the position that race does not and should not matter, color-blind racial attitudes make more of an implicit statement about White supremacy. Although it does not appear to produce the same level of oppression and negativity as overt racism, this perspective maintains a belief that people have equal access to resources regardless of race (Frankenberg, 1993), denying that racism benefits White individuals (Neville et al, 200, 2001). Therefore, racism is seen as an irrelevant problem of the past and individuals can focus on similarities across racial groups (Frankenberg 1993).

Many researchers agree that the expression of racism has become subtler in modern society (Dovidio, Mann, and Gaertner, 1989; Eberhardt and Fiske, 1994; Katz and Hass,
Dovidio and Gaertner (1998) have argued that racial discrimination occurs “when an aversive racist can justify or rationalize a negative response on the basis of some factor other than race” (p. 6). This subtly of racial privilege has been defined as ‘modern racism’ by McConahay (1986). As explained by Gushue and Constantine (2007), color-blind racial attitudes act as modern forms of racism by obscuring the impact of White privilege and relate to prejudiced attitudes that rationalize oppression. Essentially, by denying the importance of race, color-blind racial attitudes encourage the status quo and minimize efforts at social change (Gushue & Constantine, 2007).

There is emerging psychological research on color-blind racial attitudes that highlights the relationship between these attitudes and greater levels of racial prejudice. For example, Whites’ higher color-blind beliefs were related to higher racial and gender intolerance, racism against Blacks, and beliefs in a just world (Neville et al., 2000), higher anxiety and fear of racial minorities (Spanierman & Heppner, 2004), and less empathy and more blame for responsibility for minorities in the therapeutic context (Burkard & Knox, 2004). Therefore, although these attitudes are not limited to members of any particular group, White individuals have been found to be particularly more likely to adhere to color-blind racial attitudes than African-American and Hispanic individuals (Bonilla-Silva, 2001, 2003; Carr, 1997; Neville et al., 2000). Furthermore, Neville and colleagues (2000, 2001) stated that adopting color-blind attitudes mean different things for Whites and non-Whites. For whites, adopting a color-blind perspective and refusing to acknowledge racial inequalities in society serves to protect their afforded privileges.
This denial of systemic racism may contribute to a “blame the victim” mentality, which helps to preserve the status quo.

During the past several years, psychologists have focused on the importance of countering color-blind racial beliefs as part of the shift towards multicultural competency. Multicultural ideology argues that differences among racial groups should be recognized and appreciated, and people should seek to understand and accept differences in an effort to gain competency and promote social justice (Ryan, Hunt, Weible, Peterson & Casas, 2007). The field of psychology has shown a commitment towards this end. For example, the Guidelines on Multicultural Education, Training, Research, Practice and Organization Change for Psychologists (American Psychological Association, 2003) point out the problems with endorsing color-blind racial attitudes, and encourage awareness about the impact of racism and racist beliefs (Neville, Spanierman & Doan, 2006). Multicultural counseling research also has focused on the ways that White therapists possess multicultural competencies. Research in this area has found a significant, negative association between color-blind attitudes and self-reported multicultural awareness and knowledge, as well as case-conceptualization ability for etiology and treatment (Neville et al., 2006). Studies have also found that White counselors who endorse high color-blind attitudes demonstrated less empathy and more blame for client responsibility (Burkard & Knox, 2004), fell into lower white identity ego statuses (Gushue & Constantine, 2007), and held higher perceptions of symptom severity for Black clients (Gushue, 2004). These findings further point to the importance of working towards minimizing color-blind attitudes. Psychologists who lack awareness and deny the impact of race may perpetuate
racism and have decreased cultural sensitivity (Burkard & Knox, 2004), which is especially important to acknowledge given the increase in cross-cultural therapy relationships.

Although color-blind racial attitudes have been long studied in the constitutional law literature, it is an emerging concept in counseling psychology. Therefore, researchers are just beginning to understand the psychological aspects of color-blind racial attitudes. So far, this research has concluded that color-blind racial attitudes are viewed as a reflection of modern racism (Bonilla-Silva, 2003), relate to higher levels of racial prejudice (Neville et al, 2000), and are particularly salient for White individuals (Neville et al. 2000). In addition, researchers have largely focused on how color-blind racial attitudes relate to the counseling context. Taken together, this research has indicated that individuals with color-blind racial attitudes have lower levels of multicultural counseling competencies.

Due to the important consequences of psychology’s focus on multicultural competency for practice and training, researchers studying color-blind racial attitudes have focused most of their efforts at understanding how this construct relates to the counseling context. Indeed, this is an important area with many implications for practice and training. However, it limits the amount of information we have about color-blind racial attitudes for White individuals. One limitation of this research is that studies using trainees as the sample may not be generalizable to the population as a whole. Therefore, most of what we know about color-blind racial attitudes must be interpreted with this caution in mind.
In addition, research has not provided much information about how color-blind racial attitudes may differ for males and females. With regard to gender, research on the CoBRAS concluded that women held lower color-blind racial attitudes than men (Neville et al., 2000). It has been argued that women may be less likely to hold racist attitudes given their experience of gender discrimination (Carter, 1990; Pope-Davis & Ottavi, 1994). However, Worthington et al. (2008) found no gender differences present for scores on the CoBRAS. Little is known about how gender may relate to color-blind racial attitudes because these are the only two studies that included gender as a variable. Because psychologists have used trainees as the primary sample for investigations of color-blind attitudes, and most psychology trainees are females, there have not been enough male participants included in the studies to examine how males and females may differ in their color-blind racial attitudes.

Finally, research has been sparse as to what other variables that are associated with racism or discrimination may be related to color-blind racial attitudes. As stated above, the research has largely focused on how color-blind racial attitudes effects aspects of the counseling context, such as empathy and attributions of problems, (Burkard & Knox, 2004), multicultural counseling competencies (Neville et al., 2006; Spanierman et al., 2008), and judgments about mental health (Gushue, 2004). Gushue and Constantine (2007) provided the sole research study known to this author that investigated how color-blind racial attitudes related to another variable with socially relevant implications, White racial identity. These researchers found that, for a sample of 177 White trainees, higher levels of color-blind racial attitudes were positive related to attitudes associated with less
integrated forms of racial identity. Given counseling psychology’s focus on working as multiculturally competent helping professionals, it is important that we continue to understand how various constructs related to social discrimination, such as just world beliefs and social dominance orientation, may be related to racial attitudes.

Given these gaps in the research, it is important that we include non-trainees and both male and female participants when exploring colorblind racial attitudes, as well as examine how color-blind racial attitudes relate to other variables associated with discriminatory attitudes. The present study will take these areas into account.

**Social Dominance Orientation**

Given the reality that group conflict and group-based inequality of various natures are pervasive problems throughout the world, social psychologists have been interested in understanding the nature of group-based prejudice and oppression. One recent theory, social dominance theory, was developed by Sidanius and Pratto (1993). This theory states that societies minimize group conflict by relying on the status quo to promote and maintain a social hierarchy. Beliefs about inequality and superiority are termed “hierarchy-legitimizing myths” (Pratto, Sidanius, Stallworth & Malle, 1994). Examples of this ideology include ethnocentrism, racism, and sexism. Hierarchy legitimizing myths serve to justify discrimination and oppression because they allow individuals and social institutions to make determinations about social allocation, thus creating and ultimately maintaining inequalities in societies (Pratto et al., 1994). This group-based hierarchy leads to at least one group that is dominant over others and gains a disproportionate amount of privilege, while other groups are assigned an inferior position.
Social Dominance Orientation (SDO) was defined as “the degree to which individuals desire and support the attitude that their own group is superior to out-groups” (Sidanius & Pratto, 1999, p. 48). Essentially, it is the approval of hierarchical relationships between social groups. Social dominance orientation has been described as the single most important variable in accounting for the acceptance or rejection of beliefs that promote inequality (Guimond, Dambrun, Michinov & Duarte, 2003). SDO, therefore, acts as a motivating factor that rationalizes social inequalities, and it has been found to predict prejudice towards out-groups and justify discrimination against members of these groups (Heaven, Greene, Stones, & Caputi, 2000). According to Sidanius & Pratto (1999), people desire to maintain their positions of superiority, which motivates them to denigrate members of the out-group, and members of minority groups in particular. Examining the concept of social dominance orientation has thus been important for understanding policy attitudes, intergroup relations, and discriminatory behavior (Pratto, Stallworth & Sidanius, 1997).

To empirically examine social dominance orientation, Pratto et al. (1994) developed a measure of SDO. Results from their validation study showed that scores on this measure reliably predicted a wide range of ideologies and beliefs. Specifically, social dominance orientation had a negative relationship with concern for others, communality, tolerance, beliefs about sharing resources, and altruism. Secondly, it was strongly and consistently related to several hierarchy-legitimizing myths, including anti-Black racism, nationalism, sexism, denying equal opportunities, patriotism, cultural elitism, conservatism, and beliefs in a just world. In addition, SDO was correlated with
opposition to gay rights, anti-environmental programs, miscengency, chauvinism, and law-and-order policies. In conclusion, SDO was proven to be higher among those who support hierarchy-legitimating ideologies and is important in understanding the dynamics of group conflict and discrimination (Pratto et al., 1994). Other researchers have confirmed these initial findings, particularly in relation to showing that SDO predicts prejudiced attitudes (Altemeyer, 1998; Esses, Jackson & Armstrong, 1998; McFarland, 1999; Michinov, Dambrun, Guimond & Meot, 2005).

Because social dominance orientation is a key variable in understanding out-group prejudice, several researchers have examined this relationship. SDO has been shown to predict degree of out-group discrimination (Levin & Sidanius, 1993; Sidanius, Pratto, & Mitchell, 1994). Guimond and colleagues (2003) set out to discover causal evidence in the relationship between SDO and prejudice. These French researchers conducted four empirical studies on the relationship between social positions, SDO and prejudice. Their results concluded that SDO functions as a mediator of the effects of social position on prejudice, which they termed as the group socialization model (GSM). The GSM model confirmed predictions that people in a dominant position (a) score higher on SDO than people in lower social positions, and (b) display higher levels of prejudice than others. In their explanation of SDO as a mediator, Guimond et al. (2003) stated that acquiring a position in the social structure generates higher levels of prejudice based on the extent to which their new position increases or decreases social dominance orientation. These researchers concluded that a dominant social position has an effect on
prejudice, and SDO (as a measure of ideological beliefs) is the mechanism accounting for this effect.

Examination of the literature on SDO has produced patterns indicating who endorses SDO attitudes. First, people in a dominant social status position score higher on SDO than others (Guimond et al., 2003; Guimond & Dambrum, 2002; Sidanius & Pratto, 1999). It makes sense that people in positions of power and privilege would endorse an orientation that serves to maintain these advantages. Researchers have also found that men score significantly higher than women on SDO (Pratto et al., 1994). This finding is consistent with gender roles in the United States, where men tend to serve in leadership positions more than women, and have been found to hold more hierarchy-enhancing attitudes such as ethnic prejudice, racism, and capitalism (Pratto et al., 1994). In addition, to gender differences, cultural differences have been found as well. White South African respondents endorsed higher SDO attitudes than African American, Black South African, and Australian respondents (Heaven et al., 2000). In addition, Sidanius & Pratto (1999) reported a number of studies showing that Whites have higher scores on SDO than Blacks. Overall, White people benefit the most economically and politically from social hierarchies, which would lead them to be more likely to endorse SDO than minority status groups.

In conclusion, social dominance orientation is an important construct for understanding social discrimination due to its relationship to various hierarchy-legitimizing myths (Pratto et al., 1994), and especially since it has been empirically linked to prejudice (Guimond et al, 2003). Given that research has shown that SDO is
higher for Whites, males, and people in positions of social power than their respective counterparts, it is important that we continue to understand how social dominance orientation for these groups is related to hierarchy-legitimizing myths that promote prejudice and discrimination.

