DETERMINATIONS OF MENTAL RETARDATION: THE INFLUENCE OF STANDARD OF PROOF

by

DEBRA R. CHEN

A THESIS

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ABSTRACT

The effects of two standards of proof (preponderance of the evidence and clear and convincing) and quantified definitions (quantified and non-quantified definitions) on two dependant variables (mock juror determinations of intellectual disability and numerical definitions of the standards of proof) were examined. One-hundred and thirty-nine undergraduate students were asked to read a transcript and determine if the defendant in the transcript had ID. Participants were also asked to complete questionnaires designed to measure their need for cognition, right-wing authoritarianism, endorsement of negative attitudes regarding individuals with intellectual disability, and their intelligence. Analyses indicated that standard of proof and quantification significantly affected whether mock jurors believed the defendant met criteria for ID and their numerical definitions of the two standards. There were no significant moderating variables. Limitations of and implications from the study are discussed.

DEDICATION

This thesis is dedicated to my mentor, Karen L. Salekin, PhD., whose patience and faith unfailingly supported me and this project. With her humor and kindness, she helped me learn how to become a stronger writer and a more insightful researcher.

LIST OF ABBREVIATIONS AND SYMBOLS

α Chronbach's alpha coefficient (degree of internal consistency)

ANOVA Analysis of Variance

B Unstandardized coefficient

 χ^2 Chi-square

df Degrees of freedom

F Fisher's F Ratio

GLM General Linear Modeling

Mean (arithmetic average)

Max Maximum value

Min Minimum value

N Number of participants

 η_p^2 Partial eta squared (strength of observed power)

p Probability

p. Page number

r Pearson's correlation (measure of association between variables)

SD Standard deviation

SE Standard error

Sig. Significance

 x^2 Pearson's chi-square statistic

< Less than

= Equal to

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1 Introduction

Introduction to Standards of Proof

A standard of proof is the standard a party (i.e. prosecutor, plaintiff, defendant) must meet in order to prove their case. The standard represents the minimum degree to which a juror or judge is convinced that the party's claim is true in order to decide in their favor. The function of a standard of proof is to "instruct the factfinder as to the degree of confidence that our society thinks he should have in the correctness of factual conclusions for a particular type of adjudication" (Browning, 1986, p. 359). In civil and criminal cases, there are three possible standards of proof. The lowest, or least demanding, of the three standards is preponderance of the evidence (POE). This standard has typically been defined as chances are that it is more likely than not that the party's claim is true. The intermediate standard of proof is clear and convincing (CAC). This standard is typically defined as chances are that it is substantially more likely that the party's claim is true. The highest, and most demanding, of the three standards is beyond a reasonable doubt (BRD). This standard has typically been defined as the smallest presence of doubt that the party's claim is true (see Clermont & Sherwin, 2002).

It has been argued that the definitions of standard of proof provided to jurors are very confusing and that quantifying these definitions would help jurors understand them better (Horowitz, 1997). Accordingly, there has been great debate regarding whether these definitions should be quantified in an effort to standardize them. People who are opposed to quantifying standards of proof generally support their position in the following three ways: (1) it is difficult

to ascertain what numbers would be appropriate (e.g., 75% certainty versus 78% certainty), (2) attempts to assign such numbers to standards of proof will cause confusion, and (3) that quantifying the standards will cause jurors to focus solely on quantified data and evidence, instead of qualitative information (Franklin, 2006). It has also been argued that numbers can be ambiguous (e.g., individuals may have personal interpretations of what 90% certain means) (Tillers & Gottfried, 2006; Weinstein & Dewsbury, 2006). Proponents of the quantification of standards of proof do not believe that the application of a numerical base will negatively effect decision-making, but instead believe that standardization would result in more fair and just determination of guilt. In short, the uniformity would provide concrete criteria from which jurors can make their determinations (Tillers & Gottfried, 2006).

Several studies have specifically examined quantifications of standards of proof. Simon and colleagues (1969, 1970, 1971) conducted a series of studies to determine how judges and other legal decision-makers quantify standards of proof. They surveyed judges (trial level, both state and federal), potential jurors, and college students and found that judges associated BRD, on average, as a 8.9 out of 10 (89%) certainty and that jurors and students found the standard to be approximately 8.6 out of 10 (86%). They further discovered that judges equated POE with 55% (5.5 out of 10), whereas jurors and students interpreted the standard to be approximately 75% (7.5 out of 10). Similar findings were obtained by McCauliff (1982). McCauliff surveyed 177 judges to determine which percentage of conviction they thought would be appropriate for each standard. Although the results indicated that a range of percentages could be appropriate, the majority of the judges endorsed 50%, 75%, and 90% as most appropriate for the POE, CAC, and BRD respectively. These values have also been cited by others to be appropriate numerical definitions (Kagehiro, 1990; Melton, Petrilla, Poythress, & Slobogin, 2007).

Standards of Proof in Jury Instructions

In cases involving jury determinations, the standard of proof is typically portrayed to the jurors in the form of jury instructions. At the time of writing, available research has provided varying results regarding whether jurors are sensitive to standards of proof. In a series of studies conducted by Kagehiro and Stanton (1985), college students were asked to read a trial summary and the judge's instructions in a civil case, and to individually render a verdict for the plaintiff or the defendant. The investigators found that the verdicts changed as a function of standard of proof (i.e. preponderance of the evidence, clear and convincing, and beyond a reasonable doubt), but only when the standards of proof were quantified (i.e. 51%, 71%, 91%). When the students were given only legal definitions of the standards of proof, their verdicts did not significantly differ from each other. Kagehiro (1990) replicated these results in a study of college students in three different states. These studies provide evidence that quantifying definitions of standards of doubt help jurors' accuracy in understanding standards of proof.

The previous studies examined individual decision-making. MacCoun and Kerr (1988) investigated the effect of standard of proof on deliberating mock juries. In this study, 168 college students were asked to read a one-page summary of a criminal case, then were given jury instructions involving unquantified definitions of either POE or BRD, and were split into two types of groups: a deliberation group and a private argument group. The results indicated that participants were able to distinguish between the two standards and assigned POE an average value of .69 and BRD a mean value of .81. Essentially, the participants interpreted stricter standards for BRD and less strict standards for POE. However, these participants came to similar verdicts regardless of their interpretation of the standard of proof.

The little research available to date has demonstrated that changes in mock jury instructions have a minimal effect on juror verdicts. In a study of 140 mock jurors, investigators found similar findings of guilty, guilty but mentally ill, and not guilty by reason of insanity, regardless of the standard of proof in their instructions (Poulson, Braithwaite, Brondino, & Wuensch, 1997). Similar results were obtained by Ogloff (1991). In his studies with college students and community members, Ogloff discovered that, after manipulating the standard of proof (POE, CAC, BRD), the majority of participants were able to accurately recall the standard of proof stated in their instructions. However, the groups' verdicts were the same despite being given different standards of proof in their instructions.

To date, only one study has examined the standard of proof in the determination of intellectual disability. Reardon, O'Neil, and Levett (2007) performed an online study wherein the participants were directed to read general information regarding aggravating and mitigating evidence, the possible sentences available (e.g., death sentence or life without parole) and the jury's instructions. The participants read the evidence and proceeded to determine if the defendant in the case had ID. The results indicated participants were insensitive to the different standards of proof such that the participants had similar findings of ID regardless of the standard of proof in the juror instructions.

Intellectual Disability and the Legal System

In 2002, the United States Supreme Court ruled that individuals with intellectual disability could not be sentenced to death (*Atkins v. Virginia, 2002*). The Court provided minimal guidance as to how to determine if offenders have ID and left the states "the task of developing appropriate ways to enforce the constitutional restrictions upon its execution of sanctions" (p. 12). However, the Justices also stated that the definitions of ID must be guided by the clinical

definitions set by the American Association of Mental Retardation (AAMR; now the American Association of Intellectual and Developmental Disabilities; AAIDD) and the American Psychiatric Association Diagnostic and Statistical Manual (American Psychiatric Association, APA, 2000). Both associations define ID using three main criteria: 1) intellectual deficits (i.e. IQ scores approximately 70 and below), 2) deficits in adaptive behavior (i.e. deficits in everyday skills that aid in adapting to one's environment), and 3) manifestation of the disorder before the age of 18. Although states will be guided by the two definitions the Supreme Court referred to, other factors pertinent in a determination of ID were not addressed. These factors included which tests should be used, type of experts requested (e.g., clinical psychologists, developmental psychologists, psychiatrists), and the working definitions of intellectual deficits and adaptive behavior deficits, which were left up to the state to determine (Veraldi & Veraldi, 2008).

In addition to not clarifying the methods with which the state should determine the presence of ID, the Court in *Atkins* did not specify to which standard of proof the defendant would be held. As a result, it is left up to the state to determine whether a defendant must prove intellectual disability by preponderance of the evidence (POE), clear and convincing evidence (CAC), or beyond a reasonable doubt (BRD). At the time of writing, not all states have statutes regarding the determination of ID, and of those that do, not all of them include the same standard of proof or any standard of proof. Currently, 32 states have statutes providing criteria for the determination of ID; of those states, 27 have set POE as their standard of proof, and four states have set CAC. Only one state applies the BRD standard (i.e., Georgia), but this standard was recently declared unconstitutional by the 11th Circuit Court (*Hill v. Schofield*, *2010*). The Court explained in its opinion in this case that the beyond a reasonable doubt standard was too high to be realistically met in *Atkins* cases. Specifically, the Court stated the following in its opinion:

No matter the degree the procedural due process with which the mentally retarded defendant is provided, the hard fact is that he will rarely, if ever, be able to overcome the immense hurdle of demonstrating which is nearly always a subjective medical diagnosis beyond a reasonable doubt. (*Hill v. Schofield*, 2010, p. 16)

Proving Intellectual Disability

One of the difficulties of proving intellectual disability is the existence of strong and persistent unsupported beliefs and stereotypes regarding the defining characteristics of the disorder. While predicting which beliefs come into play in any one case is not possible, studies have shown that stereotypes do exist. For example, in a multinational study of attitudes toward individuals with ID, it was discovered that approximately 83-93% of the American participants believe that individuals with ID can wash and dress, tell time, and maintain friendships, but less than 50% of those participants believed that individuals with ID can understand a news event or handle an emergency. In general, the participants believed that individuals with ID are only somewhat capable of making their own decisions regarding their living and working situations (see Siperstein, Norins, Corbin, & Shriver, 2003). In addition, a recent study examined how college students would represent an individual with ID on measures of adaptive behavior (Doane & Salekin, 2009). Specifically, these students were separated into four groups (control, ID, mild ID, and moderate ID) and were asked to represent the level of functioning assigned to their group. The results indicated that the students assigned significantly lower levels of functioning than would be appropriate for their assigned group (e.g., representing severely impaired skills to a mild ID level of functioning).

