

Black and White makes gray: A look at the impact of race on child witness credibility

by

Karen Ojeda

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Abstract

Race has been found to impact the credibility of minority child witnesses in Child Sexual Abuse (CSA) cases. These biases are linked with judgments of partial or full child victim responsibility for the abuse, reducing the credibility of their testimony. However, no analysis to date has looked at racial effects on credibility in other types of legal cases. This study explored if racial effects impact child witness credibility in a non-CSA case in a 2 (Race of Child: White and Black) x 2 (Race of Perpetrator: White and Black) full factorial design. It was hypothesized that Black children would be perceived as less credible, resulting in lower guilt and sentencing outcomes for White perpetrators. In addition, it was predicted that a decrease in empathy towards a Black child witness would result in a similar outcome. Results indicate that no strong effect exists between guilt and sentencing outcomes and race of child witness. Still, interesting trends of child credibility may exist when other factors are accounted for.

To my parents- you sacrificed your dreams to make mine come true. I work towards, someday, making yours come true too. It is my honor to dedicate this to you.

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Chapter 1: Introduction

The conversation about race has seen great changes since the threads upholding the cloak of “separate but equal” (*Plessy v. Ferguson, 1896*) untangled in the 1950s. The United States had blossomed into a powerful nation, its beauty tainted by the ugly stains from the treatment of its people.

After years of sacrifice, the push for a cleaner lens through which the humanity of minorities can be valued gained momentum. By tireless efforts of activists and passionate citizens, the United States emerged in a period of reform. Across Truman to Kennedy to Johnson administrations, legislators began to show positive attention to racial inequality in America. The Civil Rights Act of 1964 and the integration of the armed forces are but a few examples of legislative energies to the cause. The collective biographies of African Americans began to show a pattern of upward mobility.

Proponents against racism held hope that this spirit of revolution signaled a lasting change in a horrid institution entrenched in our history. If laws defined racial discrimination an intolerable existence in American society, perhaps our social norms would adapt to this change in ideology. After forced changes in schools and workplaces, society ultimately acclimated to the desired change. The explicit practice of racism, once acceptable, transformed into a taboo custom, and the expression of anti-Black sentiment was stigmatized. Those who failed to adapt to the new norm learned to suppress racist tendencies into a fresh construct named implicit racism. Scholars began to closely study the characteristics of the new face of racism, such as its influence in quick judgments and decision-making.

Despite making progress on many fronts, racial inequality continues to be the Black sheep of the social justice family. In the last year alone, a handful of news headlines have illustrated how racial biases continue to threaten a harmonious society. The revamped fight has directed efforts to modern examples of inequity, such as the outstanding U.S. Supreme Court arguments on housing segregations (Hannah-Jones, 2015) and disproportionate Black incarcerations (Cook, 2014).

Additionally, the study of implicit racism has found a modern home in the legal context. The questionable use of excessive police force has birthed a rampant discussion on race in America (“Gallup Review: Black and White differences in views on race”). Aside from the enigma surrounding the facts of these cases and the legality of law enforcement responses, these events have brought light to the voices used to recreate the details. In particular, the Michael Brown case brings into question if race impacts the believability of a witness’s testimony (Cassell, 2014; Cherkis, 2014). CNN legal analyst Sunny Hostin attacks this effect as “befuddling.” In addressing the justifications for why a White witness may be a more valid witness, she protests, “Why now you have two White witnesses that are somehow not connected to the community. And now they seem to be the more credible witnesses?” (“Lawrence O’Donnell,” 2015). Blogger TheOverlord (2014) defines this as “A White witness is more valuable than a bus-load of brown witnesses... if justice was blind it would be color-blind... blind to the perspectives of minorities that is” (as cited in Willies, 2014). Together, this exemplifies the practical implications of racial biases in the legal system.

Eyewitness accounts have played a pivotal role in the direction of an investigation and as evidence in court. A testimony being undermined due to race is an unsettling possibility legal scholars are more recently confronted with. Interestingly, a racial effect on witness credibility has been explored within the confines of child sexual abuse cases. The theoretical explanation is that minorities are often stereotyped as sexually promiscuous and knowledgeable, thereby inviting or sharing responsibility for the incident contested in a sexual abuse claim (as cited in Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007). What if a minority child testifies for a non-sexual abuse case? Like the witnesses described in the Michael Brown case, are their accounts deemed less credible due to their race?

The purpose of this study is to examine whether the race of children affects their credibility as witnesses and the overall outcome of a case. It will begin by looking at the theoretical work on contemporary racism. This analysis will provide an updated review on implicit racism and weigh the theories that describe how racism operates in modern America. Next, the legal implications of the topic will be explored, particularly a novel theoretical explanation for how race can influence child credibility: empathy. Empathy is proposed as a theoretical explanation for why a decrease in child witness credibility for African American child witness is predicted among mock jurors.

While many facets of racial biases in the legal system are currently being explored and exploited by media outlets, the influence of race on an eyewitness's credibility remains an overlooked area of empirical research. While this poses a stimulating agenda on its own, the desire to study this topic from a developmental perspective stems from

the 2012 Trayvon Martin case. Although not technically a minor at the time of the incident, Rachel Jeantel, 18, was a star witness for the case (Abad-Santos, 2013). Her younger age, coupled with several qualities stereotypical of her African American identity, were frequent points of attack for the defense (Susman, 2013).

Chapter 2: Racism in the 21st Century

The response to hate crimes and aggressive discrimination towards African Americans began to shift from an acceptable reality to a risk for stigmatization. The Supreme Court answered this changing sentiment with political reforms adapting to the “evolving standards of decency that mark the progress of a maturing society” (*Trop v. Dulles, 1958*). Legal measures, such as the Executive Order 11478, began to set limits on the practice of explicit racism, and over five more decades of legislation have continued to work towards egalitarianism.

Despite these progressive efforts, the practice of racism has allegedly been transformed. Some advocate that explicit racism exists in a form “more guarded about public expressions of bias” (Pearson, Dovidio, & Gaertner, 2009). A review of the literature generally supports an implicit model of “new racism.” Updated racial theories have proposed explanations for the modern mechanisms and driving factors of implicit racial biases. Researchers have attempted to estimate their impact.

Contemporary Racism Theories

Modern Racism

Modern racism may be the most difficult present-day theory to define due to its liberal conceptualization. For instance, Entman (1990) summarizes the theory in a three-prong approach: anti-Black affect, challenging political pleas of Blacks, and the notion that racism no longer exists. An updated description is a “blending of traditional values with anti-minority affect” (Simmons & Lecouteur, 2008). Others believe that “racial criticism” exists when “minorities violate the traditional values of the mainstream” (Liu

and Mills, 2006). In this definition, minorities are apportioned a share of the responsibility for a racist manifestation.

Nonetheless, J.B. McConahay offers the most cited, enduring definition of modern racism. The four pillars include:

(1) Discrimination is a thing of the past because Blacks now have the freedom to compete in the marketplace and to enjoy those things they can afford. (2) Blacks are pushing too hard, too fast, and into places where they are not wanted. (3) These tactics and demands are unfair. (4) Therefore, recent gains are undeserved and the prestige granting institutions of society are giving Blacks more attention and the concomitant status than they deserve (McConahay, 1986).

These four facets are furthermore characterized as “empirical facts” that emphasize the prevailing perception that “racism is bad” (McConahay, 1986).

McConahay’s message is that modern racists guard their implicit ideologies by overtly rejecting racist tendencies. Any habits that hint otherwise are rationalized by using “facts” to defend negative racial attitudes. For instance, a modern racist would explain racial disparities in obesity by affirming how the cuisine common to Black cultures is higher in fat than other foods. By highlighting these “factual” differences in cooking styles, they can reject the implications of a racial income gap and the necessity of cheaper food options among African Americans.

How does modern racism manifest? Poteat & Spanierman (2012) propose a balanced perspective of a “more subtle expression of racial prejudice than the strong and blatant expressions examined in preceding decades, yet more explicit and direct than

recent implicit forms.” However, others believe modern racism is revealed in intemperate fashion. In analyzing recent media portrayal of crimes involving minorities, racial criticism is a common theme among commentators. Simmons and Lecouteur (2008) believe this exemplifies an “explicit linkage of minority group members with long-term instances of problematic behaviour that represent threats to the majority (‘unacceptable’) and to their agents of social control.” For instance, media coverage on the Martin/Zimmerman case was regularly flooded with remarks on “Black crime rates that lead people to view young Black males with suspicion” (Riley, 2014).

This polarized view can be seen in counterarguments to a perceived political favoritism granted to Blacks and other minorities with a history of oppression. Dixon and Levine believe modern racists no longer acknowledge Blacks are discriminated against. Instead, they assign statistics on low income and lower achievement to “their own personal and cultural failings: being lazy and expecting special treatment on a group basis” (Dixon & Levine, 2012).

Symbolic Racism

Symbolic racism is often used interchangeably with modern racism, primarily distinguished by its term “symbolic.” As the precursor to modern racism, it recognizes that racist values are “rooted in an abstract system of early-learned moral values and ideals (rather than in more concrete personal experiences or self-interested motivations)” (Henry & Sears, 2002). This explanation highlights the regrettable reality that racist ideologies are repeatedly adopted values from older generations.