Since the research by Pratto et al (1994) linking SDO to various hierarchy-legitimizing myths, studies have largely focused on investigating the relationship between prejudice and SDO, as well as identifying factors that may underlie SDO. For example, social dominance orientation has recently been examined in relation to the stereotype content model (Oldmeadow & Fiske, 2007), the group socialization model (Guimond et al., 2003), beliefs about the world as dangerous and competitive (Duckitt, 2001), and discriminatory behaviors (Michinov et al., 2005). While it is undoubtedly important to understand models that may explain SDO, as well as link SDO with prejudice and discriminatory behaviors as claimed in the research, it is as equally important to continue to examine the relationships between SDO and other variables associated with hierarchy-legitimizing myths such as racism and discrimination. As American society is ever-changing, it is important that psychologists continue to study relationships among social concepts over time. Therefore, the current research will fill this gap by focusing on the relationship between social dominance orientation and variables associated with the racism (color-blind racial attitudes) and ideology about equality (just world beliefs).
Relationships Between Constructs

Just world beliefs has been conceptually and empirically linked to color-blind racial attitudes and social dominance orientation, and social dominance orientation has been associated with color-blind racial attitudes.

Neville et al. (2000) found a positive relationship between JWB and color-blind racial attitudes, indicating that higher color-blind racial attitudes were related to greater beliefs in a just world. They concluded that both color-blind racial attitudes and global belief in a just world constitute a level of unawareness or ignorance of negative forces in society (such as racism), leading to a “blaming the victim” perspective in which individuals are blamed for their misfortunes.

Just world beliefs are also related to a social dominance orientation. Research on SDO has shown that people that highly endorse this ideology tend to do so even when inequalities disadvantage one’s own group (Pratto et al., 1994). These authors found a significant correlation between beliefs in a just world and SDO in one sample (r =.43), but in another sample reported the relationship as .09. They explained the discrepant results by stating that sample differences in ethnicity/race may have impacted their ideologies since the sample with the low correlation had more first-generation, non-European American participants. This sample may influence the results because SDO had been shown to be higher for Whites and those in high status positions. Therefore, the strength of the relationship may have been underestimated.

Oldmeadow and Fiske (2007), in a sample of 206 individuals of various nationalities, found that that endorsing high or low SDO was related to an individual’s
general beliefs about social inequality. These researchers examined whether the relationship between competence and warmth was moderated by JWB and SDO. They discovered that individuals who were high in JWB were likely to view social inequalities as fair and legitimate, and so may be more likely to stereotype status groups according to competence. Similarly, those high in SDO endorsed group-based inequalities, and were more likely to endorse stereotypes of competence to the extent that such stereotypes legitimize inequalities (Oldmeadow & Fiske, 2007). Therefore, the authors concluded that both just world beliefs and social dominance orientation relate to individual differences in beliefs related to group inequality.

Although these researchers did not examine the direct connection between JWB and SDO, they discovered that individuals who believed the world is a fair and just place and those who had relatively positive attitudes towards inequalities were more likely to view a high-status group as more competent than low-status group. Oldmeadow & Fiske (2007) concluded that stereotypes about group status might function to justify inequalities between groups, either to maintain a JWB or to lend support to group-based inequalities.

Finally, one recent research study examined the relationship between color-blind racial attitudes and social dominance orientation as they relate to perceptions of the general and racial-ethnic campus climate (Worthington, Navarro, Loewy, & Hart, 2008). Specifically, they found that social dominance orientation was moderately correlated with the blatant racial issues and institutional discrimination subscales of the CoBRAS, but not the racial privilege subscale. They concluded that these results indicated that SDO tends to reflect “classic conceptions of overt racism” (p.17). Their research also found that
none of these three variables predicted perceptions of the racial-ethnic college campus climate. Instead, perceptions of racial-ethnic campus climate in this study were associated with awareness/unawareness of racial privilege, a more subtle form of racism.

Overall, it is clear that these three variables are related to attitudes and beliefs that ultimately are associated with negative outcomes such as prejudiced attitudes. Therefore, it is no surprise that above research has shown that these three variables are significantly related to one another. Global just world beliefs has been empirically linked to color-blind racial attitudes, with the assertion that an unawareness of social forces that promote inequality may lead to a blame the victim mentality (Neville et al., 2000). Just world beliefs as a general concept (i.e. not differentiating between personal or global beliefs) has also been shown to be positively related to social dominance orientation (Pratto et al., 1994; Oldmeadow & Fiske, 2007). It has been argued that this relationship reflects beliefs about social equality. Furthermore, covert beliefs about an unawareness of institutional discrimination and blatant racial issues as part of color-blind racial attitudes have a significant, positive relationship with social dominance orientation (Worthington et al., 2008).

These are the first studies that have attempted to examine the relationships between these variables. Therefore, it is important to continue conduct research that provides further evidence for or against these associations. This is important for several reasons. First, studies have recently shifted to exploring the concept of just world beliefs according to personal and global distinctions. Pratto et al.’s (1994) study that argued for the JWB-SDO connection used a global measure of total JWB. as such, it is not known
how this relationship may unfold once SDO is compared to personal and general just world beliefs separately. Similarly, Neville et al. (2000) made conclusions about the relationship between global JWB and color-blind racial attitudes without discussing how the various factors of color-blind racial attitudes (Institutional Discrimination, Blatant Racial Issues, and Racial Privilege) may relate to global and just world beliefs. Second, personal just world beliefs was not included in either of these studies. Thus, it is unknown what the relationship between this aspect of just world beliefs may be with CoBRAS and SDO. Overall, as we come to understand how variables are related, it is imperative that researchers explore variables using each of their factors.

Furthermore, it is important to continue to focus on these variables because many of the conclusions have been drawn about their relationships without reporting any differences for participant gender or researchers used a multi-ethnic/racial sample. As previously stated, it has been argued that social dominance orientation and just world beliefs may differ for males and females given the fact that females experience gender discrimination. However, research has tended to report data after collapsing gender, party because there was an overwhelming number of female participants. Similarly, this author has argued that the variables of study are particularly relevant for White individuals, as well as may have different relevancy for Whites versus people of color. However, very few studies have actually reported data for an only White, American sample. Therefore, it is difficult to make clear arguments as to how these constructs may be relevant for White, American males and females when prior research has not made this clear.

Third, conclusions drawn by research from Worthington et al. (2008) about the
relationship between SDO-CoBRAS may indicate that aspects of these two variables could factor together as a racism factor. Specifically, these researchers stated that the moderate correlation between social dominance orientation with the blatant racial issues and institutional discrimination subscales of the CoBRAS indicated that SDO tends to reflect classic conceptions of overt racism. Given that researchers (i.e. Neville et al., 2000, 2001) maintain that color-blind racial attitudes are actually a reflection of “modern racism” rather than overt racism, it would be relevant to empirically test the factor structure of these variables.

Furthermore, as general practice in research, it is important to replicate findings so that one can make stronger arguments for the relationships between variables and have the most parsimonious understandings of constructs. To date, there is a limited amount of research that has examined how personal and global just world beliefs relate to other another, as well as to color-blind racial attitudes and social dominance orientation. Thus, further examination of these relationships is warranted.

Finally, as an overarching goal of this research, it is meaningful to further explore the relationships and factor structure of these three variables because of the potential contribution to the field of psychology from a multicultural perspective. Just world beliefs have been studied since the 1970’s, and researchers have been interested in social dominance orientation for several decades. Since that time, counseling psychology has shifted its focus onto understanding and applying multicultural aspects of both old and new constructs. As society changes, our understanding of social forces should also change. With the recent focus on the bidimensional model of just world beliefs, studies
are focusing on how general just world beliefs and the “blame the victim mentality” may be related to discriminatory attitudes. In addition, we are coming to view forces of oppression as acting in more subtle ways than in the past. For example, researchers describe a “modern racism” as defined by McConahay (1986), where society has shifted from overt acts to more symbolic forms. Research has also shown that a blame the victim mentality by Whites related to racial issues has increased over time. For example, Schuman & Krysan (1999) used Gallup survey data to examine White attitudes about who is to blame for racial disadvantage and social conditions in the United States. They discovered that the percentage of Whites who blamed themselves for social conditions of Blacks decreased from 50% in 1963 to only 20% in 1995. In addition, Schuman & Krysan (1999) stated that a 1998 General Social Survey reported that almost half of White participants polled agreed with the statement that “Blacks just don’t have the motivation or will power to pull themselves out of poverty” (p.847). Clearly, beliefs about the way that the world operates and who maintains responsibility are racially laden and serves to maintain the status quo.

Therefore, we are beginning to examine old constructs in more socially relevant ways (personal and global just world beliefs, and social dominance orientation), and developing an understanding of how new constructs relate to society’s current problems with oppression (color-blind racial attitudes). As researchers continue to gather data about how these variables impact society, it is important to understand how they relate to one another and if we can further categorize them into more parsimonious constructs. As outlined in the above sections, this research is new and sparse and requires further
attention. By doing so, we can work to be more multiculturally competent as psychologists. Neville et al. (2001) stated that to combat and eliminate oppression, the “unacknowledged culturally laden symbols and protocols that reflect and maintain the racial hierarchy need to be clearly identified and expunged” (p.269).

One way that further understanding just world beliefs, color-blind racial attitudes, and social dominance orientation can accomplish this aim is by using knowledge gained from research to help psychologists to create interventions aimed at social change. For example, in their validation study, Neville et al. (2000) examined whether color-blind racial attitudes were sensitive to a multicultural training intervention. They measured pre- and post-test CoBRAS scores for 45 college students of various ethnic/racial backgrounds enrolled in a year-long diversity training course. Results suggested a statistically significant decrease in CoBRAS total scores. Research since this study has found associations between color-blind racial attitudes and multicultural counseling competencies (Neville et al., 2006), and various aspects of the counseling context (see Burkard & Knox, 2004; Gushue, 2004). Taken together, these findings implicate that there is a necessity to create interventions that increase awareness of issues related to oppression, both for creating multiculturally competent trainees as well as impacting the general social climate. However, research in this area is sparse and has only focused on the multicultural competence of psychology trainees using color-blind racial attitudes. This research can help psychologists to integrate knowledge gained from the study to create interventions using all three variables with both trainees and non-trainees.
Lastly, it is important to note that research and interventions should be focused on agents of oppression in addition to those targeted. As Neville et al. (2001) argued, multicultural discourse in psychology has focused on the “disadvantaged”, or those who have been the target of oppression. However, they further stated that, as agents of change, it is important to understand concepts as they apply to the “advantaged”, or those who benefit from the system of oppression. Therefore, this study aimed to focus on White individuals, who are the group most salient as agents of oppression given their status of privilege and power.
CHAPTER THREE
RESEARCH METHODS

This chapter contains details about the methodology that was employed to conduct this research. Descriptions of the procedure, participants, instruments, and research questions are included in this chapter.

Overview

The present investigation used an archival data set collected at two Midwestern universities between fall 2006 and spring 2007 as part of the Just World Beliefs research study. This research was aimed at gaining a more complex understanding of people’s justice beliefs and its relationship with subjective well-being by exploring constructs that may be related to JWB, such as color blind attitudes, experiences of discrimination, and social dominance orientation. In addition, the larger study aimed to explore potential moderators of the relationship between JWB and subjective well-being, such as ethnic identity development, stigmatization, collective self-esteem, racial bias preparation, and White racial identity development. The larger study consisted of 490 participants from various racial/ethnic backgrounds; the present study used only the White participants from this larger sample to understand the relationships between just world beliefs, color-blind racial attitudes and social dominance orientation.
Participants

A total of 490 individuals participated in the larger just world beliefs study. This sample included participants who self identified as: Caucasian/European-American (n=366), Black/African-American (n=11), Hispanic (n=36), Asian-American (n=52), bi-racial (n=5), and “other” (n=17). The current study only used the data from the 363 participants who self-identified as White. Three people were dropped from the study due to incomplete survey responses. This sample included 276 females and 86 males. One individual did not indicate a gender. Participants’ ages ranged from 18 to 52. The mean age of participants was 19.23 (SD = 2.61). Most students were either age 18 (45.2%), 19 (31.1%) or 20 (11.6%). Students above age 20 comprised of 12.1% of the sample. With regard to year in school, 55% of participants identified as freshman, 29% sophomores, 11.8% juniors, 3.4% seniors, and 0.8% graduate students.