There is also some evidence that professionals who work with individuals with ID have their own unsupported beliefs and stereotypes regarding defining characteristics of ID. For example, it has been demonstrated that pediatricians believed that a person with mild ID could not raise children or find their own way in unfamiliar surroundings (Wolraich, Siperstein, & O'Keefe, 1987). It has also been found that physicians believe that individuals with mild ID are not capable of independent living or working in competitive environments (Wolraich & Siperstein, 1986). Thus far, the research supports the existence of stereotypic beliefs regarding the functional abilities and personal characteristics of individuals with ID.

In the legal realm, stereotypic beliefs hinder the ability of offenders with ID to obtain the necessary protections. Case law indicates that the courts, at times, rule out the diagnosis of ID on the basis of ability (Ex parte Briseno, 2004; Wiley v. State, 2004) rather than on the presence of disability. Using a recent Mississippi case as an example, the Supreme Court in Mississippi denied an evidentiary hearing to determine if the defendant had ID because he demonstrated abilities such as the ability to operate heavy machinery, hold a job for more than one year, obtain a driver's license, buy a car, and see to the care of others (Wiley v. State, 2004). In addition, in a case in Texas, the Court decided that the defendant did not have ID because he demonstrated the following abilities/criminal behaviors: "finding and keeping a job" (p. 7), getting married, giving rational responses to external stimuli, clearly expressing himself in everyday interpersonal communication such as giving "testimony which was clear, coherent, and responsive" (p. 7), and "reading magazines and filling out commissary forms appropriately" (p. 7) (Ex parte Briseno, 2004). In this case, these skills were considered to be examples of adaptive behaviors and were used in the decision to rule out the possibility of intellectual disability. In fact, the Court in this case in its opinion contrasted how the defense's expert's position was to "look for the person's adaptive deficits and limitations, putting aside this positive adaptive skills" whereas the state's

expert's position was to "look to the person's positive adaptive abilities and coping skills," instead of the adaptive behavior deficits (*Ex parte Briseno*, 2004, p. 5).

In another Atkins case, a Magistrate Court judge found the defendant to not have ID because, among other reasons, he was "able to work" (p. 75), he escaped from jail and continued running from authorities, "bought and traded vehicles" (p 78), and that he was able to "follow the advice of his attorneys, and with minimal trouble, answer questions" during court hearings (p. 85) (Holladay v. Campbell, 2003). However, upon appeal, the District Court judge in this case found that although the defendant demonstrated some adaptive behavior strengths, the presence of several adaptive behavior deficits were important to a finding of ID, such as deficits in home living (e.g., not handling money well), personal safety (e.g., playing around train tracks during childhood), and work (e.g., having jobs which did not require higher levels of skills or training). Ultimately, the District Court judge in this case found the defendant to have ID. In addition, the District Court stated in its opinion that it is important to "not pick and chose as to overemphasize certain characteristics" (p. 26) since limitations can co-exist with strengths in individual with ID. Lastly, the 11th Circuit Court upheld the District Court's finding that the defendant did have ID, citing many of the same reasons provided by the District Court (Holladay v. Allen, 2006). The opinions filed in these cases demonstrated that triers of fact can focus on adaptive behavior abilities and strengths, instead of deficits in determinations of ID.

It is to be expected that all triers of fact will look to the crime for evidence to support or refute the diagnosis of ID. However, it would only be in extreme cases that evidence of the crime can clearly rule-out the possibility of ID. Examples might include orchestrating a pyramid scheme, being in charge of mass internal distribution of illicit substances, and the like. In the typical *Atkins* case, signs that clearly indicate higher level functioning are typically not present.

In their most recent handbook of intellectual disability (AAIDD, 2010), the American Association of Intellectual and Developmental Disabilities (AAIDD) has stated that it is inappropriate to use past criminal behavior, or problem behavior, to determine adaptive abilities in the determination of ID (AAIDD, 2010).

In a survey of 13 psychologists and seven psychiatrists who had conducted *Atkins* cases in Texas, it was discovered that 19 of the 20 participants believed that it was "always" or "sometimes" appropriate consider criminal behavior in assessing ID. These individuals believed that these behaviors can demonstrate planning and organizational abilities and can be indicative of everyday behaviors. The one participant who indicated that using criminal behavior for these assessments was clearly inappropriate reasoned that doing so would create the "possibility of a defendant being seen as having an impairment in adaptive functioning primarily because he is an impulsive, disorganized, and an overall unsuccessful criminal" (Young, Boccaccini, Conroy, & Lawson, 2007, p. 174).

In a recent examination of pre-*Atkins* transcripts for trials in Texas, investigators found that of the 19 transcripts coded, 13 of them included references to criminal behavior as evidence of adaptive functioning and that each transcript contained an average of nine references to these behaviors. Examples of behavior that were cited include cutting phone lines, using disguises, and having the ability to make decisions (Kan, Boccaccini, McGorty, Noland, & Lawson, 2009). What is lacking in the research is a clear understanding of what offenders with ID are capable of doing and what is beyond their abilities (Salekin, Olley, & Hedge, 2010). It has been suggested that offenders with ID do not differ from offenders who do not have ID in terms of criminal behavior or other identifiable characteristics associated with offenders and that it can be

inappropriate to use criminal behavior in order to rule out diagnoses of ID (Salekin, Olley, & Hedge, 2010). However, it is clear that research is necessary before conclusions can be drawn.

This issue is further complicated by the fact that offenders with ID are likely to be functioning at the level of mild intellectual disability (with an IQ of approximately 55–70). These individuals are more likely to demonstrate a number of strengths in their adaptive abilities in addition to deficits. They are likely to be living independently or with minimal supervision, to be employed in a community setting, and to participate in social activities outside of a structured environment. Thus, in comparison to their more severely disabled counterparts, individuals with mild ID have more opportunities to engage in criminal behavior and are more vulnerable to the negative influences of non–intellectually impaired offenders who reside in the community. As these individuals are likely to demonstrate strengths in certain adaptive skill areas, it is highly possible that if legal decision-makers are focusing on utilizing strengths in order to rule out a diagnosis of ID rather then examining deficits to rule in the diagnosis, offenders with mild ID are particularly vulnerable to being misidentified by these legal decision-makers.

Juror Variables

There is reason to suspect that intrapersonal variables will affect mock jurors' responsiveness or sensitivity to standards of proof. There are a number of intrapersonal factors which may interact with the influence of standard of proof and/or quantification of standards on mock juror determinations of ID. It is possible that these variables may cause a mock juror to ignore the influence of standard of proof or quantification or to be more sensitive to the standard. A few of these variables will be discussed and examined as possible moderating factors in this study.

Need for Cognition

The construct of need for cognition was defined by Cohen and colleagues (1955, 1957) as a "need to structure relevant situations in meaningful integrated ways" or a "need to understand and make reasonable the experiential world" (Cohen, Stotland, & Wolfe, 1955, p. 291). They posited that a need for cognition affects an individuals' motivation to attend to information which would ultimately impact an individual's opinion on a topic. A more recent formulation of the construct was introduced by Cacioppo and Petty (1982) who provided the following definition of a need for cognition: "the tendency for an individual to engage in and enjoy thinking" (p. 116). In a study of the relationship between need for cognition and enjoyment of simple and complex tasks, these investigators found that students with a higher need for cognition enjoyed the complex task more than the students with a lower need for cognition; the opposite relationship was observed for the simple task (Cacioppo & Petty, 1982). The investigators postulated that individuals with a higher need for cognition are more motivated than others to engage in cognitively demanding tasks and that a need for cognition encapsulates a desire, rather than cognitive ability or effort. There is evidence that individuals with a higher need for cognition pursue more rigorous cognitive activity. For example, individuals with a high need for cognition have been shown to search for more information before making a decision than do individuals low in need for cognition (Kim & Kramer, 2006; Levin, Huneke, & Jasper, 2000; Levin & Jasper, 2000; Verplanken, Hazenberg, & Palenewen, 1992; Zhang & Buda, 2006). The results of a meta-analysis indicated that "individuals who are low in need for cognition may need a special incentive to engage in careful message scrutiny" (Cacioppo, Petty, Feinstein, & Jarvis, 1996, p. 230), whereas individuals who are high in need for cognition are

more willing to explore the "merits of the information to which they are exposed" (Cacioppo, Petty, Feinstein, & Jarvis, 1996, p. 230).

Need for cognition is a construct which has been extensively studied in decision-making research (for a meta-analysis, see Cacioppo, Petty, Feinstein, & Jarvis, 1996) and it has been shown that individuals' need for cognition can affect their decision-making in a variety of situations. For example, it has been found that students with a high need for cognition rate a strong argument as significantly more persuasive than a weak argument, whereas students with a low need for cognition rate the two types of arguments as equally persuasive (Cacioppo, Petty, and Morris, 1983). A second example is the finding that individuals with low need for cognition base their perceptions of persuasiveness on the quantity of features in the message rather than the quality and those with a higher need for cognition demonstrate the opposite pattern (Haugtvedt & Petty, 1992). These are just two examples of several which are available in the applicable literature. As will be discussed shortly, an individual's need for cognition can also influence their legal decision-making.

Given that need for cognition has been associated with willingness to participate in complex cognitive activity, it is understandable that an individual's need for cognition can affect their legal decision-making. Legal decisions can include a large amount of information, some of which may be contradictory and confusing. Accordingly, one would expect an individual's willingness to explore all of the presented evidence, or consider the relative quality of some data as compared to other data, would influence their legal decisions. There is some evidence that individuals high in need for cognition are more sensitive to higher quality arguments than individuals low in need for cognition. For example, it has been shown that high need for cognition mock jurors were more likely to give guilty verdicts when presented with evidence

against the defendant that was deemed admissible (i.e., allowed to be considered by the jury), than when it was deemed inadmissible (i.e., not allowed to be considered by the jury). In comparison, the verdicts given by jurors low in need for cognition were not influenced by the admissibility of the evidence (e.g., they gave similar guilty verdicts regardless of whether they were presented with admissible or inadmissible evidence) (Sommers & Kassin, 2001).

Leippe, Eisenstadt, Rauch, and Seib (2004) demonstrated that mock jurors high in need for cognition had significantly more findings of guilt when the case against the defendant was strong, than did jurors low in need for cognition. In addition, Bornstein (2004) demonstrated that mock jurors who were high in need for cognition were not influenced by the defense expert's use of anecdotal information in determining causality in a case, whereas those low in need for cognition were. It has also been shown that individuals with higher need for cognition are more likely to vote a low-quality expert witness as being negligent, than were individuals with lower need for cognition (Salerno & McCauley, 2009).

As discussed, there are several studies which support the belief that need for cognition can play a role in legal factfinders' decision-making. Factfinders' need for cognition can affect their tendency and willingness to consider all of the pertinent facts in a legal case. To date, researchers have not yet examined the role an individual's need for cognition can play in their determinations of ID. Intuitively, it seems appropriate to anticipate that, since the task of determining the appropriateness of a diagnosis of ID can be complicated and cognitively demanding, an individual's need for cognition could influence their engagement in the demands of answering the legal question. Therefore, this study will be the first to determine if mock jurors' need for cognition will affect their determination of ID in an *Atkins* case.