Furthermore, it views African Americans as an “abstract collectivity rather than specific Black individuals” (Henry & Sears, 2002). In thinking about the in-group/out-group paradigm, Blacks are viewed as a collective out-group among the conservative White American population. As explained by Brewer (1979), the White in-group is associated with “peace, order, law, government, and industry, to each other,” while out-groups are linked with “war and plunder.” It follows that a collective out-group perception of Blacks facilitates accepting intergenerational racial biases. Considering an African American as an individual gambles the need to reconcile factors that cause cognitive dissonance with symbolic racist values. The theoretical tenants of aversive racism also support a notion of intergroup bias “rooted at least in part on social categorization” (Gaertner, Dovidio, Nier, Hodson, & Houlette, 2005).

The implications of symbolic racism, like modern racism, are “strongly associated with Whites’ opposition to racially targeted policy proposals” (Sears & Henry, 2003). Gaertner, Dovidio, Nier, Hodson, & Houlette (2005) reiterates how it can be seen “indirectly and symbolically, in terms of opposition to busing or resistance to affirmative action, rather than directly or overtly, as in support for segregation.” Despite the emphasis on public policy, these illustrations raise the possibility that comparable racially-charged opposition might translate to a criminal law setting, as recent cases would suggest, with potentially higher-stakes.

Aversive Racism

The “American Dilemma” refers the incongruence between U.S. ideals on equality and a history of oppression. In “An American Dilemma,” Myrdal (1944) describes this as a

“moral contradiction of a nation torn between allegiance to its highest ideals and awareness of the base realities of racial discrimination.” Despite progressive ideals, many reject the actions that enforce these egalitarian values. In order to explain the paradox, Dixon and Levine (2012) postulate, “Policies designed to overcome disadvantage are opposed ostensibly on the grounds that such policies violate American values of self-reliance and individualism and violate democratic values of freedom and equal treatment.” How can these opposing philosophies coexist?

In its simplest form, aversive racism is characterized as “more indirect and subtle, and is presumed to characterize the racial attitudes of most well-educated and liberal Whites in the United States” (Dovidio & Gaertner, 2004). This diverges from symbolic and modern racism theories, which focus on a politically conservative population. Aversive racist liberals consciously endorse egalitarian values but may not adhere to them in political exercise.

Another unique distinction is the attention built around the name of the theory. The theory name appropriately represents the two-fold nature of aversive racism. First, “aversive” accentuates the anti-Black affect, such as discomfort, common to contemporary racism. It also refers to the mindful repulsion of prejudices that run counter to egalitarian values. Gaertner, Dovidio, Nier, Hodson, & Houlette (2005) condenses this as “Whites find any indication that they might be prejudiced to be aversive.” While the former references the unconscious biases difficult to detect, the latter reminds us that many mindfully prescribe to a sense of equality they sometimes struggle to apply.

Implicit Stereotypes

People have acknowledged stereotypes as a dominant avenue for racism for years. Its power is wielded from an internalization of beliefs that can manifest in behaviors. The phenomenon is known as stereotype threat, or the “risk of confirming, as self-characteristic, a negative stereotype about one's group” (Steele & Aronson, 1995). For instance, misconceptions of lower intellectual aptitude among African Americans has been shown to lead to poorer performance on diagnostic exams (Steele & Aronson, 1995). The negative effects of stereotyping is expected to magnify when a person belongs to more than one social group with negative stereotypes (Chavous, Harris, Rivas, Helaire, & Green, 2004).

Under the arena of child witness credibility, minority stereotypes of promiscuity and sexual knowledge have presented concerns for child sexual abuse case types. Bottoms, Davis, & Epstein (2004) review the literature indicating prevalent stereotypes of intensified sexual behavior among Blacks, including promiscuity, increased sexual experiences, and early knowledge about premarital sex. Due to the stereotypes of heightened sexuality, minority children are held more responsible for their sexual abuse. Findings show that jurors “might not take sexual abuse reports made by minority children seriously” (Bottoms, Davis, & Epstein, 2004), and harbor misgivings about credibility that could affect verdicts. The power of stereotypes is considered under the framework of aversive racism due to a common thread of ambiguity. A child sexual abuse case is commonly limited as to the amount of evidence available. Due to the limited amount of

evidence available, a greater weight is placed on witness testimony, elevating the importance of an unbiased consideration from jurors.

This paper does not test stereotypes associated with minority's sexual habits. There are no theoretical reasons to anticipate sexual stereotypes would affect credibility in a home invasion case. Instead, the instrument used to assess implicit biases focused on stereotypes relevant to credibility, such as intelligence and trustworthiness. It was hypothesized that these factors would be more accurate predictors.

Other Contemporary Racism Theories

Since most contemporary racism theories share the basic cornerstones, this section focused on the unique features from these lesser-known theories. Laissez-Faire Racism bases its theoretical impact on a "historical analysis of the changing economics and politics of race in the United States" (Bobo, Kluegel, & Smith, 1997). While other forms lightly touch on racism's historical roots, Laissez-Faire traces the evolution from explicit to implicit in greater detail. The name alone intends a sharper contrast to specific staples of overtly racist America, such as segregation, Jim Crow laws, and slavery (Matsueda & Drakulich, 2009).

Racial Resentment draws strong connections to the processes behind Whites' racial policy views. Tuch and Hughes (2011) describe it as a "variant of stratification ideology that focuses on the role of racial individualism in shaping White resistance to meaningful policy change." Also known as "New Racism" by Kinder and Sanders (1996), the theory refutes old notions of biological differences between Blacks and Whites once used as validation for racism. However, it blames Blacks for not respecting and upholding

American values. The theory claims that they “lack the moral values of individualism, hard work, discipline, and self-sacrifice that Whites believe are central to their race and American society as a whole” (Carmines, Sniderman, & Easter, 2011).

Pettigrew & Meertens (1995) offer a two-fold theory to explain racist trends across time and place. Blatant racism embodies the qualities of traditional, overt racism, while subtle racism is the contemporary facet. Subtle racism is defined by three qualities: defending traditional values, exaggeration of cultural values, and the denial of positive emotions. Traditional values support modern racist efforts to preserve Western ideologies of individualism among conservatives. An embellishment of cultural differences responds to Rokeach (1960), who believes that perceived differences are the basis for all prejudice. While Pettigrew and Meertens claim this effect exists by an intergroup versus interpersonal phenomenon, they hold that “the subtly prejudiced exaggerate actual group differences and thereby enhance their assumptions of belief dissimilarity” (Pettigrew & Meertens, 1995).

Finally, a denial of positive feelings refers to a lack of or lower positive associations versus explicit negative associations due to self-presentation. It also acknowledges a “denial of sympathy and admiration for the outgroup” (Zick, Pettigrew, & Wagner, 2008). Pettigrew & Meertens (1995) highlight the appearance of sparsely known modern racism theories in Europe, such as “under-the-skin” racism in France, “latent prejudice” in Germany, and “everyday racism” in the Netherlands.

Common Threads

An underlying theme across theories is the convention that “Whites have become racially egalitarian in principle” (Sears & Henry, 2003). They hold as truth that racial prejudice no longer exists. In accordance with this false belief, contemporary racists “discriminate in subtle, rationalizable ways” (Dovidio & Gaertner, 2000), such as projecting implicit attitudes on nonracial dimensions of hiring (Aberson & Ettlín, 2004). Justifications guard against the social sanctions associated with an explicit racist label, harboring racist inclinations unconsciously and airing them only when an opportunity for an argument rooted in acceptable facts presents itself. By controlling for rationalizations, attitudes and behaviors characteristic of contemporary racism should foretell discrimination (Brief, Dietz, & Cohen, 2000). This offers a powerful tool to detect the appearance of deeply concealed beliefs among a group that strives to distance itself from a racist label. Finally, there is a broad assumption of a “conflict between the denial of personal prejudice and underlying unconscious negative feelings and beliefs” (Pearson, Dovidio, & Gaertner, 2009).

In thinking about the legal application of contemporary racism, it is important to keep in mind the weight of ambiguity (Pfeifer & Ogloff, 1991). Aversive racism posits that Whites are more likely to discriminate against Blacks “only when it is unclear what type of evaluation or behavior is normative” (Aberson & Ettlín, 2004). Therefore, this paper considered the significance of obscure evidence in determining the legal context most likely to elicit implicit racism, as well as the importance of remaining guarded about the nature of the study.

A Purposeful Solution

A few approaches to overcoming contemporary racism have been developed. In its simplest form, purpose has been operationally defined as a “search for meaning” (Frankl, 1964). It is used interchangeably with “meaning” to emphasize a “direction in life” (Blattner, Liang, Lund, & Spencer, 2013). One of the more intriguing yet functional definitions establishes it as a “stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self” (Damon, Menon, & Bronk, 2003). Often conceptualized in a self-focused form, the latter brings attention to the possible impact on others derived from an individual’s purpose. Awareness of this potential begs the question: Can purpose combat the negative effects of implicit racial biases?

Although an empirically-robust answer to this question is still inexistent, there are some patterns that suggest an affirmative response. Consistent with what is predicted by contemporary racism theories, explicit or unconscious racial differences can create schisms among people that jeopardize our ability to empathize with others. Burrow & Hill (2013) describe it best as “diversity triggers anomie—a feeling of purposelessness and lack of shared values—that erodes social connections.” This division crafted by race may create a barrier of distrust among racial groups that inhibits the ability to empathize with an out-group victim. Additionally, the association between purpose and a “greater persistence toward valued goals” (Burrow & Hill, 2013) suggest that purpose may moderate the negative effects of modern implicit biases when a non-racist reputation is valued.