Procedure

Participants were recruited for this study from general psychology courses at two universities. Participants from a Midwestern urban university (University A, n=387) completed the surveys as partial fulfillment of their general psychology course requirement. Psychology professors ask students to participate in several experiments by the end of the semester. Students volunteered to participate in the Just World Beliefs study through the psychology department’s web-based experiment scheduling and tracking system, Experimetrix. Students would log onto this system, choose which experiment(s) to participate in, and register for a date/time using their student identification number. For fall semester 2006, participants then met a research assistant in
a classroom on campus to complete survey packets. In an attempt to recruit additional participants, subjects were recruited from general psychology courses at a second Midwestern, urban institution (University B, n=104) and the surveys were also made available on an online format using Surveymonkey. Students who participated from University B were awarded extra credit that was applied to their final course grade. At this university, the general psychology professor announced the study during class, and provided the link to the online survey for students to write down and access on their own time. In order to access the web-based questionnaires, participants were provided a link that navigated them directly to the online survey packet. At University A, students were able to access the link to the online surveys directly from Experimetrix. Consent forms for both universities can be found in Appendix A.

**Instruments**

**General Belief in a Just World Scale** (Dalbert Montada & Schmitt, 1987). This instrument measures the extent to which individuals believe that the world, in general, is a fair and just place. Six items are rated on a 6-point scale that ranged from 1 “strongly disagree” to 6 “strongly agree”. Items are summed to obtain a scale score. Higher scores reflect higher levels of general beliefs in a just world. A copy of this instrument can be found in Appendix C.

**Personal Belief in a Just World Scale** (Dalbert, 1993). This instrument measures the extent to which individuals believe that the world is personally fair and just for them. Seven items are rated on a 6-point scale that ranged from 1 “strongly disagree” to 6 “strongly agree”. Items are summed to obtain a scale score. Higher scores reflect higher
levels of personal beliefs in a just world. A copy of this instrument can be found in Appendix B.

Evidence to support the reliability and validity for the Personal and General Just World Belief scales was gathered across 4 studies by Dalbert (1999). In each of these studies, a two-factor model supporting differences between general and personal just world beliefs emerged. Personal JWB was positively correlated with self-esteem, life satisfaction, and mood level. General JWB was not correlated with these constructs. Prior research has reported alpha coefficients of .65 (general) and .79 (personal) (Dalbert et al., 1987; Dalbert 1993). Furthermore, a number of studies provided validity evidence for the General JWB Scale (Bierhoff, Klein, & Kramp, 1991; Dalbert, Fisch & Montada, 1992; Dalbert & Yamauchi, 1994; Schmitt, Kilders, Moesle & Mueller, 1991). Cronbach alphas obtained in this study for Global Just World Beliefs scores were .82 for men and .85 for women. Cronbach alphas for Personal Just World Beliefs were .95 for both men and women.

**Color-Blind Racial Attitudes Scale (CoBRAS)** (Neville et al., 2000). The Color-Blind Racial Attitudes Scale (CoBRAS) was developed by Neville et al (2000) to measure contemporary racial attitudes, or a lack of awareness or denial of racism in the United States. The CoBRAS consists of 20 items, which are rated on a 5-point scale that ranges from 1 “not at all appropriate or clear” to 5 “very appropriate or clear”. The total scale is comprised of three subscales: (a) Racial Privilege, which refers to the denial of White Privilege (7 items); (b) Institutional Discrimination, which suggests that individuals are unaware of discriminatory institutional practices (7 items); and (c) Blatant Racial Issues,
which suggests the denial of the pervasiveness of discrimination and racism in our society (6 items). Scores are determined by summing item responses, and total scores range from 20 to 100. Higher total scores reflect higher levels of color-blind attitudes in participants. Higher scores on the BRI subscale indicate higher levels of denial of blatant racial discrimination. Higher scores on the ID subscale reflect greater unawareness of institutional discrimination, and higher scores on the RP subscale mean that an individual has higher levels of denial about racial privilege.

In their validation study, Neville et al. (2000) reported coefficient alphas of .86-.91 for the total score across three initial development studies for the CoBRAS, and a 2-week test-retest reliability coefficient of .68. The CoBRAS demonstrates moderate to strong correlations with two measures of racial discrimination (Modern Racism Scale, McConahay, 1986; Quick Discrimination Index, Ponterotto et al., 1995), providing evidence of concurrent validity. Both an initial exploratory factor analysis and a confirmatory factor analysis provided evidence of construct validity, and a low, significant correlation with the MCSDS (Crowne & Marlowe, 1960; Reynolds, 1982) provides evidence of discriminant validity. A copy of this 13-item instrument can be found in Appendix D.

The present study examined the construct of color-blind racial attitudes by using the three subscales rather than a total CoBRAS score. Neville et al. (2000) reported that alpha levels for the subscales ranged from .71 to .83 for Racial Privilege, between .70 and .76 for Blatant Racial Issues, and from .73 to .81 for Institutional Discrimination. Alphas for the Institutional Discrimination scores in this sample were .67 for both males and
females, alphas for the Racial Privilege subscale scores were .71 (males) and .73 (females). The alphas for the Blatant Racial Issues subscale scores were, however, quite low (.06 for males) and surprisingly negative (-.05) for women. To determine if there was a data entry error that may have contributed to this problem, this author examined the raw data for possible mistakes. However, no evident data entry errors were found, so it was determined that participants did not respond to items on this subscale in a reliable manner. Therefore, this subscale was omitted from all further analyses due to its poor level of reliability.

**Social Dominance Orientation (SDO-6)** (Pratto et al., 1994). The Social Dominance Orientation (SDO) scale was developed by Pratto et al. (1994) to assess the degree to which participants believe that there is a natural and justifiable social order, with certain groups on top and others on the bottom. The scale consists of 16 items, which are rated on a 7-point scale that ranges from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on the scale indicate higher levels of social dominance orientation. This scale has been found to have high degrees of reliability and construct validity, especially among Black, White, Latino, and Asian American samples (e.g., á = .89) (Sidanius, Singh, Hetts, & Federico, 2000). Pratto et al. (1994) reported alpha levels that ranged across samples from .80 to .89. Cronbach alphas obtained in this study for Social Dominance Orientation scores were .93 for men and .92 for women. A copy of the SDO-6 can be found in Appendix E.

**Demographic Questionnaire.** A personal data sheet was used to investigate participant’s personal characteristics and family background. Participants were asked to indicate their
age, gender, race/ethnicity, current year in school, and parents’ level of education, occupation and income. A copy of the demographic questions can be found in Appendix F.

Research Objectives

The purpose of the present study was to examine the relationships between general and personal just world beliefs, color-blind racial attitudes, and social dominance orientation. A correlation matrix was calculated to explore this question. Second, this research aimed to determine if the variables under study could be factored into a smaller number of variables, as well as confirm the literature’s findings that personal and general just world beliefs are two separate factors. An exploratory factor analysis of the correlation matrix was used to answer these questions.
CHAPTER FOUR

RESULTS

The data were analyzed using SPSS 11.0. Descriptive statistics were calculated for the sample data. The first three questions in this study were explored via bivariate correlations. Finally, an exploratory factor analysis was conducted to address the fourth research question. The correlation matrix created to address the first three questions was used to conduct the exploratory factor analysis. Results addressing each of the research questions will be presented after first providing basic descriptive statistics on the scores of the scales used in this study.

Descriptive Statistics

Means and standard deviations were calculated for each scale total score and subscale scores separately for men and women. The results indicated that participants reported moderate levels of color-blind racial attitudes, personal just world beliefs, and global just world beliefs, and low levels of social dominance orientation (See Table 1). In order to determine if sex differences were present, a 1-way ANOVA was conducted on the means of the scales scores. Results indicated that there was a significant effect of gender on CoBRAS scores, $F(1, 360) = 5.875, p < .05$, as well as on scores for personal just world beliefs, $F(1, 360) = 3.456, p < .05$. There were no gender differences reported for social dominance orientation and global just world beliefs mean scores. Given that
gender differences were present, further analyses were conducted separately for males and females.

<table>
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<td>0.68</td>
<td>34</td>
<td>95</td>
</tr>
<tr>
<td>Institutional Discrimination</td>
<td>23.77</td>
<td>6.13</td>
<td>0.69</td>
<td>8</td>
<td>41</td>
</tr>
<tr>
<td>Racial Privilege</td>
<td>27.05</td>
<td>6.01</td>
<td>0.73</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>Blatant Racial Issues</td>
<td>17.37</td>
<td>2.79</td>
<td>-0.05</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Global Just World Beliefs</td>
<td>20.23</td>
<td>6.20</td>
<td>0.85</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Personal Just World Beliefs</td>
<td>21.75</td>
<td>8.84</td>
<td>0.95</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td>37.52</td>
<td>16.05</td>
<td>0.92</td>
<td>16</td>
<td>66</td>
</tr>
<tr>
<td>Color-blind Racial Attitudes total</td>
<td>72.08</td>
<td>10.68</td>
<td>0.69</td>
<td>48</td>
<td>103</td>
</tr>
<tr>
<td>Institutional Discrimination</td>
<td>26.62</td>
<td>6.14</td>
<td>0.67</td>
<td>15</td>
<td>41</td>
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<tr>
<td>Racial Privilege</td>
<td>27.58</td>
<td>5.97</td>
<td>0.71</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>Blatant Racial Issues</td>
<td>17.88</td>
<td>3.16</td>
<td>0.06</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Global Just World Beliefs</td>
<td>20.07</td>
<td>5.57</td>
<td>0.82</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>Personal Just World Beliefs</td>
<td>24.37</td>
<td>8.51</td>
<td>0.95</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Total Sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td>34.80</td>
<td>15.45</td>
<td>0.93</td>
<td>16</td>
<td>106</td>
</tr>
<tr>
<td>Color-blind Racial Attitudes total</td>
<td>69.10</td>
<td>10.43</td>
<td>0.69</td>
<td>34</td>
<td>103</td>
</tr>
<tr>
<td>Institutional Discrimination</td>
<td>24.45</td>
<td>6.24</td>
<td>0.67</td>
<td>8</td>
<td>41</td>
</tr>
<tr>
<td>Racial Privilege</td>
<td>27.17</td>
<td>5.99</td>
<td>0.73</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>Blatant Racial Issues</td>
<td>17.49</td>
<td>2.89</td>
<td>-0.36</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Global Just World Beliefs</td>
<td>20.18</td>
<td>6.05</td>
<td>0.85</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>Personal Just World Beliefs</td>
<td>22.35</td>
<td>8.82</td>
<td>0.95</td>
<td>7</td>
<td>42</td>
</tr>
</tbody>
</table>
Research Question 1: What is the relationship between color-blind racial attitudes (as defined by its subscales) and social dominance orientation?

The intercorrelations among all variables in this study are presented in Tables 2 and 3. Correlations indicated a significant, positive relationship between Social Dominance Orientation and Institutional Discrimination scores (r = .20 for males, r = .27 for females). There was no significant relationship found between SDO scores and Racial Privilege scores. These results are consistent with results from Worthington et al. (2008), who discovered relationships between SDO and ID and BRI, but no relationship between SDO and RP. Therefore, it appears that a general support for the domination of certain groups over other groups (SDO) is related to having limited awareness of institutional racism, but not an awareness/unawareness of racial privilege.

Research Question 2: What is the relation between the racial privilege and institutional discrimination subscales on the Color-blind Racial Attitudes Scale and personal and global just world beliefs?