Authoritarianism

Authoritarianism is a construct which has been frequently examined in decision-making research (see, for example, Bray & Noble, 1978; Butler & Moran, 2007; Frederick, 2006; Lieberman & Sales, 2007; Mitchell & Bryrne, 1973; Narby, Cutler, & Moran, 1993). Of import to this study is the evidence that highly authoritarian individuals are likely to endorse stereotypical views of social outgroups (Backstrom & Bjorklund, 2007; Cornelis & Van Hiel; 2006; Dru, 2007; Duckitt, 2006; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Heaven & Quintin, 2003; McFarland, 2010; Whitley & Lee, 2000; Wylie & Forest, 1992). Accordingly, it is possible that authoritarian jurors in *Atkins* cases will endorse stereotypical beliefs about individuals with ID, which will in turn influence whether they will find an offender as having ID. Specifically, if the authoritarian individual incorrectly believes that individuals with ID are unable to demonstrate certain tasks such as driving a car, holding a job, or getting married, they may be more likely to determine that most offenders do not have ID, even if they actually do.

Authoritarianism is an individual factor developed on the "premise that some persons need very little situational pressure to submit to authority, while others often require significantly more" (Altemeyer, 1988, p. 3) and includes "a general acceptance of its [authority's] statements and actions and a general willingness to comply with its [authority's] instructions without further inducement" (Altemeyer, 1988, p. 3). Authoritarian individuals are likely to follow conventional norms and to be punitive toward those who challenge those norms (Lieberman & Sales, 2007). Altemeyer (1996) has described authoritarianism as consisting of three sub-constructs: 1) authoritarian submission, 2) authoritarian aggression, and 3) conventionalism. Authoritarian individuals trust authoritarian powers and are willing to provide authorities with obedience and respect. Authoritarian submission is the deference to established and legitimate sources of authority without argument or doubt. Authoritarian aggression is the antagonism toward parties

that established authorities would be hostile toward (e.g., criminals). Specifically, authoritarian individuals would desire the punishment and control of those who break convention. Lastly, conventionalism is acceptance and support for mainstream social norms.

Considering that authoritarian individuals embrace convention and have little tolerance for practices and behaviors outside of the norm, there is reason to posit that highly authoritarian individuals hold negative attitudes and views of social outgroups. In fact, several studies support the belief that highly authoritarian individuals endorse negative views of social outgroups (Backstrom & Bjorklund, 2007; Cornelis & Van Hiel; 2006; Dru, 2007; Duckitt, 2006; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Heaven & Quintin, 2003; McFarland, 2010; Whitley & Lee, 2000; Wylie & Forest, 1992). Although a majority of the studies have demonstrated that authoritarianism is a significant predictor of generalized prejudice/racism (Backstrom & Bjorklund, 2007; Cornelis & Van Hiel; 2006; Dru, 2007; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Heaven & Quintin, 2003; McFarland, 2010; Wylie & Forest, 1992), there have also been studies which have shown a positive correlation between authoritarianism and negative attitudes toward social outgroups such as drug dealers (Duckitt, 2006) and homosexual individuals (Stones, 2006; Whitley & Lee, 2000).

There is theoretical reason to suspect that authoritarian individuals are more likely to endorse stereotypes than are non-authoritarian individuals. When individuals use stereotypes, they are typically using a heuristic processing style, meaning that they are referring to easily accessible and subjective information (i.e. the stereotype) which is not necessarily logical or factually accurate. Accordingly, it has been demonstrated that authoritarianism is related to "an increased tendency to rely on heuristic-intuitive processing" instead of an analytic processing style (Kemmelmeier, 2010, p. 47). Bastian and Haslam (2006) asked 114 undergraduates to

complete Altemeyer's measure of right-wing authoritarianism (MRWA) and a questionnaire that examines their stereotypes of Aboriginal people. They found that the scores on the MRWA predicted the endorsement of established stereotypes regarding Aboriginal populations. Similar results were found when examining the relationship between authoritarianism and stereotypes regarding African-American individuals (Carter, Hall, Carney, & Rosip, 2006), Turkish individuals (Verkuten & Hagendoorn, 1998), and individuals who have been diagnosed with AIDS (Whitley, 1999).

To date, no studies have examined whether authoritarian individuals would be more likely to support stereotypes regarding individuals with ID, there is good reason to suspect that they would. Endorsement of stereotypes of individuals with ID (e.g., they are not able to care for themselves, have relationships, or plan crimes) could lead people who are high in authoritarianism to incorrectly determine that a defendant does not have ID simply because the defendant does not meet his/her prototype of what an individual with ID would be.

Juror Intelligence and Legal Decision-Making

Intelligence is one of a few cognitive factors (e.g., memory capability, the tendency to affectively versus cognitively process information) which may impact jurors' legal decision-making. There are a number of various mechanisms through which jurors' intelligence may be influential. For example, intelligence may affect jurors' ability to understand basic legal concepts that will be presented during the court case, such as the applicable standards and burdens or proof and the alternative decisions available to the jurors. General intelligence may also influence jurors' capability of comprehending legal jargon (Boyll, 1991) and their ability to use abstract and complex reasoning skills when presented with competing interpretations of the same evidence. Although there are a few theoretical reasons as to why intelligence should be measured

in studies examining juror decision-making, researchers have not yet explored the influence of intelligence on juror decisions. A thorough exploration of the PsychInfo database turned no results examining the influence of juror intelligence on their decision-making.

Purpose

To date, there has been only one study which examined the effect of standard of proof on juror determinations of ID. The results of that study demonstrated that participants had similar findings of ID regardless of the standard of proof in their juror instructions. The difference between the current study and the one of Reardon et al. (2007) is the evaluation of the importance of quantification of standard of proof. As previously mentioned, there is research which suggests that it is likely that numerical definitions of standards of proof affect legal decision-making (Kagehiro, 1990; McCauliff, 1982). Researchers have hypothesized that numerical definitions alter the way mock jurors conceptualize the meaning of standards of proof and as such, in cases where they are charged with determining ID, quantification may make the difference between death eligibility and a maximum life sentence. No one has yet examined whether quantifying standards of proof will affect mock juror determinations of ID. This study not only addressed this gap in the literature, but also examined the effect of four possible moderating factors on the relationship between standards of proof and mock juror determinations of ID: need for cognition, right-wing authoritarianism, stereotypic views of individuals, and intelligence

Lastly, this study included the use of a transcript of a case in which the sole issue of the petitioner was whether or not he met criteria for ID. This transcript is based on a real case in which the findings of ID were mixed. The first judge to hear the issue on appeal made the determination that the petitioner did not meet the burden of proof (in this case POE), while the

second judge came to the opposite conclusion. The use of this case provided a real world example of a hearing in which the same data was used to support completely different conclusions and because of this, the manipulation has real-world applicability.

Hypotheses

H1: It was anticipated there would be a main effect for standard of proof. It was expected that participants who received a quantified definition of CAC in their instructions would be less likely to believe the defendant had met criteria for ID than participants who received a quantified definition of POE. In addition, it was expected that the participants who received a non-quantified definition of CAC in their instructions would be less likely to believe the defendant had met criteria for ID than participants who received a non-quantified definition of POE. This hypothesis followed the findings of MacCoun and Kerr (1988), who discovered that varying standards of proof in mock juror instructions had some impact on legal decisions.

Analysis: This hypothesis was examined using general linear modeling with standard of proof as the fixed factor.

H2: It was expected there would be a main effect for quantification of standard of proof. Specifically, it was expected that the group who received the quantified POE standard would be more likely to believe the defendant had met criteria for ID than the group who received the non-quantified POE standard. In addition, it was expected that the group who received the quantified CAC standard would be more likely to believe the defendant had met criteria for ID than the groups who received the non-quantified definitions of CAC. Previous research has demonstrated that mock jurors tend to assign more strict numerical interpretations to these standards than appropriate (Kagehiro and colleagues, 1985, 1990). Accordingly, it was expected that groups who received non-quantified definitions would interpret more demanding standards than if given

their quantified counterparts and will therefore, would be less likely to believe the defendant had met criteria for ID.

Analysis: This hypothesis was examined using general linear modeling with quantification as the fixed factor.

H3. It was hypothesized that standard of proof would also affect the participants' numerical interpretation of the standard. Specifically, it was expected that participants would assign higher numerical definitions to the CAC standard than the POE standard in the non-quantified condition. This was expected because higher numbers represent higher degrees of certainty and therefore, stricter standards. In this study, we were testing the impact of the word "substantial" in the non-quantified definition of CAC. With the exception of this word in the CAC definition, definition of non-quantification was identical in both standards.

Analysis: This hypothesis was examined using a t-test comparing the two non-quantified groups' belief the defendant met diagnostic criteria for ID.

H4: Regarding need for cognition, it was expected that the participants' need for cognition would moderate the relationship between standard of proof and quantification on the belief the defendant had met criteria for ID. Specifically, it was expected that individuals high in need for cognition would be more likely to believe the defendant had met criteria for ID in the groups given the POE standard than the CAC standard, and that individuals low in need for cognition would be less likely to believe the defendant had met criteria for ID in all groups. This hypothesis followed research demonstrating that individuals high in need for cognition are more likely to pursue and accept cognitively demanding challenges which require consideration of a number of factors (Cacioppo, Petty, Feinstein, and Jarvis, 1996) and making the differential diagnosis between ID versus "not ID" is a highly challenging task, particularly in a capital case.

Analysis: This hypothesis was examined using general linear modeling and logistic regression examining the main effects of, two-way interactions between, and three-way interaction between standard of proof, quantification, and need for cognition.

H5: It was expected that level of authoritarianism would moderate the relationship between standard of proof and quantification on the belief that the defendant had met criteria for ID. Specifically, it was expected that individuals low in authoritarianism would be more likely to believe the defendant had met criteria for ID in the groups given the POE standard than the CAC standard, and that highly authoritarian individuals would be less likely to believe the defendant had met criteria for ID in all groups. This hypothesis was informed by previous findings that individuals high in authoritarianism are more likely to affiliate with governmental bodies (Bastian and Haslam, 2006) and to be punitive toward social outgroups (i.e. offenders) (Altemeyer, 1988).

Analysis: This hypothesis was examined using general linear modeling and logistic regression examining the main effects of, two-way interactions between, and three-way interaction between standard of proof, quantification, and authoritarianism.

H6: It was hypothesized that attitudes toward individuals with ID, and stereotypic beliefs regarding their functional abilities, would moderate the relationship between standard of proof and quantification on the belief that the defendant had met criteria for ID. Specifically, it was expected that individuals who endorsed fewer negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities would be more likely to believe the defendant had met criteria for ID in the groups given the POE standard than the CAC standard. In addition, it was expected that individuals who endorsed higher negative attitudes toward individuals with ID, and more stereotypic beliefs regarding their functional abilities, would not

believe the defendant had met criteria for ID in all groups. This hypothesis was exploratory and has been unaddressed to this point by empirical research.