Although the purpose construct has yet to find empirical support in the legal context, a few explanations are offered. Industrial/operational psychology has explored the implications of purpose on decision-making and employee behavior. Social cognitive theory proposes that an increased sense of purpose “raises and sustains the level of effort” (Wood & Bandura, 1989). People with high purpose may find themselves more energized to labor against their implicit biases in order to arrive at the fairest judgment possible. High purpose individuals may also be driven by the motivation to maintain a non-racist reputation. Any “discrepancies between behavior and personal standards generate self-reactive influences” (Wood & Bandura, 1989). This may lead to an acute awareness and quick response to contemporary racism behaviors, such as rationalizing racially disparate decision-making. Studying a person’s sense of purpose, a quality possessed by all in varying degrees, offers a simple but powerful example of a factor that may be the key to moderating racial effects.

Chapter 3: Linking Race and the Law

Contemporary racism theorizes a powerful effect on daily exchanges, influencing even our ability to empathize with others. Critics may consider empathy as an unnecessary consideration in a juror decision-making process that strives to be impartial and fair to the defendant. Yet, when laced with racial biases, empathy can be powerful enough to influence verdicts on death penalty cases, particularly for minority jurors serving in a mixed race jury (Bowers, Steiner, & Sandys, 2001). It can also create an “empathic divide” between White jurors and Black defendants that influences the weight jurors place on mitigating evidence and overall perceptions of guilt (Haney, 2003).

Although generally discussed in adult interactions, children are not exempt from the weight of modern racism. This chapter briefly reviews the current state of child witness credibility research. It considers the mechanisms behind racial biases shaping empathy. It also discusses the role of empathy for child witness credibility. Because racial effects on child witness credibility are a previously unexplored issue, this chapter will blend a review of related topics that will serve as a theoretical foundation to explain any trends and effects discussed in Chapter 6.

The Question of Child Witness Credibility

The credibility of child witnesses has been challenged for many decades and for many reasons (*see* Ceci & Bruck, 1993). The field has struggled with reconciling these inconsistencies. Some scholars have accepted that juror perceptions of credibility is not uniform across child age groups, proposing that various factors significantly shape the accuracy of a child’s testimony at any age. Language development of young children may

impact their ability to recount events in accurate detail (Goodman & Melinder, 2007). While children may be more susceptible to suggestibility and poorer recall under some conditions, they may be superior to adults in others (Ceci, Ross, & Toglia, 1987). Young children can be as competent as adults in lineup identifications and answering questions that are not misleading (Goodman & Reed, 1986). Still, jurors may find themselves influentially swayed by “stereotype-consistent behavior, such as inconsistencies in testimony” (Leippe & Romanczyk, 1989), a problematic reality for child witnesses providing accurate accounts.

The modern study of child witness credibility has used memory research and cognitive factors to pinpoint the circumstances surrounding suggestibility (Bruck & Melnyk, 2004), lie detection among children (Talwar & Crossman, 2012), the existence and impact of implicit biases (Henry & Ridley, 2011), and other external factors that could undermine a child’s credibility. This updated body of research supports earlier work on many fronts. For example, jurors are likely to find young children less credible than older age groups (Newcombe & Bransgrove, 2007).

Additionally, expressing emotion and other non-verbal behaviors may significantly impact jurors’ views of a child’s credibility. An interesting new trend finds that a child witness’s emotions was linked with perceptions of credibility and overall guilt outcomes, particularly among female jurors (Wessel, Magnussen, & Melinder, 2013). Credibility increases when emotional displays are consistent with the trauma of the case, such as being visibly upset and showing discomfort for sexual abuse (Kaufmann, Drevland, Wessel, Overskeid, & Magnussen, 2003). However, others have found that jurors may still

rely on nonverbal cues for lie detection (Newcombe & Bransgrove, 2007), consistent with the adult literature on juror perceptions of witness lying. As with suggestibility, perceived credibility may depend on the circumstances of the case.

The factors molding a child witness's credibility may be difficult for a juror to gauge for a number of reasons, including the possibility of false denials of abuse, the contamination of a memory from post-event information (Hafstad, Memon, & Logie, 2004), and the occurrence of a non-believed memory (Lyon, 1995). Despite the caveats, child witness are often perceived as highly suggestible, malleable by others, and "prone to fantasy" (Cashmore & Bussey, 1996).

The adult literature on witnesses has uncovered several ways race affects credibility. It is widely accepted that cross-race biases may jeopardize the accuracy of identification. More errors are made with witnesses identifying someone of a different race (Platz & Hosch, 1988; Sporer, 2001a, 2001b; Wells & Olson, 2001). No support has been found for the notion that accuracy in recognition is influenced by racial prejudices, or that exposure to other races increases eyewitness accuracy (Overbeck, 2005). Still, the mere existence of racial stereotypes may impact "social judgment" of jurors (Ross, Dunning, Toggia, & Ceci, 1990). Due to modern ties to empathy, racial differences in child witness credibility is examined more in depth under *Development Trends in Empathy*.

Do Racial Biases Influence Empathy?

Empathy refers to awareness, and knowingly partaking in another's emotional state (Xu, Zuo, Wang, & Han, 2009). The impact of empathy can be seen in many social situations, from high levels being linked to an increase in helping behaviors (Eisenberg &

Morris, 2001) to lower levels being associated with higher criminal activity (Marshall, Marshall, Serran, & O'Brien, 2009). It may also serve as a key moderator to racial biases, a position that will be empirically examined here.

Lack of empathy, in failing to consider how some are affected by racism, is considered an affective trait signaling implicit racial biases (D'Andrea & Daniels, 1999). It may also result in apathy towards the challenges of being racially discriminated against and the unique challenges of belonging to certain racial groups. A member of the "out-group" may have a difficult time identifying with these experiences, establishing a disconnect with their ability to empathize with the other race (Johnson et al., 2002).

Neurological studies indicate that an absence or decrease in empathetic responses to other races may be an indicator of implicit racism. When comparing sensorimotor empathetic brain responses of Black and White people, both groups showed high levels of empathy for a stranger in pain. For participants with stronger implicit racial biases, significantly lower empathy manifested when reacting to members of their out-group (Avenanti, Sirigu, & Aglioti, 2010). Similar fMRI studies and reviews support racial differences in empathy, with evidence of heightened levels of empathy towards individuals in a participant's in-group (Xu et al., 2009; Chiao & Mathur, 2010; Avenanti, Bueti, Galati, & Aglioti, 2005).

A growing body of evidence suggests that empathy is compromised when implicit racial biases are accounted for. In a recent study, Forgiarini, Gallucci, & Maravita (2011) summarize a consensus in the "closer the phenotypic aspect of the actor and the observer, the stronger the psychophysiological empathic response to pain." As the

following section will outline, a tainted empathetic response influences many elements in the legal process, such as perceptions of guilt, jury decision-making, and perceptions of eyewitness credibility.

Developmental Trends in Empathy

Little has been written about empathy in the context of children. Bette Bottoms has spearheaded the investigation into racial disparities in empathy among this population. Because children are more frequently witnesses in sexual abuse cases, her research agenda focuses on juror empathy for the witness-victims. Consistent with the literature, Bottoms reports an overall gender effect of empathy towards child victims in rape cases, with women more likely to empathize than men (Bottoms, 1993).

It is speculated that empathy differences may be due to perceptions of victim responsibility (Bottoms, 1993; Krulewitz & Nash, 1979) and general attitudes about rape (Barnett & Felid, 1977). These patterns have shown important predictive power. Empathy for rape victims were highly correlated with guilty verdicts (Weir & Wrightsman, 1990). By extrapolating from the adult literature on sexual abuse cases, Bottoms concludes that empathy is an important factor shaping rape case outcomes, along with child believability and child/adult sexual relationship (Bottoms, 1993).

However, these factors do not consistently hold when introducing race into the model. The positive effects of empathy, increasing the credibility of a sexual abuse victim, may be depreciated by negative racial stereotypes. Minority children, particularly girls, are typecast as more promiscuous, aggressive, and sexually knowledgeable (Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007; Wyatt, 1982, 1990).

In addition to these stereotypes, a decline in empathy may be related to high numbers of early sexual experiences among minority adolescents. African American and Hispanic children have higher rates of early sexual activity, risky sexual behaviors, and teenage pregnancy (Smith, 1997). Still, these statistics may be misleading at face value. According to Wyatt (1990), “ethnic minority children who are included in the statistics of sexually active adolescents also have histories of child sexual victimization.”

In considering these stereotypes, Bottoms examined verdicts and credibility judgments from mock jurors evaluating the case of a 12 or 16-year-old child victim-witness to sexual abuse from a teacher. Black and Hispanic girls were viewed as more responsible for the abuse, but these perceptions did not influence guilt or credibility. A same-race effect was found where jurors found the defendant to be less credible and was more assured in his guilt when the victim matched the juror’s race (Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007). It is possible that jurors empathize with child victims by seeing themselves in them. It is also believed that a stronger same-race effect was found because mock jurors wrongly believe same-race cases occur at a higher rate than interracial cases (Bottoms, Davis, & Epstein, 2004). This may be sufficient to motivate jurors to seek more judgment in these cases. Although the initial study revealed no higher instances of prejudice among high-biased White jurors, a post-hoc look at minority child victim responsibility shows evidence of “juror-victim racial similarity bias” that merits further investigation (Bottoms, Davis, & Epstein, 2004).