Contrary to prior research (Neville et al., 2000) correlations indicated no significant relationships between the ID and RP CoBRAS subscales and global just world beliefs. There was also no significant relationship found between RP scores and personal just world beliefs. However, a significant, negative relationship was found between ID scores and personal just world beliefs (r = -.18 for males, r = -.12 for females).
Research Question 3: What is the relationship between social dominance orientation and personal and global just world beliefs?

The present research study found no significant relationships between social dominance orientation scores and either global or personal just world belief scores. Given the association of personal just world beliefs and well-being, this finding is consistent with what would be expected. However, Pratto et al. (1994) and Oldmeadow & Fiske (2007) both argued for a significant relationship between global JWB and SDO based on empirical and theoretical understandings of the constructs.

TABLE 2: CORRELATION MATRIX FOR MALES

<table>
<thead>
<tr>
<th></th>
<th>SDO Total</th>
<th>Institutional Discrimination</th>
<th>Racial Privilege</th>
<th>Global JWB</th>
<th>Personal JWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO Total</td>
<td>1.00</td>
<td>0.20*</td>
<td>0.16</td>
<td>-0.05</td>
<td>-0.13</td>
</tr>
<tr>
<td>Institutional Discrimination</td>
<td>0.20*</td>
<td>1.00</td>
<td>0.32**</td>
<td>-0.14</td>
<td>-0.18*</td>
</tr>
<tr>
<td>Racial Privilege</td>
<td>0.16</td>
<td>0.32**</td>
<td>1.00</td>
<td>-0.04</td>
<td>-0.08</td>
</tr>
<tr>
<td>Global JWB</td>
<td>-0.05</td>
<td>-0.14</td>
<td>-0.04</td>
<td>1.00</td>
<td>0.41**</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>-0.13</td>
<td>-0.18*</td>
<td>-0.08</td>
<td>0.41**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
### TABLE 3: CORRELATION MATRIX FOR FEMALES

<table>
<thead>
<tr>
<th></th>
<th>SDO Total</th>
<th>Institutional Discrimination</th>
<th>Racial Privilege</th>
<th>Global JWB</th>
<th>Personal JWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO Total</td>
<td>1.00</td>
<td>0.27*</td>
<td>0.05</td>
<td>0.02</td>
<td>-0.05</td>
</tr>
<tr>
<td>Institutional Discrimination</td>
<td>0.27*</td>
<td>1.00</td>
<td>0.23**</td>
<td>-0.07</td>
<td>-0.12*</td>
</tr>
<tr>
<td>Racial Privilege</td>
<td>0.05</td>
<td>0.23**</td>
<td>1.00</td>
<td>-0.07</td>
<td>-0.08</td>
</tr>
<tr>
<td>Global JWB</td>
<td>0.02</td>
<td>-0.07</td>
<td>-0.07</td>
<td>1.00</td>
<td>0.34**</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>-0.05</td>
<td>-0.12*</td>
<td>-0.08</td>
<td>0.34**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* *p < .05
** *p < .01

*Research Question 4: Can just world beliefs (personal and global), color-blind racial attitudes, and social dominance orientation be reduced into a smaller number of constructs?*

To determine whether personal and global just world beliefs, color-blind racial attitudes, and social dominance orientation could be reduced into a smaller number of constructs, Exploratory Factor Analyses using PAF extraction were performed separately on the male and female participant scores. The PAF extraction method was chosen over PCA because it is seen a true factor analysis due to its ability to analyze common variance (Kahn, 2006). The Kaiser-Meyer-Olkin measure of sampling adequacy was examined in order to determine whether or not the data were suitable for principal axis factor analysis. This test revealed values above .50, supporting the use of EFA. Bartlett’s test of sphericity was also examined. A significant (*p < .001*) result was found, indicating there was an adequate correlation between the variables to justify factor analysis.
For both the male and female samples, two factors met the Kaiser retention criteria (1958) of eigenvalues greater than 1.00, and the third factor was approaching an eigenvalue of 1.00. However, because it has been stated that using this criterion is among the least accurate methods for selecting the number of factors to retain (Costello & Osborne, 2005), the scree test was also used to determine the number of factors to retain. This method involves examining the graph of the eigenvalues, determining where there is a natural place in the data where the points flatten out, and drawing a scree line there. Cattell (1966) suggested that researchers retain the factors that fall above this line. An examination of the scree plots for the samples suggested as many as five factors were interpretable. Based on this information, the data were then reanalyzed specifying a four-, three-, two-, and one-factor solution with a promax oblique rotation. An oblique rotation was chosen because it allows the factors to correlate. Given that this study is analyzing subscale scores for color-blind racial attitudes, as well as two measures of just world beliefs, it is highly likely that at least some of the factors will be correlated. In addition, as stated earlier, the literature has found several of the constructs to be correlated with one another (i.e. Pratto et al., 2004; Worthington et al., 2008).

Promax was chosen as the method of oblique rotation for the analyses. Kahn (2006) suggested that this method is a better choice than alternative rotations because it starts with an orthogonal rotation and then uses an oblique rotation if the factors are correlated. That way, the rotation will reflect whether or not the factors are indeed correlated. Hair, Anderson, Tatham and Black (1998) noted factor loadings greater then .30 are considered to be adequate; loadings of .40 are considered important; and loadings are .50 or greater
are considered practically significant. This criterion was applied to the data when determining how variables loaded onto factors.

Examination of the data suggested that a three-factor solution yielded the most interpretable solution for the samples (See Tables 6-9 for structure and pattern matrices of factor loadings for the 3-Factor solution). Communalities were examined for the 5 variables and the range noted. Extractions of communalities of .70 and above indicate a high probability of replication of the results (Kahn, 2006). Communalities after extraction for females ranged from .21 to .42, and from .20 to .43 for males (See Tables 4 and 5). This suggests that some variables (SDO and Racial Privilege in particular) may have unexplained or unique variability that is not common to the proposed factor structure. This factor structure accounted for 73.6% of the variance for females, and 75% of the variance for males. Variance percentages for all 3 factors are reported in Tables 10 and 11. This solution was preferred over other factor structures because it was the most conceptually sound, and it produced the most robust factor structure.

<table>
<thead>
<tr>
<th>TABLE 4: COMMUNALITIES FOR MALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>SDO</td>
</tr>
<tr>
<td>ID subscale</td>
</tr>
<tr>
<td>RP subscale</td>
</tr>
<tr>
<td>Global JWB</td>
</tr>
<tr>
<td>Personal JWB</td>
</tr>
</tbody>
</table>
TABLE 5: COMMUNALITIES FOR FEMALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Initial</th>
<th>Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
<td>0.08</td>
<td>0.28</td>
</tr>
<tr>
<td>ID subscale</td>
<td>0.13</td>
<td>0.42</td>
</tr>
<tr>
<td>RP subscale</td>
<td>0.06</td>
<td>0.21</td>
</tr>
<tr>
<td>Global JWB</td>
<td>0.12</td>
<td>0.35</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>0.13</td>
<td>0.35</td>
</tr>
</tbody>
</table>

TABLE 6: PATTERN MATRIX FACTOR LOADINGS FOR FEMALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
<td>0.01</td>
<td>0.60</td>
<td>-0.14</td>
</tr>
<tr>
<td>ID subscale</td>
<td>-0.01</td>
<td>0.36</td>
<td>0.36</td>
</tr>
<tr>
<td>RP subscale</td>
<td>0.01</td>
<td>-0.13</td>
<td>0.53</td>
</tr>
<tr>
<td>Global JWB</td>
<td>0.59</td>
<td>0.09</td>
<td>-0.03</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>0.59</td>
<td>-0.08</td>
<td>0.04</td>
</tr>
</tbody>
</table>

TABLE 7: STRUCTURE MATRIX FACTOR LOADINGS FOR FEMALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
<td>-0.03</td>
<td>0.52</td>
<td>0.23</td>
</tr>
<tr>
<td>ID subscale</td>
<td>-0.17</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td>RP subscale</td>
<td>-0.13</td>
<td>0.20</td>
<td>0.45</td>
</tr>
<tr>
<td>Global JWB</td>
<td>0.59</td>
<td>-0.01</td>
<td>-0.16</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>0.59</td>
<td>-0.14</td>
<td>-0.19</td>
</tr>
</tbody>
</table>

TABLE 8: PATTERN MATRIX FACTOR LOADINGS FOR MALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
<td>0.02</td>
<td>0.04</td>
<td>0.42</td>
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<tr>
<td>ID subscale</td>
<td>-0.07</td>
<td>0.55</td>
<td>0.04</td>
</tr>
<tr>
<td>RP subscale</td>
<td>0.06</td>
<td>0.57</td>
<td>-0.01</td>
</tr>
<tr>
<td>Global JWB</td>
<td>0.67</td>
<td>-0.02</td>
<td>0.11</td>
</tr>
<tr>
<td>Personal JWB</td>
<td>0.62</td>
<td>0.04</td>
<td>-0.12</td>
</tr>
</tbody>
</table>
### TABLE 9: STRUCTURE MATRIX FACTOR LOADINGS FOR MALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
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<td>0.31</td>
<td><strong>0.48</strong></td>
</tr>
<tr>
<td>ID subscale</td>
<td>-0.25</td>
<td><strong>0.60</strong></td>
<td>0.43</td>
</tr>
<tr>
<td>RP subscale</td>
<td>-0.10</td>
<td><strong>0.54</strong></td>
<td>0.33</td>
</tr>
<tr>
<td>Global JWB</td>
<td><strong>0.64</strong></td>
<td>-0.18</td>
<td>-0.15</td>
</tr>
<tr>
<td>Personal JWB</td>
<td><strong>0.65</strong></td>
<td>-0.22</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

### TABLE 10: VARIANCE ACCOUNTED FOR BY FACTORS IN FEMALE SAMPLE

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.525</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>2</td>
<td>1.216</td>
<td>24.3</td>
<td>54.8</td>
</tr>
<tr>
<td>3</td>
<td>0.939</td>
<td>18.8</td>
<td>73.6</td>
</tr>
<tr>
<td>4</td>
<td>0.669</td>
<td>13.4</td>
<td>87.0</td>
</tr>
<tr>
<td>5</td>
<td>0.650</td>
<td>13.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### TABLE 11: VARIANCE ACCOUNTED FOR BY FACTORS IN MALE SAMPLE

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.697</td>
<td>33.9</td>
<td>33.9</td>
</tr>
<tr>
<td>2</td>
<td>1.189</td>
<td>23.8</td>
<td>57.7</td>
</tr>
<tr>
<td>3</td>
<td>0.864</td>
<td>17.3</td>
<td>75.0</td>
</tr>
<tr>
<td>4</td>
<td>0.664</td>
<td>13.3</td>
<td>88.3</td>
</tr>
<tr>
<td>5</td>
<td>0.586</td>
<td>11.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A one-factor solution could not be computed because the communality of a variable exceeded its variance, and thus factor extraction was terminated for both male and female data. In the four-factor solutions, no clear factor structure emerged as several of the constructs crossloaded onto more than one factor, and several factors were highly correlated with one another. Examination of the 3-factor solution indicated that perhaps a two-factor solution might be more parsimonious and interpretable, suggesting a Just
World Beliefs factor and a Discrimination factor. This was indicated due to the fact that Institutional Discrimination crossloaded with Social Dominance Orientation in the female sample, and Institutional Discrimination and Racial Privilege crossloaded with Social Dominance Orientation in the male sample. Furthermore, the intercorrelations between factors 2 and 3 are substantial in both male and female samples (.65 and .62, respectively). However, the two-factor solution was not as parsimonious as the three-factor solution for several reasons. First, Racial Privilege loaded under .30 for both factors in the female sample, and Social Dominance Orientation barely reached a pattern matrix loading of .30 in the female sample (with a value of .29 in the structure matrix). For the male sample, Social Dominance Orientation again had factor loadings that barely reached .30 in the pattern and structure matrices. Although there is no particular cutoff for factor loadings when conducting an EFA, the literature suggests retaining variables with structure coefficients of at least .30 (Kahn, 2006). In addition, these construct scores were not as highly correlated with the factors as were indicated in the three-factor solution. Therefore, it was determined that the three-factor solution revealed to have the best fit for the data. Structure and pattern matrices for two- and four-factor solutions can be found in Appendix G.