Analysis: This hypothesis was examined using general linear modeling and logistic regression examining the main effects of, two-way interactions between, and three-way interaction between standard of proof, quantification, and negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities.

H7: Although researchers have not yet studied whether mock juror intelligence will affect their legal decisions, there are several theoretical reasons as to why this would be true (e.g., intelligence is likely to affect abstract reasoning and comprehension of legal constructs and language). Therefore, it was expected that measured intelligence would influence the relationship between standards of proof, quantification, and the belief that the defendant had met criteria for ID such that individuals with a higher intelligence would be more likely to believe the defendant had met criteria for ID in the groups given the POE standard than the CAC standard and that individuals with a lower intelligence would not believe the defendant had met criteria for ID in all groups. This was exploratory as previous research had not addressed this issue.

Analysis: This hypothesis was examined using general linear modeling and logistic regression examining the main effects of, two-way interactions between, and three-way interaction between standard of proof, quantification, and intelligence.

H8: It was expected that standard of proof and quantification, need for cognition, authoritarianism, negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities, and intelligence would all be significant predictor variables of determinations of ID.

Analysis: This hypothesis was examined using logistic regression with standard of proof, quantification, the interaction between standard of proof and quantification, need for cognition, authoritarianism, negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities, and intelligence entered at the first step of the analysis.

H9: It has been shown that authoritarian individuals are more likely to endorse stereotypes than non-authoritarian individuals (Backstrom & Bjorklund, 2007; Cornelis & Van Hiel; 2006; Dru, 2007; Duckitt, 2006; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Heaven & Quintin, 2003; McFarland, 2010; Whitley & Lee, 2000; Wylie & Forest, 1992). Accordingly, it was hypothesized that highly authoritarian individuals would endorse more negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities, as measured by the Community Living Attitudes Scale, Mental Retardation Form (CLAS-MR). In comparison, individuals low in authoritarianism were expected to score significantly lower on the CLAS-MR and endorse more positive attitudes toward individuals with ID.

Analysis: This hypothesis was examined using a Pearson correlation analysis between authoritarianism and negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities.

2. Method

Participants

Data collection was completed in November 2010, following formal approval of the thesis proposal and official approval from The University of Alabama's Institutional Review Board (IRB; date of approval was 10/18/2010). Participants in the study comprised of 178 undergraduate students who were enrolled in Psychology 101, during the fall semester, at The University of Alabama (UA). Participants were recruited through their participation in the Psychology Subject Pool at UA. Each participant received 4.5 hours of research credit for his or her participation.

Recruitment

Initial contact with the participants was made through an announcement (Appendix A) on the online subject pool website (http://researchpool.psych.ua.edu/). Students were had access to the announcements of various studies on the online subject pool website. If they desired to participate in this study, then they signed up for a timeslot during a data collection session. Timeslot information included the date, time, and location of the data collection session. All students in Psychology 101 classes are required to either participate in nine hours or research or write short papers during the semester. Therefore all participants had an alternative option for their involvement in the study.

Materials

Demographic Form (Appendix B). This form requests that the participant provide basic demographic information, including age, gender, race, education level, political affiliation, and

experience as a mock juror. They were also asked whether they had any family members who were employed as defense or prosecuting attorneys. Lastly, participants were questioned regarding their experiences with individuals with developmental disabilities.

Mock Juror Instructions (Appendices C-F). There were four sets of mock juror instructions. The instructions were similar in that they informed participants that they would read a transcript and following this, be asked a number of questions related to the case and in particular, whether they believe that the petitioner met the burden of proof required to diagnose them with ID. In all conditions, the instructions specified that the defense had the burden to prove that the defendant had ID. The standard of proof in the instructions was one of four options as shown in the table below.

Table 1. Standard of Proof Assigned to Groups 1-4

Group	Quantification/Standard of Proof
Number/Abbreviation	
1/ NQ-POE	Not quantified/ Preponderance of the evidence
2/NQ-CAC	Not Quantified/ Clear and convincing
3/Q-POE	Quantified (51%)/ Preponderance of the evidence
4/Q-CAC	Quantified (75%)/ Clear and convincing

All of the groups were provided the standard of proof to which they were required to abide. However, only groups 3 and 4 were given a numerical value representing the standard of proof they were required to follow. The definitions of the standards of proof were obtained by samples provided by Judge Morton Danlow's chambers in the District Court for the North

District of Illinois, as detailed on the website:

http://www.ilnd.uscourts.gov/Judge/DENLOW/mdsji.htm.

Of note, the only difference in definitions between the POE and CAC standards was the word "substantially." Specifically, the phrase "more likely" was used in the POE "not quantified" condition, whereas the phrase "substantially more likely" was used in the "not quantified" CAC instructions. Each group was given a different set of instructions. The standard "beyond a reasonable doubt" was not utilized in this study because at the time of writing, this standard had been declared to be unconstitutional for the application in *Atkins* cases (*Hill v. Shofield, 2010*) and prior to this was only applicable in one state.

Transcript (Appendix G). Participants were directed to read a 30 page transcript that was a shortened version of a real Atkins hearing. All identifying information, including the names and relationships of the people involved, were changed, but none of the details important to the determination of ID were removed. Someone who was unfamiliar with the case would not be able to identify the case. However, someone with specific information of the original case may have the suspicion that this data was based upon that case. Of import, the transcript is public material and available to view by the public at their request.

For ease of readability, the transcript was double-spaced and single-sided. The transcript was reduced from a total of 518 pages to 30 pages. Items removed from the transcript included certification of expert witnesses, witnesses' feelings toward the death penalty, the Flynn effect, testimony by individuals who knew the defendant well, psychometric properties of tests, theories of intelligence, comparisons of different measures of adaptive behavior, the possible sentences the defendant faced, as well as information that was repeated multiple times during the hearing. For example, the issue of the retrospective nature of the evaluation was brought up more than

four times during the hearing. To reduce the length of the document, reference to this was reduced to once. In addition, discussion regarding an important topic was often reduced from several pages in the original transcript to a few lines in the reduced transcript. To do this, four researchers independently reduced the transcript and then this investigator compared the truncated version to that of the original to ensure that important data had not been removed.

ID Information sheet (Appendix H). Two definitions of ID were provided to the participants in written form. These definitions are those used by the APA (2000) and the American Association for Intellectual and Developmental Disabilities (AAIDD, 2010). Participants were instructed to use either or both definitions in their determinations.

Questionnaire (Appendix I). The questionnaire consisted of questions regarding the participants' thoughts regarding the testimony presented in the transcript. Examples of questions included if the defendant was mentally retarded and "why." Participants were asked if the defendant in the transcript met, or did not meet, the burden of proof required to be designated as having ID and they were asked to provide the rationale behind their determination. Participants were asked to indicate on a scale of 1-7 to what degree they believed the defendant had ID (hereinafter referred to as the belief the defendant had met criteria for ID). Participants were also asked to make a decision as to whether the defendant did have ID or did not have ID (yes/no; hereafter referred to as the determination of ID). The item with the 1-7 scale and the yes/no item were designed to be continuous and categorical versions, respectively, of the same question: whether the defendant had ID. The questionnaire also included items which served to screen out participants who either did not understand what was being asked or them, or did not put in sufficient attention to be able to participate in the study. Three items examined the close reading of the transcript (see questions 2b (which contained two parts) and 2c) and three questions

inquired regarding the diagnostic criteria for ID (see questions 4a,4b, and 4c). One item (question 6) served as a check to ensure that the participant read the mock juror instructions. It should be noted that questions 1 and 8 were included in this survey as part of a different study. *Measures*

Need for Cognition Scale (Appendix J). The Need for Cognition Scale (NCS; Cacioppo & Petty, 1982) is an 18-item Likert-style scale designed to measure individual's need for cognition. The NCS measures three components of need for cognition: (1) cognitive persistence ("the tendency to maximize the utility of limited amounts of information provided in a given situation" p. 283); (2) cognitive complexity (the difficulty of the task); and (3) cognitive confidence (confidence to partake in cognitively challenging activities) (Graziano, Panter, & Tanaka, 1990,). Responses range from 1 (not at all like me) to 5 (very much like me). Scores range from 18 to 90; the higher the score, the more likely the individual has a high need for cognition. Items 3, 4, 5, 7, 8, 9, 12, 16, and 17 are reverse scored. This scale has demonstrated strong internal consistency, content validity, concurrent and discriminant validity, and test-retest reliability (.90) (Cacioppo & Petty, 1982). In addition, factor analysis of the scale has indicated that the scale measures one factor (Cacioppo, Petty, & Kao, 1984). This scale was standardized in a series of studies with undergraduate students (Cacioppo & Petty, 1982) and has since been used with this population in a number of studies (see, for example, Barnett, Brodsky, & Davis, 2004; Cramer, Adams, & Brodsky, 2009).

Community Living Attitudes Scale, Mental Retardation Form (Appendix K). The Community Living Attitudes Scale, Mental Retardation Form (CLAS-MR; Henry, Keys, Jopp, & Balcazar, 1996) is a 39-item Likert-style measure designed to assess attitudes toward individuals with ID. The CLAS-MR provides four scales: (1) empowerment (the lack of authoritativeness

and leadership of individuals with ID); (2) exclusion (whether individuals with ID should be separated from society); (3) sheltering (the degree to which individuals with ID need to be cared for by others); and (4) similarity (the functional differences between individuals with and without ID). Higher scores indicate the respondent believes that individuals with ID should have fewer rights (e.g., not have the right to marry or have children), have fewer abilities (e.g., they cannot handle money well), and they also endorse stereotypical beliefs about individuals with ID (e.g., they cannot experience empathy). Response options range from 1 (disagree strongly) to 6 (agree strongly) and total scores range from 39 to 234. Items 5, 9, 10, 14, 15, 16, 18, 22, 23, 24, 25, 26, 27, 30, 33, 34, and 39 are reverse coded. This scale was standardized with 80 college students and 203 community members and has been studied with these populations (see, for example, Henry, Keys, Jopp, & Balcazar, 1996; Yazbeck, McVilly, & Parmenter, 2004). Henry and colleagues (1996) found that the CLAS-MR demonstrated adequate internal consistency and subscale reliability (r=.57).

Right-Wing Authoritarianism Scale (Appendix L). The Right-Wing Authoritarianism Scale (RWAS; Altemeyer, 1996) is a 34-item Likert-type measure designed to assess authoritarianism. Individuals are given choices between 1 (very strongly disagree) to 9 (very strongly agree). Total scores on this measure range from 30 to 270 and the higher the score, the more likely it is that the individual holds authoritarianism views (e.g., endorsing censorship and a "law and order" orientation to life). The first four items of the scale are not scored, but are included for the purpose of acclimating the individual to the 9-point scale. Items 6, 8, 10, 13, 14, 16, 19, 20, 22, 24, 25, 27, 29, 31, and 33 are reverse scored. This measure has demonstrated moderately strong psychometric properties, with internal consistency ranging from .85 - .88 and discriminant and concurrent validity ranging from .73 to .88 (Altemeyer, 1996). This scale was

standardized in a series of studies with undergraduate students as compiled into the book titled "Right-Wing Authoritarianism" by Altemeyer (1996). This scale has been used in several studies looking at the impact of right-wing authoritarianism on juror decision-making (see, for example, Barnett, Brodsky, & Davis, 2004; Cramer, Adams, & Brodsky, 2009).