Although no studies have tested whether debunking these stereotypes of minority children’s sexuality affect perceptions of credibility, it is possible that awareness

of the story behind a child witness's sexual experience may change levels of empathy among jurors. For instance, a newer study proposed that expressed emotion is highly correlated with a child witness's credibility (Wessel, Magnussen, & Melinder, 2013), which could serve as a moderator to the negative association between race, empathy, and credibility. Others are less hopeful. It appears that the story behind the facts of a case is a miniscule factor imposing on the broader issue that "children of color have often been labeled as "less than good" in our society" (Wyatt, 1990). Until this misplaced reality changes, it is unlikely that minority children will be recipients to the same level of empathy White children are entitled to as child witnesses and even victims.

Perceptions of Guilt

Racial attitudes are known to affect jurors' perceptions of defendant guilt. In line with contemporary racism theories, White jurors evaluate Black defendants as guiltier than White defendants in interracial cases with ambiguous facts. On the other hand, Black jurors exhibit reverse discrimination by practicing leniency towards defendants of their own race in both cases with clear or ambiguous evidence (Sommers & Ellsworth, 2003). Outside the context of an empirical study, Black defendants receive more judgments of guilt and harsher sentences than any other group, particularly when compared with White defendants. They are also more likely to be perceived as dangerous and criminal in media coverage and public response (Sloop, 1996).

Although an effect has been found, most researchers fail to discuss the mechanism in which racial biases influence guilt perceptions. Because implicit biases affect empathic responses, one possibility is that the influence on guilt exists via

empathy. A positive relationship between racial biases and empathy on guilt outcomes could indicate that implicit biases manifest in the form of decreased empathy, which affect the likelihood of a guilty verdict.

An example testing this premise is racial differences in the consideration of mitigating evidence. Black jurors are more likely to consider the mitigating evidence of a Black defendant, whose “background and experiences they may feel they understand better than their White counterparts” (Bowers, Steiner, & Sandys, 2001). In contrast, White jurors negatively respond to the “cultural baggage of the dangerous Black male predator” and have an increased desire for punitiveness (Bowers, Steiner, & Sandys, 2001). Whether or not empathy is the missing link that explains how implicit racial biases affect juror decisions, it is clear that perceptions of African American defendants are disproportionately infected by negative stereotypes. This study further explores this topic by analyzing the effects of perpetrator race on outcomes, and the relationship it has to the race of the child.

Decision-making Influences

Identifying implicit racial biases in action has been predominantly examined in the context of jury decision-making. These prejudices have been correlated with higher conviction rates and harsher sentences for Black defendants in cases with White victims. Defendant race creates an 11% difference in culpability, whereas victim race has an overall 8% disparity. However, if the defendant is Black, the difference increases to 21%, and cases with White victims widen the culpability gap to 23% (Baldus, Woodworth, & Pulaski, 1990, p. 141).

Of greater concern is the higher likelihood for a death penalty sentence. Levinson, Smith, and Young (2014) propose that racial disparities in death penalty statistics can be attributed to implicit biases. Jury-eligible citizens that had higher scores on an implicit bias assessment revealed more racial stereotypes and a judgment on the value of life dependent on race (Levinson, Smith, & Young, 2014). This finding supports the notion that interracial differences exist in the ability to empathize with others. Levinson, Smith, and Young (2014) suggest these variances may also be explained by “specific societal stereotypes” of devaluing Blacks, consistent with theoretical explanations of empathy.

The odds against the defendant doubles in cases with a Black defendant and White victim (Sweeney & Haney, 1992). This outcome varies in effect size but holds true across 14 studies when controlling for other variables, such as crime type and a non-ambiguous mention of victim and/or defendant race (Mitchell, Haw, Pfeifer, & Meissner, 2005). However, when Black participants are included in the sample, a meta-analysis of 29 studies found no significant differences in verdicts by defendant race (Mitchell, Haw, Pfeifer, & Meissner, 2005).

Aside from delivering a judgment of guilt and/or sentence, the effects of racial discrimination may compromise peripheral tasks jurors are asked to do. For instance, jurors are read instructions by a judge at the start of deliberation, intended to be both informative and cautionary to factors that may damage the unbiased objective of the judicial process. In spite of its purpose, jury instructions may serve as a prime for racial stereotyping (Young, Levinson, & Sinnett, 2014). Jurors may also vary in their ability to exclude inadmissible evidence from decision-making. The cost of presenting inadmissible

evidence was higher against Black defendants. Jurors reaffirmed the verdict against Black defendants as more suitable than White defendants, despite perceptions of remaining unaffected by the excluded evidence (Johnson, Whitestone, Jackson, & Gatto, 1995).

Other functions of serving on a capital jury generate patterns where unconscious racism may surface. White jurors frequently have “pro-prosecution interpretations of evidence” in contrast to Black jurors that are more critical of evidence from law enforcement, particularly police officer testimonies (Bowers, Steiner, & Sandys, 2001). These effects are magnified when the defendant is Black. Jurors with stronger implicit prejudices may also misremember case facts, filtered by their biases to be more racially charged (Levinson, 2007). For instance, more evidence of aggression may be remembered about Black versus White defendants.

The threshold to activate implicit biases can be as simple as making the color of the defendant’s skin known. A study by Levinson and Young (2010) showed mock jurors photographs of a crime scene, with half receiving a photograph revealing the forearm of the suspect, the only element that distinguishes his race. They found a significant difference on the evaluation of trial evidence and guilt outcomes amid the conditions with identifiable racial tones.

Overall, death-qualified jurors have greater implicit and explicit racial prejudices. When asked to judge the appearance of a defendant facing capital punishment, jurors were more likely to impose a death sentence for Black defendants who more closely matched the stereotypical features of his race (Eberhardt, Davies, Purdie-Vaughns, &

Johnson, 2006). Empirical studies of racial bias in criminal and civil law support the power it wields to shape trial outcomes.

Present Study

Despite a general lack of open hostility against minority groups, other destructive implicit emotions (Sears & Henry, 2003) remain. As recent legal cases have taught us, these deep-seated feelings may not be as benign as we believe. This study integrates a growing body of literature on the new face of racism, proposed repercussions on our ability to empathize, and the empirically-supported effects of racial biases on various legal practices to suggest a previously unexplored effect.

Child witness credibility has been studied for developmental trends, memory limitations, and language abilities. The study of racial prejudices has lightly scratched the surface of psycholegal research, particularly eyewitness credibility. The present study examines a type of crime children are less commonly witnesses for. This was an important distinction from the literature on child witnesses in sexual abuse cases, as it is believed that distinct mechanism (e.g., empathy versus sexual stereotypes) will explain variability in credibility judgments.

A potential moderator is also proposed through looking at the relationship between a person's sense of purpose and decisions on various measures. In all, it is hoped this study will serve as a foundation for the emergent study of race on credibility for both an adult and child witness populations.

Hypotheses

- I. What effect does race have on child witness credibility in a non-child sexual abuse (CSA) case? It was hypothesized that mock jurors would exhibit less empathy for a Black child versus a White child witness due to implicit racial biases. Lower empathy would lead to a decrease in the believability of the Black child as a witness. This diminished credibility would result in lower guilt and more lenient sentencing outcomes for the defendant in conditions with a Black child versus a White child.

- II. What effect, if any, does the race of the perpetrator have on child witness credibility in a non-CSA case? Because perpetrator race has been consistently singularized for its influential effect on legal outcomes, it was hypothesized that race of perpetrator would interact with child witness credibility. White and Black child witnesses would have higher credibility ratings when the defendant is Black than under conditions with a White perpetrator. However, when the defendant is White, a Black child would be perceived as less credible than a White child. Overall, a perpetrator race effect would result in a higher guilty outcome for conditions with a Black perpetrator.

Chapter 4: Methodology

Participants

Amazon Mechanical Turk (MTurk), an internet-based service for data collection, was used to recruit two hundred and thirty-two participants with a minimal qualification of 95% approval rating, United States citizens, and at least 18 years of age. MTurk has been validated as a platform for subject recruitment that elicits a sample representative of the population specified and of comparable quality to in-person samples (Berinsky, Huber, & Lenz, 2012; Paolacci & Chandler, 2014; Peer, Vosgerau, & Acquisti, 2014). Participants were compensated \$0.60 upon completion for their participation.

Design

This study used a 2 (Race of Child: White/Caucasian and Black/African American) x 2 (Race of Perpetrator: White/Caucasian and Black/African American) between-subjects design. One of the four experimental conditions (see Table 1) was randomly assigned to participants.

Table 1

Conditions

		Race of Perpetrator	
		<i>White/Caucasian</i>	<i>Black/African American</i>
Race of Child	<i>White/Caucasian</i>	Condition 1	Condition 2
	<i>Black/African American</i>	Condition 4	Condition 3

Materials

Case Scenario (Appendix A).

A legal case (State v. Simpson, 1996) inspired the facts used for the vignette in this study. A 651-word, two-page vignette was developed summarizing the details of a criminal case in Brooklyn, NY. The vignette described the home invasion of a young couple, 34-year-old Shawn and 33-year-old Toni Hines, and R.J., their eight-year-old child. It began with the screams of the child-victim, awoken by the opening of the bedroom door. A series of violent actions ensued, including the perpetrator covering mouth and nose of the child, the struggle between the perpetrator and father, and a gun discharged into the father's leg. The setting of the vignette is filled with critical details that cast doubt on the ability to be an accurate witness: dim lighting, no use of corrective lens, and all witnesses abruptly awoken in the middle of the night.