For both the male and female samples, first factor that emerged consisted of the Global and Personal Just World Beliefs scores. As such, this factor was named Just World Beliefs. This factor accounted for 30.5% of the variance for females, and 34% of the variance for males. The second factor in the female sample, which consisted of Social Dominance Orientation scores, was labeled as Social Dominance. This factor accounted
for 24% of the variance. The third factor for females consisted of Institutional Discrimination and Racial Privilege subscales. This factor was named Color-blind Racial Attitudes, and accounted for 19% of the variance. In the male sample, the second factor consisted of Institutional Discrimination and Racial Privilege subscales. It was named Color-blind Racial Attitudes, and accounted for 24% of total variance. Finally, the third factor was named Social Dominance Orientation because it consisted of the SDO scores. This factor accounted for 17% of the variance for this sample. Overall, the pattern indicated that, for both males and females, Just World Beliefs factor, Color-blind Racial Attitude, and Social Dominance Orientation factors were found. Therefore, just world beliefs, color-blind racial attitudes, and social dominance orientation are indeed three separate constructs.

Tables 12 and 13 provide the interfactor correlations. Factors correlated as just world beliefs/social dominance orientation $r = -0.144$ (females) and $r = -0.364$ (males), just world beliefs/color-blind racial attitudes $r = -0.305$ (females) and $-0.295$ (males), and color-blind racial attitudes/social dominance orientation $r = 0.618$ (females) and $r = 0.655$ (males). The interfactor correlations in the three-factor solution were below .80, indicating that the factors were correlated, but can still be considered as separate factors.

TABLE 12: FACTOR CORRELATION MATRIX FOR MALES

<table>
<thead>
<tr>
<th>Factor</th>
<th>JWB</th>
<th>CoBRAS</th>
<th>SDO</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWB</td>
<td>1.000</td>
<td>-0.295</td>
<td>-0.364</td>
</tr>
<tr>
<td>CoBRAS</td>
<td>-0.295</td>
<td>1.000</td>
<td>0.655</td>
</tr>
<tr>
<td>SDO</td>
<td>-0.364</td>
<td>0.655</td>
<td>1.000</td>
</tr>
</tbody>
</table>
### TABLE 13: FACTOR CORRELATION MATRIX FOR FEMALES

<table>
<thead>
<tr>
<th>Factor</th>
<th>JWB</th>
<th>CoBRAS</th>
<th>SDO</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWB</td>
<td>1.000</td>
<td>-0.144</td>
<td>-0.305</td>
</tr>
<tr>
<td>CoBRAS</td>
<td>-0.144</td>
<td>1.000</td>
<td>0.618</td>
</tr>
<tr>
<td>SDO</td>
<td>-0.305</td>
<td>0.618</td>
<td>1.000</td>
</tr>
</tbody>
</table>
CHAPTER FIVE
DISCUSSION

The purpose of the present study was to investigate the relationships between just world beliefs (personal and global), color-blind racial attitudes, and social dominance orientation, as well as to determine if just world beliefs could be further defined by these other two constructs. By examining these relationships, this research would provide further insight into variables that are related to attitudes and beliefs that promote negative outcomes such as prejudiced attitudes and discriminatory behaviors for White individuals. The results of this study will be discussed. The limitations of the research will be presented. Applications to the field of counseling psychology and suggestions for future research will be offered.

Research Question 1: What is the relationship between color-blind racial attitudes (as defined by its subscales) and social dominance orientation?

This research established a moderate connection between color-blind racial attitudes and social dominance orientation. Correlations indicated a significant, positive relationship between social dominance orientation scores and scores on the Institutional Discrimination subscale. There was no significant relationship found between social dominance orientation scores and Racial Privilege subscale scores. The relationship between blatant racial issues and social dominance orientation was not explored due to having to drop the BRI subscale from this study. Further support for the social dominance
orientation-color-blind racial attitudes connection was evidenced by the fact that for females, Institutional Discrimination crossloaded with social dominance orientation in the factor loadings, and these two constructs were also highly correlated as factors. This means that, for the female sample, institutional discrimination scores loaded as a color-blind racial attitudes factor as well as with the social dominance orientation scores, suggesting they may be combined onto the same factor. This factor correlation, which explains patterns of relationships among factors, also indicates that the social dominance orientation and color-blind racial attitudes factors were correlated with one another. These patterns of loadings among color-blind racial attitudes, social dominance orientation, and institutional discrimination suggests that men may be somehow more able to separate their color-blind racial attitudes from their attitudes about institutional discrimination and social dominance orientation than women, and that women see the three as more linked than do men. This is an interesting pattern of findings that deserve further attention in the future.

These results support what was concluded by Worthington et al. (2008). They examined the relationship between color-blind racial attitudes and social dominance orientation, finding moderate, positive relationships between the Institutional Discrimination and Blatant Racial Issues subscales of the CoBRAS and SDO, and no significant relationship between the Racial Privilege subscale and social dominance orientation. The current study found the same pattern for Institutional Discrimination and Racial Privilege subscale scores.
The present study suggested that individuals who lack awareness about the existence of institutional racism also subscribed to beliefs about certain groups being naturally more dominant over other groups. However, an unawareness of racial privilege was not associated with attitudes about social dominance. Worthington et al. (2008) explained their findings by arguing that social dominance orientation reflects “classic conceptions of overt racism” (p. 17) because Blatant Racial Issues and Institutional Discrimination color-blind attitudes represent an unawareness of more overt racial aspects, whereas an unawareness of racial privilege represents a more subtle form of racism.

Neville et al. (2006) stated that color-blind racial attitudes is a framework used either consciously or unconsciously to justify the racial structure and explain racial inequalities. Using this conceptualization of color-blind attitudes, one can understand then how this set of attitudes would be related to attitudes about social dominance, especially because White individuals are the people in a position of social power. Color-blind racial attitudes and social dominance orientation are both discriminatory attitudes that serve to maintain the status quo. Yet, these constructs seem to differ in an important way. Social dominance orientation has been described as a unifying construct in explaining oppressive attitudes and behaviors (Sidanius & Pratto, 1999), and has been linked to more overt types of discriminatory attitudes, such as sexism, anti-Black racism, and cultural elitism (Pratto et al., 1994). On the other hand, color-blind racial attitudes are viewed as a form of subtle, “modern racism” that is distinct from overt racial prejudice.
due to society’s changing notion of acceptable expressions of racial attitudes (Neville et al., 2001).

Using the results from the current study and those by Worthington and colleagues (2008), as well as keeping these similarities and differences in mind, it seems that social dominance orientation is related to particular aspects of color-blind racial attitudes rather than to the construct as a whole. This is only the second study that has examined the relationship between these two constructs, and future research should continue to explore how they are related.

Research Question 2: What is the relationship between the Racial Privilege, Institutional Discrimination and Blatant Racial Attitudes subscales on the Color-Blind Racial Attitudes Scale and personal and global just world beliefs?

Correlation scores for the present study indicated no significant relationships between the Institutional Discrimination and Racial Privilege CoBRAS subscales and global just world beliefs. In addition, no significant relationships were found between Institutional Discrimination and personal just world beliefs. A small yet significant, negative relationship was found between Racial Privilege and personal just world belief scores, indicating that the higher participants endorsed personal just world beliefs, the lower they endorsed items related to unawareness of racial privilege.

Intuitively it is reasonable to expect that people who have a limited awareness of institutional forms of racial discrimination and White privilege would also endorse beliefs that the world is generally fair and just. As Neville and colleagues (2000) explained, these concepts constitute a level of unawareness about social inequalities and
their impact. Theoretically, general just world beliefs and color-blind racial attitudes both include an ignorance or denial to social forces such as racism or unjust incidents, and, consequently, may embrace a "blame the victim" perspective in which people are blamed for their misfortunes. Therefore, an individual who lacks awareness of institutional forms of discrimination and their consequences, as well as how their racial privilege impacts their social position, may also believe that the world is generally a fair and just place where people are afforded what they deserve. However, the results of this study indicate that just world beliefs and color-blind racial attitudes are mostly independent, unrelated variables.

Perhaps the lack of a significant relationship between color-blind racial attitudes and general just world beliefs can be explained by examining the way that just world beliefs function. As stated in previous chapters, just world beliefs relate to adaptive (personal JWB) and derogative (general JWB) attitudes. Montada and Lerner (1998) reported that individuals turn to derogatory behavior, such as believing that one “got what they deserved” after they experience instances of injustice and find that efforts to restore their belief such as attempting to restore justice or physically/mentally avoid the injustice were not successful. Therefore, although general just world beliefs can be associated with discriminatory attitudes, victim derogation may only occur after the first two measures to protect their belief have failed in the face of injustice. In addition, because injustice does frequently occur in the world, it is likely that individuals will eventually directly or indirectly experience some form of injustice. Therefore, individuals may endorse just world beliefs despite an awareness that racism and privilege exists. On the other hand,
individuals who are color-blind do not even have an awareness that race is meaningful or that discrimination exists (Neville et al., 2000).

Research Question 3: What is the relationship between social dominance orientation and personal and global just world beliefs?

The present study found no significant relationship between social dominance orientation scores and either global or personal just world belief scores. This finding is partially inconsistent with what was expected. Similar to color-blind racial attitudes, it was expected that social dominance orientation would be related to general but not personal just world beliefs.

Just world beliefs have been conceptually and empirically related to social dominance orientation (Oldmeadow & Fiske, 2007; Pratto et al., 1994). However, Pratto et al. (1994) used a unidimensional measure of just world beliefs rather than examining both global and person just world beliefs separately, and cited low levels of reliability for their measure. Therefore, they were unable to conclude that the variables were reliably correlated across samples. Oldmeadow and Fiske (2007) made a conceptual argument for the relationship between just world beliefs and social dominance orientation based on their finding that those who believed that the world is fair and just and those who endorsed group-based inequalities were both more likely to view a high-status target as more competent than a low-status target. However, they too used a unidimensional measure of just world beliefs, and found only a moderate level of internal reliability for the scale ($r = .59$). In addition, their sample consisted of various nationalities rather than
an all White sample like the present study. Therefore, they cautioned the reader about making conclusions based on their results.

Given the problems with prior research as well as the present finding that global just world beliefs were not significantly correlated with social dominance orientation, it may be that these two constructs are not as strongly associated as previously thought. Although they both measure individual differences in ideological beliefs related to group inequality, these constructs obviously differ. Social dominance orientation (SDO) is considered to be a “general attitudinal orientation toward inter-group relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical” (Pratto, Sidanius, Stallworth, & Malle, 1994, p. 742). Social dominance orientation thus reflects the individual’s tendency to order social groups along a superior-inferior dimension. Therefore, social position and power is allocated according to beliefs about superiority and who “should” be on top based on a person’s preference for relations that are hierarchical (Pratto et al., 1994). On the other hand, just world beliefs are seen as an example of a hierarchy-enhancing ideology based on meritocracy (Pratto et al., 1994). Essentially, any individual or group may be able to be a member of a high-status group or receive “good” things if they act in ways that are “good”. This conceptualization of just world beliefs does not include a belief that social position should be hierarchical. Hence, people who ascribe to general just world beliefs would believe that opportunity is available to all regardless of social position. Therefore, people who ascribe to an ideology based on meritocracy (general just world beliefs) may not necessarily also endorse attitudes about a social hierarchy (social dominance orientation).
Research Question 4: Can just world beliefs (personal and global), color-blind racial attitudes, and social dominance orientation be reduced into a smaller number of constructs?