Shipley Institute of Living Scale (Protected/Copyrighted Information). The Shipley Institute of Living Scale (SILS; Zachary, 1991) is a 60-item measure designed to assess general intellectual functioning in adults and adolescents. Individuals are asked to complete a 40-item vocabulary test and a 20-item test of abstract thinking. Total scores on this measure range from 0-80 and the higher the raw score, the higher the general. This measure has moderate to strong reliability (alphas range from .62 to .80) and there is evidence of content validity (Zachary, 1991). In addition, this measure is moderately correlated with the Wechsler Adult Intelligence Scale-Revised (r=.74, .85; Zachary, 1991). This scale was standardized with 542 elementary students, 257 high school students and 217 college students (Zachary, 1991). Intelligence is being measured as part of this study as it has been identified to be correlated to, but not the same construct as, need for cognition (r=.31; Stuart-Hamilton, 2001), but also as an independent variable of interest. This measure is not a comprehensive measure of intelligence and is typically used for research purposes as a screener for intelligence. Therefore, the results from this measure cannot be extrapolated to be representative of more comprehensive measures of intelligence, such as the Stanford-Binet 5 (Roid, 2003). This measure was administered in a group format. Procedure

Assignment to groups. A total of 178 participants were recruited for this study. This number allowed for the removal of up to 50 participants who may have provided invalid data (i.e. if the participant answered a manipulation check item incorrectly; see section Materials

above for details). Data for 39 participants were removed due to failure of manipulation check items. To control for the fact that students who participated in a study may have shared the purpose of the study with individuals who have not yet participated, each group was filled with 32 participants before the next group was recruited. Therefore, Group 1 was filled (with 32 students) before Group 2 was recruited (with 32 students), and so on, until 128 participants were recruited. Starting with the 129th participant, participants were assigned one to each group (one to Group 1, then one to Group 2, etc.) until data collection was complete (n = 178). Analyses were conducted to determine if the groups were significantly different from each other on a number of important variables, and the results indicated they were not (see Results section for more information).

Data Collection Session. Data was collected in a lab room (i.e. Gordon Palmer Room 406) and classrooms (i.e. Gordon Palmer Rooms 204, 206, and 208) at UA. The capacity of rooms ranged from 5-125. The number of participants at any data collection session ranged from 3-50 participants. Each participant had individual seating and adequate writing space at a group or individually partitioned table.

At the start of each session, investigators introduced the study to participants and provided them with information about their rights as participants (Appendix M). An information sheet regarding the tasks involved in the study, the approximate time requirement of the study, the risk and benefits of participating, and the participants' rights was provided to all participants (Appendix N). After all questions regarding the information sheet were answered, investigators explained the procedure that would be followed (Appendix O).

Step 1

Participants were first given one packet with following documents in the following order: (1) Demographic Form (Appendix B), (2) NCS (Appendix J), (3) RWAS (Appendix L), and (4) SILS. The average administration time of the first packet was one hour. When this packet was returned, the participant was informed that they could take a 5-minute break if desired. *Step 2*

A second packet was given to the participants and in it were the following documents in the following order: (1) Juror Instructions (see Appendices C through F),(2) ID Information Sheet (Appendix H), (3) Case Transcript (Appendix G), (4) Questionnaire (Appendix I), and (5) CLAS-MR (see Appendix K). The only difference in the packets given to each group was the juror instructions. The average administration time of the second packet was 1 hour. Participants were released from the session upon their completion of the packets and were given a debriefing script (Appendix P). All sessions were completed within 2.5 hours with a majority of participants completing the study between 1.5-2 hours. All participants recruited for the study completed the study.

3. Results

Preliminary Analysis.

The number of participants whose data were discarded was analyzed. A total of 39 participants' data was discarded; 29 failed a question pertaining to a detail in the manuscript (e.g., if the state's expert administered an IQ test), two failed a question pertaining to the diagnostic criteria for ID (e.g., if adaptive behavior deficits are included in the diagnostic criteria), and eight failed the question related to juror instructions (e.g., asking who had the burden of proof in their instructions). Analyses including the discarded data were performed to determine if the findings would have been significantly different if the discarded data were included in the final analyses. The results indicated this was not the case. The significance of each model was not affected by the removal of the invalid data. Analyses were also conducted to determine if any assumptions of the various statistics utilized were violated. Variables were graphed to determine that they were normally distributed. Levene's test of equality of error variances were also calculated for each general linear model. It was determined that significant violations were not present. All continuous potential moderating variables were centered to a mean value of zero.

Participants

As previously mentioned, demographic information was collected from participants via the Demographic Form. Information obtained from participants included age, gender, ethnicity, years of education, and political affiliation. Participants were also asked if they had any experience with jury duty, and if they had any family members who worked as judges, defense attorneys, and/or prosecuting attorneys. Participants were also questioned regarding their experience in the mental health field and with individuals with individuals with developmental disorders.

Participants were 139 undergraduate students at UA. Thirty-four participants were assigned to the non-quantified POE group (NQ-POE), thirty-eight were assigned to the non-quantified CAC group (NQ-CAC), thirty-four were assigned to the quantified-POE group (Q-POE), and thirty-three participants were assigned to the quantified-CAC group (Q-CAC). Table 2 reports the distribution of the participants on the continuous variables measured (i.e. age and the continuous moderator variables) and Table 3 reports group comparisons across these variables. As Table 3 demonstrates, the groups were not significantly different from each other on any of these variables. Table 4 reports the distributions of the participants across the categorical variables measured (i.e. experience as a juror, if they had any family members who worked as judges, defense attorneys, and/or prosecuting attorneys and experience in the mental health field and with individuals with individuals with developmental disorders) and Table 5 reports group comparisons across these variables. As demonstrated in Table 5, the groups were not significantly different across these demographic variables.

Table 2. Distribution of Participants Across Age, Need for Cognition, Authoritarianism, Negative Attitudes Toward Individuals with ID, and Intelligence

Scale	Mean	SD	Min	Max	Possible	Skewness	Skewness	Kurtosis	Kurtosis
					Range		SE		SE
Age	18.98	3.14	18	54	>=18	10.20	.206	113.47	.41
Need for	58.26	11.96	28	90	18-90	.150	.206	148	.410
Cognition									
Authoritarianism	155.38	36.02	60	222	30-270	578	,206	.029	.410
Negative	135.82	18.93	65	182	39-234	540	.208	1.000	.413
Attitudes									
Toward									
Individuals with									
ID									
Intelligence	99.01	6.79	81	114	34-144	493	.207	021	.411

Table 3. GLM Comparison of Age, Need for Cognition, Authoritarianism, Negative Attitudes Toward Individuals with ID, and Intelligence Across Groups

Variable	F	Df	р	$ \eta_p ^2$
Age	1.032	3, 135	.381	.022
Need for	.318	3, 134	.812	.007
Cognition				
Authoritarianism	.301	3, 132	.825	.007
Negative	.906	3, 133	.087	.02
Attitudes				
Toward				
Individuals with				
ID				
Intelligence	1.827	3, 133	.145	.04

Table 4. Frequencies of Categorical Demographic Variables of the Sample

Variable				
Gender	Male – 26.6%	Female – 73.4%		
Race	African- American – 14.4%	Asian-American – 2.9%	Caucasian – 78.4%	Hispanic – 4.3%
Year	Freshman – 67%	Sophomore – 22.3%	Junior – 8%	Senior – 2.2%
Political Affiliation	Republican – 48.2%	Democrat – 22.3%	Independent – 9.4%	Other – 5.0%
Jury Experience	Yes7%	No- 99.3%		
Family Member/Judge	Yes7%	No- 99.3%		
Family Member/Defense Attorney	Yes – 1.4%	No – 98.6%		
Family Member/Prosecutor	Yes – 2.2%	No – 97.8%		
Experience in the Mental Health Field	Yes - 3.6%	No – 96.4%		
Contact with Individual with Developmental Disabilities	Yes – 72.7%	No – 27.3%		
Type of Contact	Volunteer- 28.1%	Classroom – 19.7%	Friend/Family – 32.1%	Employment – 10.4

Table 5: Chi-Square Comparisons of Categorical Demographic Variables Across Groups

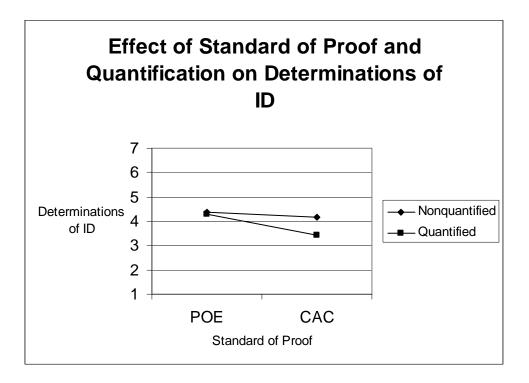
Variable	X ²	df	p	Phi
Gender	.699	3	.873	.071
Race	10.304	9	.326	.272
Year	10.847	5	.542	.279
Political Affiliation	8.06	12	.780	.241
Jury Experience	3.11	3	.375	.150
Family	3.23	3	.357	.153
Member/Judge				
Family	2.18	3	.536	.125
Member/Defense				
Attorney				
Family	4.06	3	.254	.171
Member/Prosecutor				
Experience in the	9.23	6	.161	.258
Mental Health Field				
Contact with	5.35	3	.148	.196
Individual with				
Developmental				
Disabilities				
Type of Contact	6.29	18	.481	.481

Primary Analysis.

Effects of standard of proof and quantification on the belief the defendant had met criteria for ID. H1 predicted there would be a significant effect of standard of proof on the belief the defendant had met criteria for ID. In addition, H2 predicted there would be a significant effect of quantification on the belief the defendant had met criteria for ID. To examine the effect of standard of proof and quantification on the continuous version of this dependent variable, these two hypotheses were analyzed concurrently with general linear modeling. Results indicated that the standard of proof significantly affected whether a participant found the defendant to have ID, F(1, 135) = 8.32, p = .005, $\eta_p^2 = .058$. The groups who received POE in their instructions, regardless of quantification status, were significantly more likely to find the defendant to have ID (M = 4.34, SD = 1.09) than the participants who were given CAC as their standard of proof

(M = 3.86, SD = 1.03) (see Figure 1). Quantification of standard of proof also influenced whether participants believed the defendant met criteria for ID, F(1, 135) = 5.02, p = .027, η_p^2 = .036. Nonquantified definitions of standards were associated with significantly higher findings of ID (M = 4.28, SD = 1.12) than quantified definitions (M = 3.89, SD = 1.13) (see Figure 1).