The story concluded with a summary of the child's testimony, details of the perpetrator, and a description of other evidence gathered by police. Additionally, the psychological impact of the invasion on the child was recounted. R.J. identified the suspect, Jamie Purcell, from a lineup. He is charged with 4 felony counts.

Experimental Manipulations (Appendix B). Child and perpetrator race were manipulated into two conditions: Black or White. With the exception of race, all details of the case were held constant in all four conditions. Additionally, conditions were grouped according to their race distribution for comparison. Child race was dichotomously coded to separate conditions with a White (1 and 2) and a Black child (3 and 4). Perpetrator race

was also coded into two groups, conditions with a White (1 and 4) and Black perpetrator (2 and 3).

Measures

Demographic Questions (Appendix B). Basic, non-identifying demographic questions were asked of all participants: age, gender, and race.

Manipulation Checks (Appendix B). After reading the vignette, participants were asked five questions that assessed how much they remembered and how well they followed the case summary. Three of these questions measured true or false responses to main points from the home invasion (e.g., where the intruder entered the home). The remaining two questions measured if participants recalled the race of the child and the race of the intruder in their condition.

If participants failed to correctly answer a minimum of two of the three questions on facts of the case, their responses were considered separately. A special attention was given to the two manipulation checks on race of intruder and child. If participants failed to correctly answer one or both of these questions, they were excluded from analysis. Overall, twenty-two participants were excluded from analysis after examining responses to these question: Seven participants in Condition 1, four participants in Condition 2, five participants in Condition 3, and six participants in Condition 4.

Dependent Measures (Appendix B). The primary outcomes of interest were guilt and sentencing ratings. Using a five-point scale (1 = extremely guilty; 5 = not at all guilty), participant perceptions of guilt were measured. This factor was also dichotomized into a verdict (1 = Guilty, 0 = Not Guilty). The twelve participants that rated the perpetrator's

guilt as 3 (*neither guilty nor not guilty*) were coded as missing data in the dichotomous measure. A separate question asked participants to provide a recommended sentence for the intruder using a 5-point scale (1 = no jail time; 2 = 1-3 years; 3 = 4-6 years; 4 = 7-9 years; 5 = 10+ years). This scale was based on the sentencing standards in the state of New York.

Affect Misattribution Procedure (Appendix B). In order to gauge participant implicit biases, questions from the Affect Misattribution Procedure (AMP) (Payne, Cheng, Govorun, & Stewart, 2005) were adapted for this study. AMP is a modern tool used to predict decision-making and actions in many dimensions, including racial attitudes. Due to the ongoing discussion on the accuracy of the AMP priming feature (Blisson, Imhoff, Huhnel, Hess, & Banse, 2012) and the desire to offer participants fair compensation for their time, a modified version of the assessment without photograph priming was employed instead. Using a feeling thermometer scale (1 = Always; 5 = Never), questions measured how much comfort and sympathy participants felt for four racial groups (African American/Black, Latino/Hispanic, Asian, and Caucasian/White). Participants also rated how they perceived each of these four racial groups on the following topics: Reliability, intelligence, and resilience/strength against adversity.

Child Victim Empathy Scale (Appendix B). Empathy for the child witness was assessed with questions adapted from the Child Victim Empathy Scale (Bottoms et al., 2014). Using a five-point Likert scale (1 = Extremely agree; 5 = Not at all agree), questions included rating how much the child's life was in danger and to what degree a child's life should be protected over an adult's life.

Children's General Believability Scale (Appendix B). Credibility of the child witness was measured using questions adapted from the Children's General Believability Scale (Bottoms et al., 2014). Participants were asked to rate on a five-point scale (1 = Extremely agree; 5 = Not at all agree) how much they agreed with a series of questions and statements (e.g., lineup selection, testimony, and impact of age on importance of evidence).

Life Engagement Test (Appendix B). In order to measure purpose, the Life Engagement Test scale (Scheier et al., 2006) was used. Participants were asked to rate how much they agree with six separate statements on a five-point scale (1 = Extremely agree; 5 = Not at all agree). Calculating the mean responses to these six questions for every participant created a composite purpose score.

Procedure

After providing consent and basic demographic information, participants began the study by answering a series of questions from the AMP scale. These were divided into four individual questions under each topic to measure a response for each racial group. A five-point feeling thermometer was used to record responses. They were also asked to indicate their level of interaction with other races through four questions. Three of these questions gauged contact on a five-point scale (1 = Always; 5 = Never), and one asked them to type an integer for the number of close friends of a different race. Finally, participants answered the six-question Life Engagement Test before receiving one of the four vignettes described above.

After reading the case summary, all participants proceeded to answer questions described above measuring their reactions to the case and the child witness's credibility in light of several factors. Their guilt and sentencing scores were also recorded.

Chapter 5: Results

From the two hundred and thirty-two participants recruited, a sample of one hundred and seventy-one participants was used in data analysis. This sample includes only White participants, which constituted 85% ($SD = 0.360$) of the original participant sample. Due to minimal racial diversity in the sample, creating this subgroup facilitates generalization to prospective White jurors. According to Fukurai, Butler, & Krooth (1993), a high number of White jurors are utilized in a standard jury (as cited in Bottoms, Davis, & Epstein, 2004). Therefore, an all-White sample is arguably less alarming and possibly more ecologically valid and useful for prediction. It also enables a focused interpretation of the findings to a population that may reveal trends apart from other racial groups. For instance, an all-White jury has a statistically significant increase in the conviction of Black defendants (Anwar, Bayer, & Hjalmarsson, 2012). A summary of participant demographics is displayed in Table 2. Males (48%) had an average age of 38.52 years ($SD = 13.10$), while females (52%) had an average age of 40.18 years ($SD = 14.14$). Mean sample age was 39.39 years ($SD = 13.64$).

Table 2

Participant Summary Statistics

Descriptive Statistics

	N	Mean	Std. Deviation
Gender	171	1.52	.50
Age	171	39.39	13.64

Participants were randomly assigned to one of four conditions, with 37-46 people in each cell. Condition 1 had 24.6% ($N = 42$) of participants, 26.9% ($N = 46$) for Condition 2, 21.6%

(N = 37) for Condition 3, and 26.9% (N = 46) for Condition 4. All responded to the same questionnaire, regardless of condition assignment.

Guilt and Sentencing

Guilt was assessed as both a continuous and categorical measure across all conditions. Under the five-point continuous scale, 50.3% of participants found the intruder to have the highest level of guilt (“extremely guilty”), 17.5% at moderate guilt (“somewhat guilty”), 7% at moderate not guilty (“somewhat not guilty”), 18.1% at the lowest level of guilt (“not at all guilty”), and 7% fell in the middle (“neither guilty nor not guilty”). Under the dichotomous measure of guilt, 67.8% of participants found the intruder guilty, and 25.1% found the intruder not guilty.

Overall, the harshest sentencing option (10+ years) was the highest recommendation across conditions at 53.8%. All other sentences recommended for the intruder decreased by order of severity, with 22.8% for 7-9 years, 18.1% for 4-6 years, 4.7% for 1-3 years, and 0.6% for no jail time.

Guilt and Sentencing by Condition

Descriptive statistics for each condition were examined. Sentencing for Condition 1 had a mean of 4.38 years ($SD = 0.79$), Condition 2 was 4.15 ($SD = 1.09$), Condition 3 was 4.19 ($SD = 0.94$), and Condition 4 was 4.26 ($SD = 0.95$) (see Table 3). A one-way ANOVA did not reveal a statistically significant difference between conditions for sentencing, $F(3,167) = 0.48, p = 0.70$. Additionally, mean guilt for Condition 1 was 2.31 ($SD = 1.52$), Condition 2 at 1.85 ($SD = 1.37$), Condition 3 at 2.27 ($SD = 1.57$), and Condition 4 at 2.59 ($SD = 1.72$) (see Table 3). A one-way ANOVA did not reveal a statistically significant

difference between conditions on guilt, $F(3,167) = 1.78, p = 0.15$. Due to a large mean difference between conditions 2 and 4, and a lower p-value approaching marginal significance, a closer look at potential interracial effects on guilt outcomes was pursued.

Table 3

Mean (SD) of Verdict, Sentencing, Empathy, and Credibility by Condition

Child Race	Perpetrator Race	Mean (SD) Guilt	Mean (SD) Empathy	Mean (SD) Credibility	Mean (SD) Sentencing
Black	White	2.59 (1.72)	2.96 (1.33)	2.72 (1.50)	4.26 (0.95)
White	White	2.31 (1.52)	2.98 (1.30)	2.45 (1.21)	4.38 (0.79)
Black	Black	2.27 (1.57)	2.97 (1.34)	2.70 (1.33)	4.19 (0.94)
White	Black	1.85 (1.37)	2.52 (1.47)	2.41 (2.41)	4.15 (1.09)

Guilt and Sentencing by Child and Perpetrator Race

After analyzing each condition separately, the effects of child race and perpetrator race on guilt were further explored. An independent-samples t-test did not reveal a significant difference between Black ($M = 2.45, SD = 1.65$) and White ($M = 2.07, SD = 1.45$) child conditions; $t(169) = 1.59, p = 0.12$. To assess if there was a difference in guilt means based on perpetrator race, another independent-samples t-test was conducted. A marginally significant difference between Black ($M = 2.03, SD = 1.47$) and White ($M = 2.45, SD = 1.63$) perpetrator conditions was revealed; $t(169) = -1.77, p = 0.08$. A negative t-value suggests a negative relationship: As race of perpetrator moved from 0 to 1 (Black to White), perceptions of guilt decreased. Due to the success of some of the above tests in identifying trends and significant effects, additional methods to investigate the effect of race on guilt were pursued.