The results of the exploratory factor analysis suggested that a three-factor solution using a promax oblique rotation yielded the most interpretable solution for both males and females. These factors corresponded to the main variables of study, just world beliefs, color-blind racial attitudes, and social dominance orientation. These results suggest that just world beliefs, color-blind racial attitudes, and social dominance orientation are indeed separate, but correlated, constructs, meaning that just world beliefs, color-blind racial attitudes, and social dominance orientation cannot be reduced into a smaller set of constructs. This three-factor solution showed that just world beliefs, color-blind racial attitudes, and social dominance orientation could not be factored down into one or two constructs. Therefore, these three variables are tapping into separate constructs. This finding is important because it shows that, although color-blind racial attitudes, just world beliefs, and social dominance orientation have all been shown to be associated with prejudice and discrimination, they are not measuring the same aspects of social discrimination.

Even though color-blind racial attitudes and social dominance orientation were identified as separate constructs, their factors were highly correlated. In addition, Institutional Discrimination crossloaded with social dominance orientation for females. Although separate factors, these results suggest that color-blind racial attitudes and social dominance orientation reflect similar attitudes, especially for women. Hierarchy-
legitimizing myths, which are ideologies that promote group inequality, indicate how individuals and society should allocate resources. Such ideologies can indicate that some social groups are “not as good” as others, and thus deserve to be ascribed less positive value (Pratto et al., 1994). Social dominance orientation is an ideology that promotes hierarchy-legitimizing myths, and individuals with a high level of social dominance orientation may become members of institutions that maintain or increase social inequality (Pratto et al., 1994). It is not surprising then that Institutional Discrimination, the color-blind facet that taps into an unawareness of the implications of institutional discrimination, crossloaded with social dominance orientation. Worthington et al. (2008), who found a correlation between social dominance orientation and the Institutional Discrimination and Blatant Racial Issues of color-blind racial attitudes, concluded that social dominance orientation reflects “classic” conceptions of overt racism. In addition, Pratto et al. (1994) found that social dominance orientation was correlated with anti-Black racism, anti-Arab racism, and “modern” racism, concluding that social dominance orientation is related to ethnic prejudice. It may be argued then that social dominance orientation is a hierarchy-legitimizing ideology that reflects racism. Similarly, color-blind racial attitudes relate to racist attitudes through a lack of awareness or unwillingness to address issues of prejudice and discrimination (Ryan, Hunt, Weible, Peterson & Casas, 2007). The difference between the two variables exists because, unlike social dominance orientation, the color-blind perspective does not necessarily make overt claims about White superiority and instead holds the view that race does not and should not matter
(Gushue & Constantine, 2007). Therefore, color-blind racial attitudes have a lack of race salience.

The results also showed that the first factor, named Just World Beliefs, consisted of both personal and general just world belief scores. Therefore, the present study did not factor personal and general just world beliefs into separate constructs. Previous research has argued for the importance of using a multidimensional view of just world beliefs (i.e. Dalbert, 1999; Lipkus et al., 1996; Furnham & Proctor, 1989; Hafer & Olson, 1993). However, most of the arguments for this distinction have been based on theory, and studies have just begun to empirically test this model. One study of the personal-global distinction examined just world beliefs using students in the United States (Lipkus et al, 1996). However, they concluded just world beliefs were best represented by the bi-dimensional model after using two unidimensional scales. Factor analyses were conducted separately to show that each scale was unidimensional (one factor) rather than examining if all items would parcel into separate factors. Additionally, three of the four studies examined the multidimensional nature of just world beliefs using a “self” versus “other” distinction (meaning that the world was seen as just for the self but not for others), whereas this study examined just world beliefs using a personal versus general distinction. Theoretically, the difference may simply be semantic, but various scales were used to assess these constructs. Based on the findings from the current study, it seems at first glance that White individuals did not differentiate between personal and general just world beliefs. However, it may be that just world beliefs represent a hierarchically
structured construct with two distinct just world beliefs (personal and global) factoring together into a single higher-order just world beliefs construct.

Specifically, results from this study found that personal and global just world beliefs did not factor into separate constructs as found by previous researchers (i.e. Dalbert, 1999; Lipkus et al., 1996; Sutton & Douglas, 2005). This is not an unexpected finding. The present research showed that when the just world beliefs scales were factored along with measures of other constructs, a just world beliefs factor emerged. However, when the just world beliefs scales’ items have been factored in previous research, two different types of just world beliefs emerge. Thus, there may be two different types of just world beliefs that make up a single factor when the scores on these subscales are factored along with scores from other measures. Therefore, the results from the present study confirm that there is a distinct just world beliefs factor, whereas the prior results suggest there are two types of just world beliefs. When factoring items from a single just world beliefs scale, two types of just world beliefs would likely emerge (personal and global). On the other hand, when the two subscale scores are factored along with scores on other scales, a distinct just world beliefs factor is suggested. Given these results, it is suggested that a higher-order factor analysis be conducted on the Just World Beliefs items in the future to explore this possible hierarchical structure.

Researchers have argued that belief in a just world in general versus personally should be differentiated because personal experiences of injustices would be threatening to just world beliefs, and thus denied (Dalbert & Yamauchi, 1994) to protect justice beliefs. However, when you are a member of the dominant group, the world operates in
ways that benefit your social status and position of power. Because many White people experience the world through this lens, beliefs about the ways that the world operates may be the same regardless whether it is for an individual personally or for the world in general. Specifically, White people are less likely to experience prejudice and discrimination, bringing less attention to the fact that the world is not fair and just. Therefore, they may not differentiate between life being fair and just for them versus for others because personal experiences of injustice are not present to threaten beliefs about the world. Thus, the present single just world beliefs factor (rather than a hierarchically structured factor) may accurately represent how dominant group members structure their just world beliefs. These two possibilities should be addressed in future research by comparing the just world belief structure of whites and people of color.

In summary, the present study generated several important findings. First, White individuals reported low to moderate levels of color-blind racial attitudes, personal just world beliefs, and global just world beliefs, and social dominance orientation. This means that participants held moderate beliefs about the world being fair and just both for them personally and in general, endorsed moderate levels of color-blind attitudes, and endorsed attitudes about having a social hierarchy. Second, personal and general just world beliefs were not significantly related to color-blind racial attitudes or social dominance orientation. Indeed, variables associated with attitudes of social discrimination were not substantially positively associated with beliefs about the world that promote mental health. In addition, social dominance orientation was significantly related to the institutional discrimination facet of color-blind racial attitudes. This
contributes to our understanding of how color-blind racial attitudes and social dominance may be associated, arguing that the relationship may be specific to more “classic” forms of racist beliefs. Furthermore, just world beliefs, color-blind racial attitudes, and social dominance orientation have been shown to be independent constructs rather than tapping into some smaller set of variables associated with discriminatory attitudes. It seems that just world beliefs tap into beliefs about fairness and justice, Institutional Discrimination and Racial Privilege tap into attitudes about race, and social dominance orientation scores reflect beliefs about a hierarchical social structure. Third, this study has found that personal and global just world beliefs were factored into one construct rather than a bi-dimensional model, at least among white participants. However, the alternate hierarchical model that was presented in the discussion section is also a possibility. This, future research should compare the structure of just world beliefs across racial/ethnic groups using item- rather than scale-level data.

Limitations of the Study

One limitation of this study is that the sample sizes employed in the exploratory factor analyses may have been less than desirable to yield stable and replicable results. The sample of White participants was divided by gender in order to determine any significant differences. Therefore, a relatively large sample size was then divided to 86 males and 276 females. One researcher reported following the sample size guideline that one must have at least 5 cases per variable (Gorsuch 1983); another stated that 100 cases are poor, 200 is fair, 300 is good, and 500+ is very good (Comrey & Lee, 1992). Although strict rules regarding sample size and number of variables added in the model
have varied over the years, recent guidelines about best practices state that a researcher should evidence the presence of “strong data” to have an accurate analysis in EFA (Costello & Osborne, 2005). Strong data are defined by these researchers as having a.) communalities no less than .40, b.) factor loadings of at least .32, and c.) factors with at least three items (either individual scale items or total scores) in order to be considered stable. If all three of these conditions are met, research suggests that one can get by with as few as 100 subjects. Violations of any of these criteria, however, increases needed sample size. The male sample was fairly small in this study and the communalities were not substantially high in either sample (see Tables 4 and 5). Finally, given that only 5 variables were used in the analysis after BRI was dropped, fewer than the suggested number of items was also used in this research. Although the data met the KMO Measure of Sampling Adequacy and Bartlett’s Test of Sphericity, indicating that EFA was an appropriate analysis for the samples, the small sample size (especially for males), low communalities, and fewer than recommended variables may have negatively influenced the findings.

Another limitation is related to the use of only two of the three CoBRAS subscales. Construct validity, which indicates whether scores are measuring an underlying construct, could have been affected due to the fact that only 2 of the 3 CoBRAS subscales were used to assess color-blind racial attitudes. Prior research connected social dominance orientation and global just world beliefs to all 3 facets of color-blind racial attitudes. However, this study was only able to analyze the results with 2 subscales because the Blatant Racial Issues subscale showed poor reliability. Therefore,
there may have been a connection between a second color-blind racial attitudes subscale that was not able to be assessed, which would have strengthened the argument that color-blind racial attitudes are related to the other constructs.

Finally, potential results based on the self-selection of participants should be considered. Study participants were able to view the description of the research and chose whether or not to participate for extra course credit. There is the potential that individuals who were more interested in issues related to “factors that might relate to attitudes about the world, experiences of discrimination, attitudes about fairness, racism, ethnic identity, and emotional well-being” (as stated on the study description) selected to participate. It is not known if any differences exist between individuals who chose to participate in the study and those who chose not to participate. Thus, the ability to generalize these results beyond samples of persons who self-selected into a study like this one is limited.

*Implications for Counseling Psychology*

As demonstrated in earlier chapters, research over several decades has suggested that there are many detrimental associations to holding global just world beliefs, and having color-blind racial attitudes, and a socially dominant orientation (Furnam & Proctor, 1989; Neville et al., 2000; Pratto et al., 1994). Perhaps the most negative of these associations is the tendency for individuals to directly or indirectly act in racist and discriminatory ways against others (Carr, 1997; Dalbert et al., 1987; Guimond, et al., 2003; Neville et al, 2001). Therefore, as a field that is actively involved with social justice, it is important that Counseling Psychology continue to understand how these variables influence the ways that individuals think and behave. Counseling Psychology
has focused largely on how racism, prejudice, and discrimination have influenced disadvantaged groups. However, in order to effectively address social inequalities, we also need to have an understanding of the advantaged groups within systems of oppression (Neville et al., 2001).

An initial aim of this study was to understand how color-blind racial attitudes and social dominance orientation relate to global just world beliefs. However, this study found that general just world beliefs were not significantly related to color-blind racial attitudes or social dominance orientation. However, other findings from this study have important implications for the field of psychology. The present research found that White university students, held up to moderate levels of just world beliefs, color-blind racial attitudes, and social dominant orientation. As stated earlier, this reflects that individuals endorsed attitudes about viewing the world as fair and just (despite the reality of discrimination and oppression), as well as beliefs that race does not and should not matter, and that some groups are socially superior to others. In a society like the United States where institutional forms of “isms” impact the well-being of social groups, and where privilege maintains power and status quo for White individuals, it is crucial that we work to intervene with White individuals to increase their awareness about social inequalities. On a college campuses in particular, Counseling Psychologists can accomplish this goal by providing cultural sensitivity workshops, outreach programs on recognizing the importance of race, or develop other programs that focus on social justice initiatives involving White students.