Figure 1. Effect of Standard of Proof and Quantification on Determinations of ID

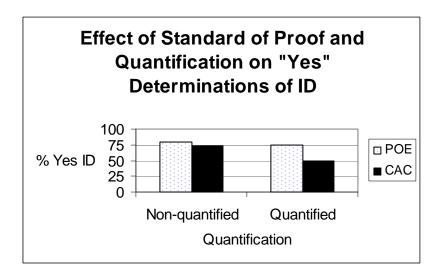


There was a significant interaction effect, F(1, 135) = 4.30, p = .04, $\eta^2 = .031$ (see Figure 1). Analysis of simple effects and of the interaction contrast indicated that the Q-CAC group was significantly less likely to believe the defendant had met criteria for ID (M=3.46, SD=.87) than the NQ-POE group (M =4.35, SD =1.23), the NQ-CAC group (M =4.21, SD =1.04), and the Q-POE group (M =4.32, SD =.94). The Q-CAC group, the NQ-POE group, and the NQ-CAC group were equally likely to believe the defendant had met criteria for ID. In other words, the group that received the quantified CAC standard was significantly less likely to believe the defendant had met criteria for ID than the groups who received the quantified POE standard, the non-

quantified POE standard, or the non-quantified CAC standard. An alternative way to interpret the results would be that the non-quantified CAC standard had the same effect as both POE standards on the participants' belief the defendant had met criteria for ID and all three standards were seen as less demanding than the quantified CAC standard. In fact, observation of the means scores for these three groups show that they are virtually identical, suggesting that participants in the NQ-CAC condition viewed their standard to be the same as POE regardless of quantification.

The results of the analysis of the categorical determinations of ID are similar to the above results. Figure 2 shows the distribution of the "yes" determinations of ID across the four groups.

Figure 2. Effect of Standard of Proof and Quantification on "Yes" Determinations of ID



As can be seen in Figure 2, fewer participants in the group which received the Q-CAC standard found the defendant to have ID (48.5%) than the NQ-POE group (79.4%), the NQ-CAC group (74.7%), and the Q-POE group (74.7%).

Effect of standard of proof on numerical interpretations of the standards. H3 predicted that the group which received the non-quantified CAC standard would assign significantly higher numerical interpretations to its standard, than would the group which received the non-quantified POE standard. Analysis did not support this hypothesis, and in fact, the exact opposite result was

obtained. Participants in the non-quantified CAC group produced estimates that were virtually identical to the non-quantified POE group (t(70)=-.355, p=.723). Specifically the NQ-CAC group produced a mean score of 54.62 (SD=7.51) while the NQ-POE mean was only slightly higher at 56.18(SD=9.64).

Effect of moderating variables.

Hypotheses 4-7 predicted that need for cognition, right-wing authoritarianism, negative attitudes and stereotypes toward individuals with ID, and intelligence would significantly interact with the influence of standard of proof and/or quantification on the participants' belief the defendant met criteria for ID and their determinations of ID, respectively. Although the general linear models and the logistic regression models were statistically significant for each moderating variable (p<.05), the two-way interactions and the three-way interaction between the moderating variables and the main independent variables were not significant factors in those models. These results indicate that none of the moderating variables interacted with standard of proof or quantification in any fashion to influence the participants' belief the defendant met criteria for ID or their determinations if the defendant had ID or not.

Presence of significant predictors of determinations of ID. H8 expected that standard of proof and quantification, need for cognition (as measured by the NCS), authoritarianism (as measured by the RWAS), negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities (as measured by the CLAS-MR), and intelligence (as measured by the SILS), would all be significant predictors of determinations of ID. Logistic regression was performed to assess whether these factors were significant predictors of whether the participants thought the defendant had ID (i.e. categorical version). All variables were entered at the first step. The model was not statistically significant, χ^2 (4, N = 139) = 2.596, p =

.628. The model explained between 1.9% (Cox & Snell R square) and 2.7% (Nagelkerke R square) of the variance in findings of ID, and correctly classified 65.9% of cases. Therefore, although standard of proof and quantification had a significant effect on the participants' belief that the defendant met criteria for ID, it could not predict the actual yes/no decision. In addition, none of the moderating variables included in this analysis were significant predictors of the participants' determinations of ID.

Relationship between right-wing authoritarianism and stereotypes. H9 posited that there would be a significant relationship between the participants' right-wing authoritarianism and their endorsement of stereotypes as measured by the CLAS-MR. This hypothesis was tested using the Pearson product-moment correlation coefficient. Results indicated there was a significant positive correlation between the two variables, r = .32, n = 138, p < .001, with high levels of right-wing authoritarianism associated with more frequent endorsements of stereotypes toward individuals with ID.

Exploratory Analyses.

Relationship between the continuous and categorical versions of determinations of ID. Determinations of ID were measured by two methods: on a continuous scale (range 1-7) and with a categorical variable (yes/no). A point-biserial correlation was conducted to determine if the continuous and categorical versions of determinations of ID were significantly related to each other. Analysis indicated this was the case, r=.689, n=139, p<.001. Therefore, these results suggest that across all participants, there was a significant relationship between the continuous and categorical versions of this dependant variable.

Qualitative findings. Examination of the qualitative data provided by participants revealed they considered many different factors when considering a determination of ID. The

participants who believed the defendant had ID most often cited the IQ results provided by the defense expert and the fact that the defendant had sexual intercourse with animals. They also cited that the defendant's principal wanted to refer him to a school for mentally retarded children. It is interesting to note that when participants were giving reasons for finding the defendant to have ID, they rarely cited more than one reason (with a range of one to three reasons). In contrast, participants who believed that the defendant did not meet the burden of proof regarding the presence of ID (regardless of the standard) often wrote 3 or more reasons to support their determination (range 2-8, mean of 4). These participants most often cited elements of the defendants' crimes as reasons, including his ability to identify his peeping victims, to escape, to run from the police, and to use an alias when running from the police. They also noted his ability to drive, to know what he wanted to eat, his lack of attendance at school, and his perceived lack of effort on IQ tests administered to him as a child.

Discussion

Standard of Proof and Quantification.

One of the goals of this study was to obtain a better understanding of the impact of standard of proof and quantification. This is important to the field because in order to make appropriate decisions, jurors need to understand what they are being asked to do. The results of this study indicate that, in the absence of a numerical anchor, participants in the CAC condition misinterpreted the level of certainty required to meet their burden of proof and interpreted their standard to be similar to the POE standard. In a real world setting this should translate into more findings of ID when standard jury instructions are utilized (i.e., no numerical anchor is provided) than would be appropriate.

One possible explanation for these findings is that the only difference between the non-quantified POE and CAC standards was the use of the word "substantially" in the CAC standard (i.e. the CAC standard included the phrase "substantially more likely than not" whereas the POE standard used the phrase "more likely than not."). Though not tested, given the profound similarity of results between this group and both POE groups, it is likely that the word simply did not register with the participants and instead, they focused on the words "more likely than not." Less likely, though possible, is that the participants did not understand the meaning of the word and because of this, they ignored it completely. Future research may want to evaluate this finding by asking the participants to assign a valence to the word "substantially" and see if the results differ from those of the present study.

To address the debate as to whether standards of proof should be quantified, an examination of the differences between the participants assigned to the quantified CAC standard and those assigned to the non-quantified CAC standard is required. The results indicated that participants assigned to the quantified CAC standard were significantly less likely to believe the defendant had ID than the group who received the non-quantified CAC standard. Therefore, they were sensitive to the provision of a numerical anchor in their instructions. Accordingly, it may be appropriate to conclude that providing jurors with a quantified definition will affect their decisions. In addition, not only did the quantified definition affect their decision-making, but it helped them make decisions based upon the appropriate level of demand (i.e., the non-quantified CAC group interpreted their standard to be more similar to the POE groups, which the quantified CAC group did not do).

With the exception of one group (NQ-CAC), it appears that these mock-jurors understood what they were being asked to do and followed the directions well. As previously mentioned, prior research tends to show that jurors do not understand jury instructions and are insensitive to differences in burden of proof (see, for example, Poulson, Braithwaite, Brondino, & Wuensch, 1997; Reardon, O'Neil, and Levett, 2007). Given the structure of the study, this finding is not surprising. The study was not designed to evaluate how well people understood the details of typical jury instructions (i.e., lengthy, complicated, and voluminous), but was designed to evaluate their understanding of burden of proof in an *Atkins* case and to see if anchoring their perception of level of certainty impacted their determinations. This type of study required short, concise sentences that explained their job in the most uncomplicated of ways. Another big difference between this study and the typical study of comprehension of jury instructions is the fact that participants could refer back to the instructions as often as they wished. This is not an

option provided to jurors in the real world and in fact, in some instances they are not allowed to obtain clarification of instructions, even if they ask to do so.

Moderating Variables

Need for Cognition. The results from this study suggest that need for cognition does not interact with the relationship between standards of proof and the degree to which they believed the defendant met criteria for ID. In other words, the extent to which the participants enjoy cognitively difficult tasks did not affect their ability to be influenced by their juror instructions in their legal decision-making. These results were surprising because of the significant body of literature which suggests that need for cognition impacts the likelihood that people will engage in cognitively challenging tasks. One explanation for these results would be the removal of individuals from the subject pool who did not attend to the task or did not engage in the task to the degree required to pass the manipulation check. In essence, it may be the case that individuals who were removed were low in need for cognition and because of this, the full influence of NFC could not be explored. If this was indeed the case, this would support the notion that making the differential diagnosis between ID and "not ID" is complex and requires persistence and engagement in the fine details of the case. However, for this to be true, it would be expected that the distribution curve of the NCS scale would fall higher along the scale than expected. Examination of the mean NCS indicates that the average is a little higher than expected, but not overwhelmingly. Accordingly, is it possible a few individuals who were excluded could have been low in need for cognition, but not many. Therefore, a more likely explanation would be that once the individuals low in cognition were engaged in the task, they attended to the same evidence presented to the case as the individuals high in need for cognition so that they made comparable decisions to their high in need for cognition counterparts. This

explanation is bolstered by the fact that the same qualitative reasons were repeatedly cited by participants as to why they believed the defendant did or did not have ID.

Right-Wing Authoritarianism. Right-wing authoritarianism has been associated with characteristics such as being prejudiced, submissive to authority, and punitive. Studies have shown that jurors who are high on this trait tend to believe information presented to them by the District Attorney's Office or the Office of the Attorney General. These governmental bodies hold a lot of power, real and perceived, and because of this are viewed as authority figures. In cases in which the presence of ID is contested, the state will always be present data to refute the claim, and because of this it was hypothesized that mock jurors who scored high on the measure of right-wing authoritarianism, would be less likely to determine that the defendant met his burden of proof. As previously mentioned, this relationship was not borne out and people high on the RWA scale were equally likely to make either determination. Although it would be convenient to say that this finding was due to a sampling bias with skewed distribution, review of the distribution of scores demonstrates that this was not the case. One possible explanation for this finding is that without a consequence to their legal determination (i.e. that the sentence was not dependant upon their decision), it is likely that authoritarian individuals lacked a drive to side with the state. Furthermore, trials and judicial hearings are often highly emotional and attorneys use the emotional tone to try to manipulate jurors into believing their version of the events. In an Atkins hearing emotions run high and this may result in RWA impacting real determinations of ID rather than hypothetical ones as is the case in the current study.