Correlations

A high number of response variables were correlated with the dichotomous guilt measure. Dangerousness of perpetrator was strongly positively correlated with guilt, $r = 0.78$, $N = 171$, $p < 0.001$. As a person's perception of the perpetrator's dangerousness increased, guilt ratings increased. Belief of the child witness's testimony was strongly positively correlated with guilt, $r = 0.71$, $N = 171$, $p < 0.001$. The more people believed the child's testimony, the likelihood of finding the perpetrator guilty increased. Belief the child's life was in danger was strongly positively correlated with guilt, $r = 0.71$, $N = 171$, $p < 0.001$. The more a person believed the child's life was endangered by the perpetrator's actions, the guiltier the perpetrator was perceived.

The impact of child age on witness's credibility was strongly negatively correlated with guilt outcomes, $r = -0.59$, $N = 171$, $p < 0.001$. The more people disagreed with the credibility measure (*Due to his age, R.J.'s testimony should not be believed*), the guiltier they perceived the perpetrator to be. The empathy measure (*A child's life should be protected to a higher degree than an adult's life*) was negatively correlated with guilt, $r = -0.29$, $N = 171$, $p < 0.001$. Finally, a person's sense of purpose was strongly positively correlated with guilt, $r = 0.31$, $N = 171$, $p < 0.001$. When a person's sense of purpose decreased, the odds of finding the defendant guilty decreased. Age and gender of participants were not correlated with guilt: age, $r = -0.09$, $N = 171$, $p = 0.26$; gender, $r = 0.01$, $N = 171$, $p = 0.87$.

A Look at Other Predictors

After considering these correlations, a look at mean responses for variables with significant correlations revealed interesting trends. Mean guilt verdicts for a set of

variables highly correlated with guilt are summarized in Table 4. Items included are taken from the Child Victim Empathy, Children’s General Believability, and Life Engagement Test scales. Means and standard deviations were also compared across the continuous guilt measure (see Table 5).

Table 4

Mean (SD) of Verdicts by Variables- Categorical

	DichGuilt	
	Not Guilty	Guilty
	Mean (SD) N = 43	Mean (SD) N = 116
Purpose	3.45 (1.13)	2.33 (1.11)
Dangerousness	4.84 (0.65)	1.40 (1.11)
Believe_Testimony	4.16 (1.04)	1.99 (0.92)
Life_in_Danger	3.70 (1.71)	1.30 (0.62)
Age_Believe	2.53 (1.42)	4.21 (0.85)
ChildLife_Protect	3.42 (1.22)	2.55 (1.32)

Table 5

Mean (SD) of Verdicts by Variables- Continuous

	Guilt				
	Extremely Guilty	Somewhat Guilty	Neither Guilty nor Not Guilty	Somewhat Not Guilty	Not at All Guilty
	Mean (SD) N = 86	Mean (SD) N = 30	Mean (SD) N = 12	Mean (SD) N = 12	Mean (SD) N = 30
Purpose	2.21 (1.11)	2.68 (1.07)	2.26 (1.10)	3.71 (0.75)	3.35 (1.24)
Dangerousness	1.31 (1.03)	1.63 (1.30)	2.00 (1.54)	4.92 (0.29)	4.81 (0.75)
Believe_Testimony	1.86 (0.94)	2.37 (0.76)	2.42 (0.90)	3.83 (0.58)	4.29 (1.16)
Life_in_Danger	1.20 (0.57)	1.60 (0.67)	2.00 (1.35)	3.08 (1.78)	3.94 (1.65)
Age_Believe	4.31 (0.80)	3.90 (0.92)	3.75 (1.14)	3.00 (1.04)	2.35 (1.52)
ChildLife_Protect	2.44 (1.33)	2.87 (1.25)	3.67 (1.44)	3.33 (0.98)	3.45 (1.31)

In order to test Hypothesis I, a one-way ANOVA was performed on a measure of credibility (*How much do you believe the testimony provided by the child, R.J., on the*

events of the crime?) to assess differences in credibility among Black and White child conditions. There were no statistically significant differences in credibility means between child race groups, $F(1,169) = 1.89, p = 0.17$. Black children were not statistically less credible than White child witnesses. Next, a two-way factorial ANOVA was conducted on the same measure of credibility looking at the effects of credibility and child race on guilt. The main effect of child race was not statistically significant, $F(1,161) = 0.87, p = 0.35$. The main effect of credibility was highly statistically significant, $F(4,161) = 48.04, p < 0.001$. Mock jurors were significantly more likely to perceive the perpetrator as guilty when they believed the child witness's testimony, regardless of witness race. Finally, the interaction between child race and credibility was not statistically significant, $F(4,161) = 0.81, p = 0.52$. Guilt ratings did not vary as a result of the relationship between child race and credibility.

The impact of child race on an empathy measure (*A child's life should be protected to a higher degree than an adult's life.*) was assessed. A one-way ANOVA revealed no statistically significant differences between groups, $F(1,169) = 1.16, p = 0.28$. Participants were not statistically less empathetic towards Black child witnesses. A two-way full factorial ANOVA was performed on the same measure of empathy, as well as child race, on verdicts. The main effect of empathy was statistically significant, $F(4,161) = 4.37, p = 0.002$. Independent of race, participants had statistically more guilty verdicts when they felt more empathy towards the child witness. The main effect of child race was not statistically significant, $F(1,161) = 1.27, p = 0.26$. The interaction between child

race and empathy was not statistically significant, $F(4,161) = 0.46, p = 0.76$. The relationship between empathy and guilt ratings did not depend on child race.

To test Hypothesis II, a two-way ANOVA was conducted to evaluate the impact of child and perpetrator race on child witness credibility. The main effect of perpetrator race on credibility was not significant $F(1,167) = 0.017, p = 0.90$. This analysis also revealed no statistically significant interaction between child and perpetrator race on perceived credibility, $F(1,167) = 0.004, p = 0.95$. Race of perpetrator did not affect perceptions of the child witness's credibility. Next, a general linear model was performed to assess differences in guilt due to child race, perpetrator race, and credibility. No statistically significant three-way interaction between child race, perpetrator race, and credibility was found, $F(4,151) = 0.96, p = 0.43$. The relationship between child race, perpetrator race, and perceived child witness credibility did not have a statistically significant impact on guilt outcomes. Table 3 summarizes the mean effect of condition on guilt, empathy, credibility, and sentencing.

Race, Moderators, and Guilt Outcomes

After considering differences in means for various measures of credibility and empathy, the impact of these factors and race on guilt was assessed. A logistic regression analysis was used to determine the effects of child race on the likelihood of higher guilty (1) than not guilty (0) outcomes (Table 6). Purpose, age, and gender variables were added to the same multivariate model. Results showed that child race did not impact guilt, $b = 0.30, SE = 1.31, Wald = 0.003, p = 0.95, odds ratio = 0.14$. Additionally, perpetrator race did not impact guilt outcomes, $b = -0.54, SE = 1.31, Wald = 0.17, p = 0.68, odds ratio =$

0.58. Purpose revealed a statistically significant effect on verdict, $b = -0.95$, $SE = 0.36$, Wald = 6.90, $p = 0.009$, odds ratio = 0.39. As a person's purpose decreased, the odds of finding the perpetrator guilty decreased by a factor of 0.39.

Table 6

Logistic Regression

Dependent Variable: Dichotomous Guilt (0,1)			
Source	Type III		
	Wald Chi-Square	df	Sig.
(Intercept)	12.301	1	.000
Gender	.000	1	.987
Age	.836	1	.361
Child_Race	.009	1	.926
Perp_Race	.333	1	.564
Child_Race * Perp_Race	.211	1	.646
<u>Purpose</u>	19.870	1	.000
Child_Race * Purpose	.051	1	.822
Perp_Race * Purpose	.081	1	.776

Hypothesis II was tested using an interaction between perpetrator and child race. No significant interaction was found, $b = -0.38$, $SE = 0.82$, Wald = 0.21, $p = 0.65$, odds ratio = 0.69. Overall, the full model compared against a constant was statistically significant, $\chi^2(8) = 30.49$, $p < 0.001$. Adding these predictors alone has not increased the ability to predict guilt outcomes by participants. The model correctly classified 75.5% of guilt outcomes, a slight improvement (73.0% with constant alone) when predictors are added to the model. It explained 28.9% of the variance (Nagelkerke R^2).

Although a significant main effect was found for purpose, it was believed that the inclusion of other predictors could improve the predictive power of the model. This was not implemented in the logistic regression model due to concerns with overfitting since

many predictors are highly correlated. Since continuous and categorical measures of guilt were strongly correlated, $r = -0.96$, $N = 159$, $p < 0.001$, the impact of child race and perpetrator race on verdicts were examined using a continuous measure of guilt. Using a five-point or more Likert scale as continuous data has been supported by several empirical studies (Glass, Peckham, & Sanders, 1972; Rasmussen, 1989). A multivariate general linear model with high-explained variance ($R^2 = 0.78$) was used (see Table 7).