Research has shown that these types of initiatives have been successful at
increasing multicultural awareness for White students through multicultural trainings. For example, Neville et al. (2000) reported that color-blind racial attitudes, and particularly the Racial Privilege aspect, significantly decreased after participating in a year-long diversity training series. This indicates that attitudes about race are sensitive to intervention and can therefore be changed. Given the importance of multicultural competence in the field of counseling, professional training programs in higher education have begun to focus on this initiative with reported success. Although programs varied in the specifics of how they accomplish increased multicultural competence (i.e., workshop, course), a meta-analysis of the effectiveness of multicultural training found a large effect size (d=.92) following an intervention (Smith, Constantine, Dunn, Dinehart, & Montoya, 2005). Furthermore, Sammons & Speight (2008) reported that students enrolled in a multicultural course reported an attitudinal change. Specifically, they stated that students reported increased critical thinking and empathy, as well as decreased cultural biases. Given that just world beliefs, color-blind racial attitudes, and social dominance orientation are reflective of a set of potentially malleable attitudes or beliefs, the above research is encouraging for college campuses.

Second, more specific to professional training, it is important that psychology programs work to increase the awareness of White trainees about their own attitudes and beliefs that relate to discrimination and prejudice (Hill, 2003). As more racially and ethnically diverse clients seek clinical services, White practitioners should have an understanding of their own attitudes and beliefs about race, justice and social hierarchies, and understand how these attitudes may influence their clinical work. With the adoption
of the multicultural guidelines by the American Psychological Association (2003), focus had recently shifted to examining White counselors’ color-blind racial attitudes and multicultural counseling competencies. Burkard and Knox (2004) found that therapists who scored high on color-blind racial attitudes reported less empathy for African-American clients, and attributed more responsibility to the African-American client for the problem. They suggested that therapist biases about race may affect the person’s ability to conceptualize a case in a culturally sensitive way, and provide empathy for client issues. Neville et al. (2006) furthered this research by examining the connection between color-blind racial attitudes and multicultural counseling competencies, finding that greater levels of color-blind racial attitudes were related to lower self-reported multicultural awareness and knowledge, and lower multicultural conceptualization ability. Finally, Gushue and Constantine (2007) discovered that higher levels of color-blind racial attitudes were related to less advanced levels of White racial identity statuses, which are not sophisticated enough to value a wide range of cultural perspectives. Taken together, these researchers called for training programs to help White trainees make connections between race, racism and the therapeutic process. This area of research relating color-blind racial attitudes and multicultural competency has just begun to take shape. To date, no known studies have examined the relationship between just world beliefs or social dominance orientation and clinical work for White psychology trainees. It is imperative that Counseling Psychology continue to study color-blind racial attitudes and begin to examine how general just world beliefs and social dominance orientation might relate to multicultural counseling competencies.
In addition, this study suggests that color-blind racial attitudes, social dominance orientation, and just world beliefs each may need to be targeted separately in multicultural training and educational interventions since they may represent separate, although related, constructs. Should this study have found a single factor structure for these beliefs and attitudes, an intervention or educational activity that focuses on any one of them should be associated with changes in all three. However, since the study found these attitudes and beliefs to factor into three separate constructs, it should probably not be assumed that a focus on one (or even two) of the constructs would result in changes in all three.

In addition to practical applications, this study also has implications for theory development. Color-blind racial attitudes have been referred to as a form of “modern racism”, conceptualized by McConahay (1986) as a shift to more subtle and covert forms of racism in response to the Civil Rights movement and changing definitions of socially acceptable expressions of racial attitudes. This modern form of racism is characterized by (a) persistent, negative stereotyping, (b) a tendency to blame racial minorities for racial disparities, and (c) resistance to efforts to ameliorate social inequities (Bobo, Kluegel & Smith, 1997). Color-blind racial attitudes would fit into this category because they are related but distinct from racism in that they are an ideological component referring to the denial of racial dynamics (i.e., an unawareness of the existence of racism) rather than necessarily reflecting a belief in racial superiority (Neville et al., 2000). Racism, on the other hand, reflects a belief in the superiority or inferiority of groups based on race, as well as corresponding behaviors that affect the “esteem, social opportunities, and life
chances of individuals from groups that are directly associated with the above belief system” (Rollock & Gordon, 2000, p.5).

Given that social dominance orientation is a belief about the general superiority of one group over others, it makes sense that it would be related to attitudes reflecting color-blindness. However, research has argued that it may be associated with overt racism rather than the modern form of racism described above. The current study as well as research by Worthington et al. (2008) found that people who supported beliefs about one social group dominating over others (social dominance orientation) also lacked awareness of institutional racism and general, pervasive racial issues. However, social dominance orientation was not associated with an unawareness of racial privilege, seen as a more subtle form of racism. Therefore, while color-blind racial attitudes may reflect more subtle forms of racism, social dominance orientation appears to reflect more classic forms of overt racism (Worthington et al., 2008).

The field of Counseling Psychology has recently begun to focus attention on the impact of racial microaggressions, which are more unconscious and subtle ways that "well-intentioned” White people insult people of color (Sue, Capodilupo, Torino, Bucceri, Holder, Nadal, & Esquilin, 2007). An unawareness of racial institutional discrimination and racial privilege as factors of color-blind racial attitudes, as well as holding a social dominance orientation, may be factors that contribute to “well-intentioned” White individuals who act in prejudiced and discriminatory ways. To further our understanding of how color-blind racial attitudes and social dominance orientation relate to notions of racism, it would be Important for psychology researchers to
investigate any potential relationships between color-blind racial attitudes, social
dominance orientation, and racial microaggressions.

Results from the current research also imply applications for theory development
of just world beliefs. As the literature produced clearer knowledge about individuals
responding to experienced injustices by denying their existence, researchers began to
focus on the importance of distinguishing between seeing the world as just personally
versus globally or generally. Today, this bidimensional model of personal versus global
just world beliefs is increasingly used when studying just world beliefs.

Furthermore, just world beliefs have been argued to be associated with both healthy
and unhealthy variables. Specifically, personal just world beliefs has been empirically
related to subjective well-being and self-esteem (Dalbert, 1999; Lipkus et al., 1996). In
addition, just world beliefs as a unidimensional construct has been conceptualized as
related to unhealthy attitudes and behaviors (such as victim blaming) in an attempt to
protect the adaptive aspects of adhering to these beliefs (Montada, 1999). With regard to
general just world beliefs, Begue and Bastounis (2003) argued that endorsing these
beliefs may be associated with social discrimination. However, there was little empirical
research to support this claim. The current research contributed to our understanding of
general just world beliefs by showing that they did not significantly relate to color-blind
racial attitudes or social dominance orientation, which are factors associated with social
discrimination.

There have been a few research studies that examined relationships between just
world beliefs, color-blind racial attitudes, and social dominance orientation (see Neville
et al., 2000; Pratto et al., 1994; Worthington et al., 2008). Thus, it is important to continue to explore these relationships. The studies that were conducted to date did not distinguish between personal and general just world beliefs and utilized various measures of just world beliefs. Furthermore, studies generally collapsed across gender despite mixed results about possible gender differences, and they collected data from samples consisting of different ethnic groups and nationalities. Therefore, this is the first study that is attempting to empirically link these three variables for White, American individuals, as well as included both personal and general just world beliefs, and allowed for the detection of any gender differences. In addition, it is only the second study to empirically test the personal versus global just world beliefs structural model. As explained throughout this paper, results from the present study call into question what we had known about the relationships between these variables based on the current literature, and points to the importance of further studies on the structure of the personal versus general just world beliefs distinction as well as what unhealthy attitudes may be associated with just world beliefs.

In conclusion, continuing to focus on the relationships between the variables in this study can further help to advance the mission of social justice and multiculturalism in a practical way by providing the foundation for potential interventions with White individuals who hold global just world beliefs, color-blind racial attitudes, and a social dominance orientation to perhaps address social inequalities.
APPENDIX A:

CONSENT FORMS
CONSENT TO PARTICIPATE IN RESEARCH  
Just World Beliefs  
Suzette Speight, Ph.D.

You are being asked to take part in a research study being conducted by Dr. Suzette Speight, a faculty member in the School of Education at Loyola University of Chicago. You are being asked to participate because our research team is interested in factors that might relate to attitudes about the world, experiences of discrimination, attitudes about fairness, racism, ethnic identity, and emotional well-being. We are hoping to survey around 150 diverse undergraduates. Please read this form carefully and ask any questions you may have before deciding whether to participate in the study.

Purpose:
The purpose of this study is to explore how a person’s beliefs about the world, about fairness, racism, their ethnic identity, and experiences with discrimination might relate to emotional well-being. The study will involve recruiting a sample of approximately 150 diverse undergraduates to complete anonymous surveys.

Procedures:
If you agree to be in the study, you will be asked to complete a survey packet of 10 questionnaires. The survey packet should take you about 30 to 40 minutes to complete. The questionnaires will ask about your beliefs about the world, about fairness, racism, ethnic identity, experiences with discrimination and emotional well-being.

Risks/Benefits:
- There are no foreseeable risks involved in participating in this research.
- If some of the questions make you feel uncomfortable, please tell one of the Research Assistants right away, so that you can talk to one of the psychologists who are here. We have resources that you might find helpful.
- There are no direct benefits to you from participation, but the results of this study will increase our understanding of how factors related to just world beliefs connect to emotional well being.

Compensation:
You will be given credit that will be applied towards your final grade in psychology 101 course. You can withdraw from the study without losing this compensation.
Confidentiality:
- We will not be asking your name on the survey packet. There will be no way to connect you with your survey responses.
- Only the research team will have access to the surveys.
- We will keep the consent forms (with your signature) separate from the surveys.

Voluntary Participation:
Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions:
If you have questions about this research study, please feel free to contact Dr. Suzette Speight at 312-915-6937 or via email at sspeigh@luc.

If you have questions about your rights as a research participant, you may contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form to keep for your records.

____________________________________________    __________________
Participant’s Signature                                                    Date

____________________________________________   ___________________
Researcher’s Signature                                                   Date
You are being asked to take part in a research study being conducted by Dr. Suzette Speight, a faculty member in the School of Education at Loyola University of Chicago. Your participation is voluntary. Please read the following information about this study and select "yes" below if you agree to participate. You must be at least 18 years old to participate in this study.

Purpose:
The purpose of this study is to explore how a person’s beliefs about the world, about fairness, racism, their ethnic identity, and experiences with discrimination might relate to emotional well-being. The study will involve recruiting a sample of approximately 150 diverse undergraduates to complete anonymous surveys.

Procedures:
If you agree to be in the study, you will be asked to complete an online survey packet of 10 questionnaires. The survey packet should take you about 30 minutes to complete. The questionnaires will ask about your beliefs about the world, about fairness, racism, ethnic identity, experiences with discrimination and emotional well-being.

Risks/Benefits:
• There are no foreseeable risks involved in participating in this research.
• There are no direct benefits to you from participation, but the results of this study will increase our understanding of how factors related to just world beliefs connect to emotional well being.

Compensation:
You will be given credit via experimetrax that will be applied towards your final grade in psychology 101 course. You can withdraw from the study without losing this compensation.

Confidentiality:
Your responses will not be marked with your name, only numbered. In other words, your name will not be associated with any of your responses.

Voluntary Participation:
Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.
Contacts and Questions:
If you have questions about this research study, please feel free to contact Dr. Suzette Speight at 312-915-6937 or via email at sspeigh@luc.

If you have questions about your rights as a research participant, you may contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
By selecting "yes" below, you are indicating that you are 18 years or older, have read this consent form, and agree to participate in this study. If you do not wish to participate, please select the "no" box.

___ Yes     ___ No
Consent Form Online – University B

Your participation is voluntary. Please read the following information about this study and select "yes" below if you agree to participate. You must be at least 18 years old to participate in this study.

Purpose:
The purpose of this study is to explore how a person’s beliefs about the world, about fairness, racism, their ethnic identity, and experiences with discrimination might relate to emotional well-being. The study will involve recruiting a sample of approximately 150 diverse undergraduates to complete anonymous surveys.

Procedures:
If you agree to be in the study, you will be asked to complete an online survey packet of 10 questionnaires. The survey packet should take you about 30 minutes to complete. The questionnaires will ask about your beliefs about the world, about fairness, racism, ethnic identity, experiences with discrimination and emotional well-being.