Negative Attitudes and Stereotypes. For years media has perpetuated the belief that people with ID are of one ilk. They look unintelligent, they act in an unintelligent manner, and they are totally incapable of independent thought and independent living. Studies dating from the

1980's to present day demonstrate that these stereotypes are ingrained and resistant to change. One would have to read only a few judicial opinions regarding *Atkins* claims to notice that the prosecution uses these stereotypes to try to persuade the trier of fact that a person could not have ID and demonstrate these characteristics. Example of such red herrings are skills like the ability to drive, cook, to get married and raise children, and to hold a job.

In light of the strong research base for the persistent, negative view of people with ID, it was hypothesized that people who scored high on the CLAS-MR would be less likely to view the defendant as having ID. In this case, the defendant met criteria for mild ID and as such, did not demonstrate many of the stereotypical characteristics. Hence, the absence of data that fit with the prototype of what ID "is" would result in the determination of "not ID", which in this case would equate to an error likely related to an inaccurate prototype of ID.

Despite this strong theoretical base, the relationship was not observed in the current study. Again, an easy explanation would be that our sample did not include enough people high in stereotypic views as measured by the CLAS-MR, but this was not the case. The distribution was normal and the mean was slightly over the midpoint of the scale and toward higher scores of stereotypic views. There are at least two possible explanations for this finding. One is the fact that the CLAS-MR does not capture stereotypes regarding specific adaptive behaviors such as the ones present in this case (e.g., assuming that the ability to use an alias when running from the police indicates someone does not have ID). Therefore, the CLAS-MR may not comprehensively address the stereotypes which could have affected the participants' decision-making in this specific case. Another explanation is that participants who showed higher levels of negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities, focused on the criteria given to them in the definitions provided by the APA and the AAIDD and

were able to ignore their own beliefs. While possible, this hypothesis is unlikely to be correct because the definitions provided by these agencies are vague; the vague nature of the definitions is the primary complaints of the judiciary.

Intelligence. Researchers have not yet examined how general intelligence may affect juror decision-making. It has been theorized that general intelligence can influence jurors' ability to understand the complexities of a legal case, such as being able to comprehend the legal jargon in the juror instructions and the abstract reasoning involved in comparing contrasting interpretations of the same evidence. However, these results indicated that in this study, intelligence did not interact with standards of proof in their influence on determinations of ID. It is not clear as to why this was the case, but it is possible that they truly understood the jury instructions and the determinations of ID did not require more intellectual prowess than the average person. In the current study, the mean IQ was in the average range (99), and the range was normally distributed with virtually all of the scores in the average range (range 81-114). While possible, the more plausible explanation is that the absence of emotion and theatrics associated with a legal hearing may have resulted in an analytic view of the data that allowed a strict view of the facts unaffected by emotion. Of course another possibility is that general intelligence does not influence juror decision-making, but that more specific cognitive processes are involved in the legal decision-making process, such as working memory, processing speed, and ability to grasp new concepts. These constructs cannot be assessed using a screening test such as the SILS and this would be one avenue of study for future research.

Presence of significant predictors of determinations of ID. None of the identified variables were noted to be significant predictor variables in the logistic regression analysis. It was not surprising that the moderating variables in this analysis were not significant as they were

not significant in any of the analyses with the continuous version of the dependent variable. However, it was expected that standard of proof and quantification would have been significant predictors of determinations of ID as the results with the continuous version of the variable suggested these relationships were present.

Relationships between variables

It is noteworthy to acknowledge that the participants' authoritarianism was significantly positively correlated with their endorsement of negative attitudes toward individuals with ID and stereotypic beliefs regarding their functional abilities, as measured by the CLAS-MR. This finding parallels those of other researchers who found that highly authoritarian individuals are more likely to have negative attitudes toward social outgroups (Duckitt, 2006; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Heaven & Quintin, 2003; McFarland, 2010). This significant relationship is likely due to authoritarian individuals' tendency to dislike social outgroups and the fact that the CLAS-MR captures a general dislike and distrust of individuals with ID. This study was the first to examine a relationship between authoritarianism and negative attitudes toward individuals with ID and will be a helpful contribution to the literature on right-wing authoritarianism.

Qualitative Information

The majority of participants who found the defendant to have ID (n=93), and who provided reasons why they believed the defendant had ID, cited the scores on the IQ tests as the primary reason for their determination. In this case, the defense expert witness provided data on 7 IQ tests that scored below the cut-off required for the diagnosis of ID. Participants also cited

the fact that the defendant had sexual interactions with animals as evidence for the ID diagnosis. Factors present prior to the age of 18 years did not seem to have much of an impact. Only one item out of a possible eight factors was reported to be of import and that was the school principal referring the defendant to a school for students with ID.

For those participants who believed the defendant did not meet diagnostic criteria for ID, their primary determinants were criminal behavior and the presence of adaptive strengths. Of note, the AAIDD states with some specificity that criminal behavior should not factor into the diagnostic considerations for ID. However, in this case it appears that this deviant, incomprehensible behavior did influence the decision-making process. They cited similar reasons as the judges have in relevant case law (see, for example, *Ex parte Briseno*, 2004) including a defendant's ability to identify his peeping victims, to escape, to run from the police, and to use an alias while on the run. These results indicate that mock jurors are likely to inadvertently weigh strengths versus weaknesses in making the determination of ID. This weighing procedure is inappropriate and can result in errors in classification. The diagnosis of ID is made on the presence of adaptive deficits that meet the criteria set forth by either or both the AAIDD and the APA, regardless of the presence of strengths in certain areas.

It is noteworthy that the participants, regardless of whether they believed the defendant had ID, did not often cite the assessment of the defendant's adaptive behavior deficits or that the defendant demonstrated deficits before the age of 18 years. Therefore, although the participants understood the diagnostic criteria for ID (as demonstrated by the fact that they passed the manipulation check questions regarding the diagnostic criteria), they did not seem to weigh the three prongs of the criteria equally in their consideration. In fact, the only criteria that they did seem to notice was deficits in intellectual functioning. One possible explanation for this focus on

the first prong is that the findings were quite salient. In this case there were 9 IQ scores to review and they ranged from 49 to 73. Despite the state trying to explain away the very low scores obtained during the defendant's childhood, it was impossible to ignore the quantity of scores and the fact that they were mostly under the required cutoff score of 70. If participants were asked to rank the diagnostic criteria for ID in decreasing degree of comfort, it would probably be the following list: IQ, onset before the age of 18, and adaptive behavior deficits. This list parallels the frequency of types of qualitative reasons provided in decreasing order.

Limitations

There are limitations to this study which should be acknowledged. Although a majority of jury studies are conducted with mock jurors, a sample of an undergraduate pool is certainly not demographically representative of all potential jurors because potential jurors are more likely to have a higher mean age, include more male individuals, and to have greater racial diversity. In addition, although the removal of data for participants who failed the manipulation check items ensured the examination of the effects of the independent variables on the dependant variables, this procedure is not a part of actual jury determinations. There is no doubt that some jurors do not pay attention to their instructions and/or parts of the hearing to which they are instructed to attend. However, their opinions still play a role in the ultimate legal decision regardless of how much attention they paid to the instructions and/or the hearing/trial. Therefore, the removal of invalid data serves as a threat to the ecological validity of the study.

The instructions used in this study, although they were based upon instructions used in a real courtroom, were short and concise. In addition, the definitions of the standard were repeated a few times and the definitions were understandable. As courts may define the standards in any manner they deem appropriate, the instructions of this study are not likely to be representative of

the juror instructions used in *Atkins* cases across the country. Therefore, it is not possible to assume that jurors across the country are following their juror instructions and/or are sensitive to standards of proof in their instructions in *Atkins* cases as they were in this study. In addition, although the participants in this study tended to understand the instructions and to be sensitive to the differences between them, there is no evidence that if the instructions were longer, more complicated, and/or contained more legal jargon that the jurors would have understood them or internalized their meaning.

The impact of the consequences of an *Atkins* hearing was removed from this study (i.e. the participants were not told the defendant would be sentenced to death or to life in prison without parole based upon their decision). In *Atkins* cases, legal decision-makers may be given this information when they are asked to determine whether a defendant has ID. Therefore, this study did not include this cognitive burden that is typically placed upon triers of fact in an *Atkins* case. As no studies have yet examined the influence of sentence on juror decision-making in *Atkins* cases, it is difficult to predict how including the sentence would have affected the results. It is possible that authoritarianism would have arisen as a significant moderator variable due to the likelihood that authoritarian individuals are likely to be punitive toward social outgroups.

This study also did not include a deliberation phase. Actual jury decisions are determined after a deliberation phase of indeterminate length. It is possible that if the mock jurors had the opportunity to deliberate as to whether the defendant in the transcript had ID that their findings of ID would have been different. In addition, actual jury hearings are also conducted in person, whereas this study used only a transcript. By eliminating the presence of other factors which may influence a juror's decision (e.g., likeability of an expert), the study more closely focused on the

determination of ID, but also decreased the ecological validity of the study. In totality, this study is limited in its generalizeabilty to *Atkins* cases.

Conclusions and recommendations

Regardless of the limitations, this study is the first to examine whether quantified standards of proof affect findings of ID and to what extent juror characteristics can influence that relationship. It is clear that when states or courts decide which standard of proof applies to *Atkins* hearings, they are making a choice which will significantly affect the likelihood of a defendant being found to have ID. The results also suggest that quantifying standards of proof will help the juror more accurately conceptualize the meaning of the standard because they will attend to the numerical definition.

It is recommended that jurors receive more intensive education regarding diagnosing ID as part of their juror instructions in *Atkins* cases as they are more likely to remember the criteria with which they are most familiar. In addition, it is recommended that juror instructions be kept short and concise, as doing so can increase the readability and effect of the instructions on the legal decisions.

Suggestions for future research include conducting a similar study with jurors who are reporting to jury duty. This will likely increase the diversity of the sample being studied and may provide different results. In addition, researchers may want to utilize a video of the transcript instead of a written version to more accurately replicate the effect of a hearing on juror decision-making. Lastly, it is recommended that future studies include a deliberation phase, which would help further examine not only the reasons why jurors believe a defendant to have ID, but also to determine how deliberation would affect a finding of ID in a jury hearing.