Table 7

General Linear Model

Dependent Variable: Guilt (1,2,3,4,5)					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	321.73	28	11.490	17.648	.000
Intercept	68.501	1	68.501	105.207	.000
Gender	.439	1	.439	.674	.413
Age	.665	1	.665	1.021	.314
<u>Child_Race</u>	1.915	1	1.915	2.942	.089
Perp_Race	.396	1	.396	.608	.437
Child_Race * Perp_Race	.147	1	.147	.226	.635
Purpose	.115	1	.115	.177	.674
<u>Child_Race * Purpose</u>	1.996	1	1.996	3.066	.082
Perp_Race * Purpose	.013	1	.013	.020	.888
<u>Dangerousness</u>	42.808	4	10.702	16.437	.000
<u>Believe_Testimony</u>	16.617	4	4.154	6.380	.000
Life_in_Danger	3.853	4	.963	1.479	.212
Age_Believe	3.278	4	.820	1.259	.289
ChildLife_Protect	4.494	4	1.123	1.725	.148
Error	92.457	142	.651		
Total	1281.000	171			
Corrected Total	414.187	170			

A main effect for child race was marginally significant, $F(1, 142) = 2.94$, $p = 0.09$, $\eta_p^2 = 0.02$. Guilt ratings decrease when moving from Black to White child witness groups.

Additionally, a main effect for dangerousness (*How dangerous do you find the intruder?*) was highly significant, $F(4, 142) = 16.44, p < 0.001, \eta_p^2 = 0.32$. Perceptions of guilt increase the more dangerous a perpetrator is viewed. Finally, a main effect for testimony belief (*Due to age, R.J.'s testimony should not be believed.*) was highly significant, $F(4, 142) = 6.38, p < 0.001, \eta_p^2 = 0.15$. The more subjects agreed that the child witness's testimony was less credible due to age, the less guilty they rated the intruder.

Interestingly, a marginally significant interaction between child race and purpose appeared, $F(1, 142) = 3.07, p = 0.08, \eta_p^2 = 0.02$. Child race had a marginally significant effect on guilt outcomes depending on purpose levels. A look at the Estimated Marginal Means tables indicates that, when purpose is at its highest, child race group differences on mean guilt are reduced. When a person has a low sense of purpose, the mean difference gap is widened, with the perpetrator in the White child conditions found guiltier than Black child conditions.

Chapter 6: Discussion

General Discussion

This study sought to bring clarity to the gray area surrounding race and child witness credibility. It was believed that Black children would be perceived as less credible due to differences in empathy between racial groups. Overall, witness credibility and empathy did not vary as a result of child race. Together, these findings suggest that the impact of child race alone is not driving guilt and sentencing outcomes.

Empathy and credibility were not statistically affected by child race. Jurors did not significantly differ in their empathetic response to the Black or the White child witnesses. Similarly, the two-way interaction between empathy and child race did not significantly impact verdicts. Credibility did not significantly differ between Black and White child groups. The three-way interaction between credibility, child race, and perpetrator race did not reveal significant effects on verdicts. While empathy and credibility were highly correlated with guilt outcomes, the race of child does not interact with these measures to support a statistically significant racial difference in overall witness credibility.

A person's sense of purpose was highly correlated with guilt. Although purpose did not have a significant main effect in the general linear model, it had a highly significant main effect in the logistic regression model. Due to problems of overfitting, the logistic regression model could not include all predictors from the general linear model. It is possible that the main effect of purpose was obscured by multicollinearity in the general linear model.

Interestingly, purpose emerged as a potential moderator of racial biases. The

interaction between purpose and child race was marginally significant in the general linear model, implying that racial effects on guilt may be dependent on a person's sense of purpose. A look at the extreme levels for a person's sense of purpose revealed a possible direction of effects. When a person had a high sense of purpose, the gap in mean differences for perceptions of guilt closed. Low purpose revealed the converse effect. Unfortunately, purpose was difficult to accurately assess in a dichotomized form of high and low due to a substantial group of subjects falling in a middle range. A stronger effect may be missing due to this.

Race of perpetrator did not emerge as a consistently significant effect on guilt or sentencing under several analyses. This outcome was surprising considering the extensive literature on racial differences in legal outcomes (Hymes, Leinart, Rowe, & Rogers, 1993; Demuth & Steffensmeier, 2004; Albonetti, 1997). It was predicted that the inclusion of perpetrator race in the study's design would interact with child race by moderating racial biases against the Black child witness. Child witness credibility did not significantly vary between Black and White child conditions as a function of perpetrator race. The interaction between child and perpetrator race did not significantly affect guilt. Overall, perpetrator race did not significantly impact guilt outcomes. Participants may have found the evidence in the case compelling enough to convict the perpetrator, finding other considerations unnecessary.

Disproportionately high sentencing recommendations were also unanticipated. Although approximately 25% of participants did not believe the intruder was guilty, only 1 person recommended no jail time for the defendant, regardless of condition. Once

again, this may be a reflection of the opportunity to be punitive when the facts of the case are sufficiently strong.

Although statistically significant effects between race and legal outcomes were not found, the data reveals some trends worthy of attention. Despite no significant main effects or interaction between child and perpetrator race on guilt, differences in means were noted. The perpetrator in conditions with a Black child was found not guilty 5.7% more than the White child conditions. A closer look at perceptions of guilt reveals an 8.1% difference in the highest level of guilt assigned to the intruder for White conditions. Similarly, Black perpetrators were found not guilty 5.7% less than White perpetrators. At the highest level of guilt (*Extremely guilty*), Black defendants were rated 5.9% more than White defendants.

While not a statistically significant finding, conditions with a White child had a pattern of higher mean credibility scores than Black child conditions. Participants had the highest level of empathy under Condition 2 (White Child, Black perpetrator), while other levels of empathy were at approximately the same level. It is possible that a racial effect may exist, but may have been masked by other factors. A racial effect may not have been captured in the study due to limitations outlined in greater detail below.

Limitations

There is reason to believe ambiguity was a critical factor in the study failing to find significant results. Sommers & Ellsworth (2003) summarizes the consequences of this drawback:

“When salient norms regarding racism are absent... White perceivers often let their guard down, allowing their behavior to be influenced by anti-Black attitudes and prejudice. In light of this finding, we believe that White juror bias may be most likely when a trial is not racially charged and jurors’ concerns about racism are not made salient.”

Mock jurors may have been sufficiently cued to the study’s purpose to examine racial attitudes that the true state of implicit prejudices were overshadowed by an attempt to maintain an appearance of being unbiased, even in an anonymous study. Even though the twice mention of race may not qualify as an “explicitly racially charged” case summary, Sommers & Ellsworth (2000) advocate “when testimony suggests criminal allegations against a defendant may be racially motivated, Whites no longer racially discriminate” (as cited in Pearson, Dovidio, & Gaertner, 2009). Trends in the data support the mere suggestion of race may be powerful enough to activate efforts against racial discrimination. Future studies should be cautious to employ a measure of implicit racial biases that better protects against the red flag of a race study.

Several statistical concerns arose throughout the study. Due to participants that did not meet the criterion for inclusion in the study (e.g., failed manipulation checks), sixty-one participants were removed from the sample. This further reduced power to discern statistically significant differences. Additionally, the objective at the start of the study was to examine differences among racial groups. Unfortunately, the sample lacked diversity, with the majority of the sample (85%) being White/Caucasians. Because these numbers resulted in an unrepresentative group of prospective jurors across the United

States, the 15% that identified one or more other racial groups were excluded from the analyses. This allowed a more focused look at how the effects may manifest for a White American population. All things considered, future studies should use a larger sample that is better equipped to detect smaller effects of greater importance for a type of study where detecting effects already poses several challenges.

Multicollinearity may have affected data analysis. Several of the items measured were highly correlated with guilt, and each other. It is likely that purpose was one of the predictors affected by this statistical phenomenon. Purpose was unsurprisingly highly correlated with other measures, such as believing the child's testimony (a credibility measure), $r = 0.40$, $N = 171$, $p < 0.001$, and believing the child witness's life was in danger, $r = 0.47$, $N = 171$, $p < 0.001$. This could explain why the main effect of purpose in the general linear model was not significant.

Finally, other dependent measures should be considered. Since empathy was considered the theoretical backbone to varying credibility ratings for the child witness, a more extensive look at its impact is warranted. Despite the high correlation among empathy measures used in the study, other measures that elicit stronger emotions from jurors may be a more accurate gage of juror empathy. Similarly, more specific questions could be used to assess mock jurors' perceptions of child credibility.

Future Research

This topic could be reexamined with a more diverse sample of participants. Increasing diversity could reveal novel effects unique to other races. It may reveal a

pattern of stronger empathy effects for certain racial groups (Bottoms, Golding, Stevenson, Wiley, & Yozwiak, 2007).

Using an alternative case type also merits consideration. It is possible that a home invasion scenario was not unnerving enough to elicit empathy from mock jurors in the study. While it is acknowledged that participants should not experience distress when participating in an empirical study, in accordance with up-to-date Institutional Review Board bylines, a distinct set of case facts may better approach that threshold without overstepping. Correspondingly, different case types may extract distinct theoretical reasons for why a racial bias may exist.

A modification suggested for a follow-up study is the use of photographs in addition to text for perpetrator and witness descriptions. Photographs could provide a subtle way of making racial differences known without priming participants. This method could yield more accurate results. However, it is important to be wary of other effects this methodology may trigger. For instance, the attractiveness of communicators has been shown to affect communication skills, such as increasing agreement with communicator (Chaiken, 1979). These findings could extend to a courtroom setting where witnesses are communicating their testimony to a jury. Therefore, future studies should use photographs with a high consensus of neutrality, or control for these effects.