Risks/Benefits:
• There are no foreseeable risks involved in participating in this research.
• There are no direct benefits to you from participation, but the results of this study will increase our understanding of how factors related to just world beliefs connect to emotional well being.

Compensation:
You will be given credit that will be applied towards your final grade in your psychology course. Your information will be forwarded to your psychology professor so they are aware of your participation in the study. You can withdraw from the study without losing this compensation.

Confidentiality:
Your responses will not be marked with your name, only numbered. We will ask you to enter your name and email address so that you can get participation credit for this experiment, but once you have been given credit, your information will be deleted. In other words, your name will not be associated with any of your responses.

Voluntary Participation:
Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.
Contacts and Questions:
If you have questions about this research study, please feel free to contact Dr. Suzette Speight at 312-915-6937 or via email at sspeigh@luc.

If you have questions about your rights as a research participant, you may contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
By selecting "yes" below, you are indicating that you are 18 years or older, have read this consent form, and agree to participate in this study. If you do not wish to participate, please select the "no" box.

___ Yes    ___ No
APPENDIX B:

PERSONAL BELIEF IN A JUST WORLD SCALE
**Justice**

Below you will find various statements. Most likely, you will strongly agree with some statements, and strongly disagree with others. Sometimes you may feel more neutral. Read each statement carefully and decide to what extent you personally agree or disagree with it. Circle the number which corresponds to this judgment. Make sure you circle a number for every statement.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I believe that, by and large, I deserve what happens to me.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2. I am usually treated fairly.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. I believe that I usually get what I deserve.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4. Overall, events in my life are just.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5. In my life, injustice is the exception rather than the rule.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6. I believe that most of the things that happen in my life are fair.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7. I think that important decisions that are made concerning me are usually just.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
APPENDIX C:

GENERAL BELIEF IN A JUST WORLD SCALE
Below you will find various statements. Most likely, you will strongly agree with some statements, and strongly disagree with others. Sometimes you may feel more neutral. Read each statement carefully and decide to what extent you personally agree or disagree with it. Circle the number which corresponds to this judgment. Make sure you circle a number for every statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think basically the world is a just place.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. I believe that, by and large, people get what they deserve.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. I am confident that justice always prevails over injustice.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I am convinced that in the long run people will be compensated for injustices.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. I firmly believe that injustices in all areas of life (e.g. professional, family, politics) are the exception rather than the rule.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. I think people try to be fair when making important decisions.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX D:

COLOR-BLIND RACIAL ATTITUDES SCALE
COLOR-BLIND RACIAL ATTITUDES SCALE (CoBRAS)

Directions. The following is a set of questions that deal with social issues in the United States (U.S.). Using the 6-point scale, please give your honest rating about the degree to which you personally agree or disagree with each statement. Please be as open and honest as you can; there are no right or wrong answers.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 & 6 \\
\text{Strongly Disagree} & & & & & \text{Strongly Agree}
\end{array}
\]

1. ____ Everyone who works hard, no matter what race they are, has an equal chance to become rich.

2. ____ Race plays a major role in the type of social services (such as type of healthcare or daycare) that people receive in the U.S.

3. ____ It is important that people begin to think of themselves as American and not African American, Mexican American or Italian American.

4. ____ Due to racial discrimination, programs such as affirmative action are necessary to help create equality.

5. ____ Racism is a major problem in the U.S.

6. ____ Race is very important in determining who is successful and who is not.

7. ____ Racism may have been a problem in the past, but it is not an important problem today.

8. ____ Racial and ethnic minorities do not have the same opportunities as White people in the U.S.

9. ____ White people in the U.S. are discriminated against because of the color their skin.

10. ____ Talking about racial issues causes unnecessary tension.

11. ____ It is important for political leaders to talk about racism to help work through or solve society’s problems.

12. ____ White people in the U.S. have certain advantages because of the color of their skin.
13. _____ Immigrants should try to fit into the culture and adopt the values of the U.S.

14. _____ English should be the only official language in the U.S.

15. _____ White people are more to blame for racial discrimination in the U.S. than racial and ethnic minorities.

16. _____ Social policies, such as affirmative action, discriminate unfairly against White people.

17. _____ It is important for public schools to teach about the history and contributions of racial and ethnic minorities.

18. _____ Racial and ethnic minorities in the U.S. have certain advantages because of the color of their skin.

19. _____ Racial problems in the U.S. are rare, isolated situations.

20. _____ Race plays an important role in who gets sent to prison.
APPENDIX E:

SOCIAL DOMINANCE ORIENTATION SCALE
Social Dominance Orientation Scale

Below are a series of statements with which you may agree or disagree. For each statement, please indicate the degree of your agreement/disagreement by choosing the appropriate number.

1  2  3  4  5  6  7
Not True Somewhat True Very True

1. _____ Some groups of people are simply inferior to other groups.
2. _____ In getting what you want, it is sometimes necessary to use force against other groups.
3. _____ It is okay if some groups have more of a chance in life than others.
4. _____ To get ahead in life, it is sometimes necessary to step on other groups.
5. _____ If certain groups stayed in their place, we would have fewer problems.
6. _____ It is probably a good thing that certain groups are at the top and other groups are at the bottom.
7. _____ Inferior groups should stay in their place.
8. _____ Sometimes other groups must be kept in their place.
9. _____ It would be good if groups could be equal.
10. _____ Group equality should be our ideal.
11. _____ All groups should be given an equal chance in life.
12. _____ We should do what we can to equalize conditions for different groups.
13. _____ Increased social equality is something we should strive for.
14. _____ We would have fewer problems if we treated people more equally.
15. _____ We should strive to make incomes as equal as possible.
16. _____ No one group should dominate in society.
* Items 9-16 are reverse scored.
Demographic Questionnaire

Please answer what best describes you:

1. What is your age: ____

2. What is your gender:
   ____ Male
   ____ Female

3. What is your race/ethnicity:
   ____ Caucasian/European-American
   ____ Black/African-American
   ____ Hispanic
   ____ Asian American/ Pacific Islander
   ____ Native American
   ____ Biracial
   ____ Other ______________________

4. What is your current year in schooling:
   ____ Freshman
   ____ Sophomore
   ____ Junior
   ____ Senior
   ____ Graduate student

5. What is the highest level of education your parents completed:
   Mother
   ____ elementary school  ____ high school  ____ associate degree  ____ bachelors degree  ____ graduate/professional degree
   Father
   ____ elementary school  ____ high school  ____ associate degree  ____ bachelors degree  ____ graduate/professional degree

6. What is your mother’s occupation: __________________

7. What is your father’s occupation: __________________
8. What is your family’s household income:

- [ ] less than $10,000
- [ ] $10,000 to $20,000
- [ ] $20,000 to $30,000
- [ ] $30,000 to $40,000
- [ ] $40,000 to $50,000
- [ ] $50,000 to $60,000
- [ ] $60,000 to $70,000
- [ ] $70,000 to $80,000
- [ ] $80,000 to $90,000
- [ ] $90,000 to $100,000
- [ ] over $100,000
APPENDIX G:

TWO AND FOUR FACTOR PATTERN AND STRUCTURE MATRICES
### TWO FACTOR PATTERN MATRIX FACTOR LOADING FOR FEMALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Item</td>
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<tr>
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<td>RP subscale</td>
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### TWO FACTOR STRUCTURE MATRIX FACTOR LOADING FOR FEMALES

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<tr>
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### TWO FACTOR PATTERN MATRIX FACTOR LOADING FOR MALES

<table>
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<tbody>
<tr>
<td></td>
<td>Item</td>
<td>Factor 1</td>
<td>Factor 2</td>
</tr>
<tr>
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<tr>
<td>ID subscale</td>
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<tr>
<td>RP subscale</td>
<td>0.083</td>
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</tr>
<tr>
<td>Global JWB</td>
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<td>0.047</td>
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<tr>
<td>Personal JWB</td>
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<td>-0.048</td>
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### TWO FACTOR STRUCTURE MATRIX FACTOR LOADING FOR MALES

<table>
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<tr>
<th>Item</th>
<th>Factor Loadings</th>
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<tbody>
<tr>
<td></td>
<td>Item</td>
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<td>Factor 2</td>
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<td>ID subscale</td>
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<tr>
<td>RP subscale</td>
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<tr>
<td>Global JWB</td>
<td>0.619</td>
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<tr>
<td>Personal JWB</td>
<td>0.659</td>
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## FOUR FACTOR PATTERN MATRIX FACTOR LOADING FOR FEMALES

<table>
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<tr>
<th>Item</th>
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<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDO</td>
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<td>0.596</td>
<td>-0.113</td>
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<td>-0.067</td>
<td>0.120</td>
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</table>

## FOUR FACTOR STRUCTURE MATRIX FACTOR LOADING FOR FEMALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
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<tbody>
<tr>
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<td>0.220</td>
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<td>0.594</td>
<td>0.577</td>
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<td>RP subscale</td>
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<td>0.377</td>
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<td>Global JWB</td>
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<td>-0.158</td>
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<tr>
<td>Personal JWB</td>
<td>0.598</td>
<td>-0.147</td>
<td>-0.189</td>
<td>-0.125</td>
</tr>
</tbody>
</table>

## FOUR FACTOR PATTERN MATRIX FACTOR LOADING FOR MALES

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.024</td>
<td>0.422</td>
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<tr>
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<tr>
<td>Personal JWB</td>
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<td>-0.011</td>
<td>-0.093</td>
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## FOUR FACTOR STRUCTURE MATRIX FACTOR LOADING FOR MALES

<table>
<thead>
<tr>
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<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
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<tbody>
<tr>
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<tr>
<td>RP subscale</td>
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<tr>
<td>Global JWB</td>
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<tr>
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<td>0.658</td>
<td>-0.204</td>
<td>-0.329</td>
<td>-0.180</td>
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REFERENCE LIST


Olson, J., & Hafer, C. (2001). Tolerance of personal deprivation. In J. T. Jost, & B. Major (Eds.), The psychology of legitimation: Emerging perspectives on ideology,
justice, and intergroup relations (pp. 157–175). Cambridge, MA: Cambridge University Press.


Taylor, S., Wright, S., Moghaddam, F., & Lalonde, R. (1990). The personal/group
discrimination discrepancy: Perceiving my group, but not myself, to be a target

Tomaka, J. & Blascovich, J. (1994). Effects of justice beliefs on cognitive appraisal of
subjective, physiological, and behavioral responses to potential stress. *Journal of

social dominance orientation, racial-ethnic group membership, and college
students’ perceptions of campus climate. *Journal of Diversity in Higher
Education, 1*, 8-19.
VITA

Jennifer Kestner was born and raised in Youngstown, Ohio. Before attending Loyola University Chicago, she attended the Youngstown State University, where she earned a Bachelor of Arts in Psychology, with Highest Distinction, in 2002. From 2002 to 2004, she also attended the University of Missouri-Columbia, where she received a Master of Arts in Counseling Psychology.

While at Loyola, Jennifer has worked on a research team with Suzette Speight, Ph.D., focused on understanding the relationship between beliefs about justice, subjective well-being and several psychological factors. She has also provided talk therapy through several clinical practica experiences throughout the Chicagoland area.

Currently, Jennifer is completing her doctoral degree as a pre-doctoral psychology intern at the University of Notre Dame in South Bend, Indiana.
DISSETATION APPROVAL SHEET

The Dissertation submitted by Jennifer M. Kestner has been read and approved by the following committee:

Suzette Speight, Ph.D., Co-Director
Professor of Psychology
University of Akron

Steven Brown, Ph.D., Co-Director
Professor of Counseling Psychology
Loyola University Chicago

Carolyn Mildner, Ph.D.
Clinical Assistant Professor of Counseling Psychology
Loyola University Chicago

The final copies have been examined by the Director of the Dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the Dissertation is now given final approval by the committee with reference to content and form.

The Dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

9/25/09
Date

Co-Director's Signature

9/25/09
Date

Co-Director's Signature