Conclusion

Although strong racial effects were not found in this study, more work should be done to understand the role racial biases play in the law. Does race affect a child witness's credibility under less compelling circumstances? If yes, do these effects extend

to an adult population? If credibility is impacted by race, what effect do these biases have in a jury? Knowledge about the impact of race in the legal system has been inadequate. This study highlights the complicated nature of racial biases and encourages further dialogue on this topic.

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APPENDIX

A. *Case Scenario* (Condition 1)

On November 20, 2013, a man entered through the unlocked basement window of the Brooklyn, NY home of 34-year-old Shawn and 33-year-old Toni Hines at approximately 3am. The married Caucasian couple has lived in the area for five years. Sleeping inside were the couple in their bedroom and their 8-year-old, R.J., in the bedroom across the hall. Shawn and Toni were awoken by R.J.'s screams at approximately 3:15am. R.J. testified to being awoken by the sound of the bedroom door opening and felt an unfamiliar hand attempt to cover both mouth and nose immediately after. Shawn rushed across the hall to the child's aid. The intruder was found in R.J.'s dimly lit bedroom holding a pistol to the 8-year-old's head and yelling, "Where's the money?"

R.J. testified that it was difficult to see due to the only source of lighting being the dim light from the hallway, and that R.J. could not locate and wear the corrective lens, but was able to see Shawn tackle the armed intruder. R.J. reported punches, an exact quantity unknown, after Shawn tackled the perpetrator to the ground for approximately five minutes. R.J. testified that the intruder raised the gun towards Shawn's chest, but Shawn pulled the arm of the perpetrator towards the ground and the gun was discharged on Shawn's leg instead. R.J. approximates that the gun was fired by the intruder three more times, one of which struck the arm of Toni as she attempted to retreat to her bedroom with R.J. From Shawn and Toni's bedroom, R.J. reports hearing the intruder

escaping from the home through their front door. Toni called 911 and the family waited for the police to arrive.

Shawn, Toni and R.J. were all questioned upon the arrival of the police. R.J. was unfamiliar with many aspects of the occurrence and could only remember the intruder was wearing gloves and denim pants at the time of the attempt to place a hand over R.J's mouth and nose. Because the intruder was standing behind the child for part of the home invasion and R.J. could not locate the corrective lenses, the child witness was not able to provide many physical attributes with confidence, but was able to describe the intruder as "shorter than Shawn" (< six feet), thick eyebrows, full beard, small ears, and a sharp nose. Due to lighting conditions, R.J. could not identify the race of the intruder conclusively. The police also examined video cameras that surrounded the exterior of the Hines' household, but due to inclement weather, camera evidence was blurry and could not be deciphered. The only substantial evidence the police could gather from the camera was that the suspect entered through the unlocked basement door. Footprints through the snow also revealed the perpetrator walking around the perimeter of the house and hovering near windows before finally entering the home.

Shawn and Toni Hines were treated at the hospital for non-life threatening injuries. In the weeks following, R.J. remained frightened. Psychologist Brenda Chamberlin stated that the child suffered from mild post-traumatic stress disorder caused by the physical stress of attempted suffocation as well as emotional stress stemming from the threat of a firearm to the head. Shawn testified that R.J. spends

nights in their [Shawn and Toni's] bedroom and does not want to be away from them or left in the dark, a behavior that started after the incident.

Jamie Purcell, a 33-year-old Caucasian man, was arrested at a police stop after matching the description of red Dodge truck provided by Toni, the firearm found inside the vehicle, and the brief physical description given by Shawn. R.J. was asked to identify the perpetrator from a lineup, and identified Jamie Purcell as the intruder. Purcell was charged with four counts: first-degree burglary, first-degree assault (as to Shawn), first-degree assault (as to Toni) and second-degree assault (as to R.J.). Each count was enhanced with possession of a deadly weapon.

B. Questionnaire and Variable Key

QUESTIONNAIRE		
	QUESTIONS	VARIABLE NAMES
<i>Demographic Questions</i>		
1.	Age	Age
2.	Race	Race
3.	Gender	Gender
<i>Affect Misattribution Procedure (AMP)</i>		
4.	<u>How comfortable do you feel with people of the following racial groups?</u>	
	a. African American/Black	Comfort_Black
	b. Latino/Hispanic	Comfort_Latino
	c. Asian	Comfort_Asian
	d. Caucasian/White	Comfort_White
5.	<u>How often do you feel sympathy for people of the following racial groups?</u>	
	a. African American/Black	Sympathy_Black
	b. Latino/Hispanic	Sympathy_Latino
	c. Asian	Sympathy_Asian
	d. Caucasian/White	Sympathy_White
6.	<u>Where would you rate the following racial groups on these scales?</u>	
	a. Reliability	
	i. African American/Black	Reliable_Black
	ii. Latino/Hispanic	Reliable_Latino
	iii. Asian	Reliable_Asian
	iv. Caucasian/White	Reliable_White
	b. Intelligence	
	i. African American/Black	Intelligent_Black
	ii. Latino/Hispanic	Intelligent_Latino
	iii. Asian	Intelligent_Asian
	iv. Caucasian/White	Intelligent_White
	c. Resistant / Strong against adversity	
	i. African American/Black	Resilient_Black
	ii. Latino/Hispanic	Resilient_Latino
	iii. Asian	Resilient_Asian
	iv. Caucasian/White	Resilient_White
7.	<u>How often do you interact with people of a different race than you?</u>	
	a. African American/Black	Interact_Black

	b. Latino/Hispanic	Interact_Latino
	c. Asian	Interact_Asian
	d. Caucasian/White	Interact_White
8.	<u>How often do you interact with children of a different race than you?</u>	
	a. African American/Black	IntKids_Black
	b. Latino/Hispanic	IntKids_Latino
	c. Asian	IntKids_Asian
	d. Caucasian/White	IntKids_White
9.	<u>How many close friends do you have of a different race? [Integer]</u>	Friends
10.	<u>How often does your work bring you in contact with children of a different race?</u>	
	a. African American/Black	Work_Black
	b. Latino/Hispanic	Work_Latino
	c. Asian	Work_Asian
	d. Caucasian/White	Work_White
Life Engagement Test		
11.	There is not enough purpose in my life.	Purpose_1
12.	To me, the things I do are all worthwhile.	Purpose_2
13.	Most of what I do seems trivial and unimportant to me.	Purpose_3
14.	I value my activities a lot.	Purpose_4
15.	I don't care very much about the things I do.	Purpose_5
16.	I have lots of reasons for living.	Purpose_6
Manipulation Checks		
17.	The intruder, Jamie Purcell, was found by Shawn and Toni in the bedroom of 8-year-old R.J. Hines.	Check_1
18.	What do you think the gender of child witness (R.J. Hines) was?	Check_2
19.	Purcell entered the home through the locked front door.	Check_3
20.	What was the race of the intruder?	Check_4
21.	What was the gender of the intruder?	Check_5
22.	What was the race of the child witness?	Check_6
23.	R.J. describes the perpetrator taller than his father, Shawn.	Check_7
Dependent Measures		
24.	How guilty of the crimes charged do you believe the intruder is?	Guilt
25.	What jail sentence would you recommend for the intruder?	Sentencing
Child General Believability Scale		

26.	How much do you believe the testimony provided by the child, R.J., on the events of the crime?	Believe_Testimony
27.	How much do you believe the lineup selection by the child, R.J., on the events of the crime?	Believe_Lineup
28.	Do you believe the level of trauma R.J. exhibits impacts the child's ability to give an accurate testimony of the events?	Trauma
29.	Due to his age, R.J.'s testimony should not be believed.	Age_Believe
30.	Due to his age, R.J.'s testimony is less important than other pieces of evidence.	Age_Importance
31.	A child's testimony should never be the ultimate piece of evidence that convicts a defendant.	Testimony_UltimateEvidence
32.	R.J.'s testimony was not influenced by other characters (i.e. his parents).	Testimony_Influenced
33.	R.J.'s testimony was as accurate as an adult's testimony.	Testimony_Accurate
Child Victim Empathy Scale		
34.	How dangerous do you find the intruder?	Dangerousness
35.	R.J.'s life in grave danger due to the actions of the intruder.	Life_in_Danger
36.	A child's life should be protected to a higher degree than an adult's life.	ChildLife_Protect
37.	The punishment of the perpetrator should take into account the consequences of a crime beyond the single incident.	Punishment
*The scale [1 = Extremely; 5= Not at all] was used for the following questions: 11-16, 24, 26-37		
*The scale [1 = Always; 5= Never] was used for the following questions: 7-8, 10		
*The scale [1 = no jail time, 2 = 1-3 years, 3 = 4-6 years, 4 = 7-9 years, 5 = 10+ years] was used for the following question: 25		
*The scale [1= Comfortable; 5=Uncomfortable] was used for the following questions: 4a-4d		
*The scale [1 = Sympathetic; 5= Unsympathetic] was used for the following questions: 5a-5d		
*The scale [1 = Dependable; 5 = Undependable] was used for the following questions: 6ai-6aiv		
*The scale [1 = Intelligent; 5 = Unintelligent] was used for the following questions: 6bi-6biv		
*The scale [1 = Resilient/Quick to recover; 5 = Delicate/weak] was used for the following questions: 6ci-6civ		