References

- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Aletemeyer, B. (2002). Dogmatic behavior among students: Testing a new measure of dogmatism. *The Journal of Social Psychology*, *142*, 713-721. doi: 10.1080/00224540209603931
- American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000.
- Atkins v. Virginia, 536 U.S. 304, 122 S. Ct. (2002). 2242.
- Backstrom, M., & Bjorklund, F. (2007). Structural modeling of generalized prejudice: The role of social dominance, authoritarianism, and empathy. *Journal of Individual Differences*, 28, 10-17. doi: 10.1027/1614-0001.28.1.10
- Barnett, M. E., Brodsky, S. L., & Davis, C. M. (2004). When mitigation evidence makes a difference: Effects of psychological mitigating evidence on sentencing decisions in capital trials. *Behavioral Sciences and the Law*, 22, 751-770. doi: 10.1002/bsl.591
- Bastian, B., & Haslam, N. (2005). Psychological essentialism and stereotype endorsement. *Journal of Experimental Social Psychology*, 42, 228-235. doi: 10.1016/j.jesp.2005.03.003
- Beattie, J. R., Anderson, R. J., & Antonak, R. F. (1997). Modifying attitudes of prospective educators towards students with disabilities and their integration into regular classrooms. *The Journal of Psychology*, *13*, 245-259. doi: 10.1080/00223989709603512
- Blume, J. H., Johnson, S., & Seeds, C. W. (2009). Of Atkins and men: Deviations from clinical definitions of mental retardation in death penalty cases. Cornell Law School Legal Studies Research Paper Series, Paper # 122
- Bornstein, B. H. (2004). The impact of different types of expert scientific testimony on mock jurors' liability verdicts. *Psychology, Crime, & Law, 10*, 429-446. doi: 10.1080/1068316030001629292
- Boyll, J. L. (1991). Psychological, Cognitive, Personality and Interpersonal Factors in Jury Verdicts. *Law and Psychology Review*, *15*, 163-184. Retrieved from www.ncjrs.gov

- Bray, R. M., & Noble, A. M. (1978). Authoritarianism and decisions of mock juries: evidence of jury bias and group polarization. *Journal of Personality and Social Psychology*, *36*, 1424-1430. doi: 10.1037/0022-3514.36.12.1424
- Butler, B., & Moran, G. (2007). The role of death qualification in venirepersons' evaluations of aggravating and mitigating circumstances in capital trials. *Law and Human Behavior*, *26*, 182-. doi: 10.1023/A:1014640025871
- Butler, B., & Moran, G. (2007). The impact of death qualification, belief in a just world, legal authoritarianism, and locus of control on venirepersons' evaluations of aggravating and mitigating circumstances in capital trials. *Behavioral Sciences and the Law*, 25, 57-68. doi: 10.1002/bsl.734
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, 42, 116-131. doi: 10.1037/0022-3514.42.1.116
- Cacioppo, J. T., Petty, R. E., Feinstein, J. A., & Jarvis, W. B. (1996). Dispositional differences in cognitive motivation: the life and times of individuals varying in need for cognition. *Psychological Bulletin*, *119*, 197-253. doi: 10.1037/0033-2909.119.2.197
- Cacioppo, J. T., Petty, R. E., & Morris, K. J. (1983). Effects of need for cognition on message evaluation, recall, and persuasion. *Journal of Personality and Social Psychology*, 45, 805-818. doi: 10.1037/0022-3514.45.4.805
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment*, 48, 3-4. doi: 10.1207/s15327752jpa4803 13
- Carter, J. D., Hall, J. A., Carney, D. R., & Rosip, J. C. (2006). Individual differences in the acceptance of stereotyping. *Journal of Research in Personality*, 40, 1103-1118. doi: 10.1016/j.jrp.2005.11.005
- Clermont, K. M., & Sherwin, E. (2002). A comparative view of standards of proof. *American Journal of Comparative Law*, *50*, 243-253. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=285832
- Cohen, A. R. (1957). Need for cognition and order of communication as determinants of opinion change. In C. I. Howland (Ed.), *The order of presentation in persuasion* (pp. 79-97). New Haven, CT: Yale University Press.
- Cohen, A. R., Stotland, E., & Wolfe, D. M. (1955). An experimental investigation of need for cognition. *Journal of Abnormal and Social Psychology*, *51*, 291-294. doi: 10.1037/h0042761
- Cornelis, I., & Van Hiel, A. (2006). The impact of cognitive styles on authoritarianism based conversation and racism. *Basic and Applied Social Psychology*, 28, 37-50. doi: 10.1207/s15324834basp2801_4

- Cramer, R. J., Adams, D. D., & Brodsky, S. L. (2009). Jury selection in child sex abuse trials: A case analysis. *Journal of Child Sexual Abuse*, *18*, 190-205. doi: 10.1080/10538710902743974
- Crowson, H. M. (2009). Does the DOG Scale measure dogmatism? Another look at construct validity. *The Journal of Social Psychology*, *149*, 265-283. doi: 10.3200/SOCP.149.3.365-383
- Crowson, H. M., DeBacker, T. K., & Davis, K. A. (2007). The DOG Scale: A valid measure of dogmatism? *Journal of Individual Differences*, 29, 17-24. doi: 10.1027/1614-0001.29.1.17
- Cutler, B. L., Moran, G., & Narby, D. J. (1992). Jury selection in insanity defense cases. *Journal of Research in Personality*, 26, 165-182. doi: 10.1016/0092-6566(92)90052-6
- Davies, M. F. (1993). Dogmatism and the persistence of discredited beliefs. *Personality and Social Psychology Bulletin*, 19, 692-699. doi: 10.1177/0146167293196004
- Davies, M. F. (1998). Dogmatisms and belief formation: Output interference in the processing of supporting and contradictory cognitions. *Journal of Personality and Social Psychology*, 75, 456-466. doi: 10.1037/0022-3514.75.2.456
- Doane, B., M., & Salekin, K. L. (2009). Susceptibility of current adaptive behavior measures to feigned deficits. *Law and Human Behavior*, *33*, 329-343. doi: 10.1007/s10979-008-9157-5
- Downing, C. D. (1986). The burden of proof in a paternity action. *Journal of Family Law*, 25, 357-372. Retrieved from http://www.aspenpublishers.com/Product.asp?catalog_name=Aspen&product_id=990003 9000&cookie test=1
- Dru, V. (2007). Authoritarianism, social dominance orientation and prejudice: Effects of various self-categorization conditions. *Journal of Experimental Social Psychology*, 43, 877-883. doi: 10.1016/j.jesp.2006.10.008
- Duckitt, J. (2006). Differential effects of right wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin*, *32*, 684-696. doi: 10.1177/0146167205284282
- Ekehammar, B., Akrami, N., Gyje, M., & Zakrisson, I. (2004). What matters most to prejudice: Big five personality, social dominance orientation, or right-wing authoritarianism? *European Journal of Personality*, 18, 463-482. doi: 10.1002/per.526

- Eichinger, J., Rizzo, T., & Sirotnik, B. (1991). Changing attitudes toward people with disabilities. *Teacher Education and Special Education*, *14*, 121-126. Retrieved from http://www.uk.sagepub.com/journals/Journal201947
- Erlich, H. J. (1978). Dogmatism. In H. London & J. E. Exner, Jr. (Eds.), *Dimensions of personality*, (pp. 129-164). New York: John Wiley & Sons.
- Ex parte Briseno, 135 SW 3d 1 (2004).
- Finkel, N. J., Shaw, R., Bercaw, S., & Koch, J. (1985). Insanity defenses: from the jurors' perspective. *Law & Psychology Review*, *9*, 77-92. Retrieved from http://www.law.ua.edu/lawpsychology/
- Fitzgerald, R., & Ellsworth, P. C. (1984). Due process vs. crime control: Death qualification and jury attitudes. *Law and Human Behavior*, 8, 31-51. doi: 10.1007/BF01044350
- Franklin, J. (2006). Case comment United States v. Copland, 369 F. Supp. 2d 275 (E.D.N.Y. 2005): Quantification of the 'proof beyond a reasonable doubt' standard. *Law, Probability, and Risk, 5*, 159-165. doi: 10.1093/lpr/mg1017
- Frederick, J. T. (2005). Mastering voir dire and jury selection: Gain an edge in questioning and selecting your jury. Chicago, IL: American Bar Association.
- Graziano, S. J., Panter, A. T., & Tanaka, J. S. (1990). Individual differences in information processing strategies and their role in juror decision making and selection. *Forensic Reports*, *3*, 279-301.
- Halperin, I., & Merrick, J. (2006). Multinational study of attitudes towards individuals with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, *3*, 143. Retrieved from http://www.wiley.com/bw/journal.asp?ref=1741-1122
- Haney, C. (1984). On the selection of capital juries: The biasing effects of the death-qualification process. *Law and Human Behavior*, *8*, 121-132. doi: 10.1007/BF01044355
- Haney, C., Hurtado, A., & Vega, L. (1994). "Modern" death qualification: New data on its biasing effects. *Law and Human Behavior*, 18, 619-633. doi: 10.1007/BF01499328
- Haugtvedt, C. P., & Petty, R. E. (1992). Personality and persuasion: Need for cognition moderates the persistence and resistance of attitude changes. *Journal of Personality and Social Psychology*, 63, 308-319. doi: 10.1037/0022-3514.63.2.308
- Heaven, P. C., & St. Quintin, D. (2003). Personality factors predict racial prejudice. *Personality and Individual Differences*, 34, 625-634. doi: 10.1016/S0191-8869(02)00046-6

- Henry, D., Keys, C., Balcazar, F., & Jopp, D. (1996). Attitudes of community-living staff members toward persons with mental retardation, mental illness, and dual diagnosis. *Mental Retardation*, *34*, 367-379. Retrieved from http://www.aaiddjournals.org/
- Henry, D., Keys, C., Jopp, D., & Balcazar, F., (1996). The Community Living Attitudes Scale, Mental Retardation Form: Development and psychometric properties. *Mental Retardation*, *34*, 149-158. Retrieved from http://www.aaiddjournals.org/
- Horowitz, I. A. (1997). Reasonable doubt instructions: Commonsense justice and standard of proof. *Psychology, Public Policy, and Law, 3,* 285-302. doi: 10.1037/1076-8971.3.2-3.285
- Howell v. Tennessee, 151 S.W.3d 450 Tenn. (2004).
- Kagehiro, D. K. (1990). Defining the standard of proof in jury instructions. *Psychological Science*, *1*, 194-199. doi: 10.1111/j.1467-9280.1990.tb00197.x
- Kagehiro, D. K. & Stanton, W. C. (1985). Legal vs. quantified definitions of standards of proof. Law and Human Behavior, 9, 159-178. doi: 10.1007/BF01067049
- Kan, L., Boccaccini, M. T., McGorty, A., Noland, R. M., & Lawson, K. (2009). Presenting information about mental retardation in the courtroom: A content analysis of pre-Atkins capital trial transcripts from Texas. *Law & Psychology Review*, 33, 1-28. Retrieved from www.law.ua.edu/lawpsychology/
- Kemmelmeier, M. (2010). Authoritarianism and its relationship with intuitive-experiential cognitive style and heuristic processing. *Personality and Individual Differences*, 49, 44-48. doi: 10.1016/j.paid.2009.08.012
- Kim, H. M., & Kramer, T. (2006). The moderating effects of need for cognition and cognitive effort on responses to multidimensional prices. *Marketing Letters*, *17*, 193-203. doi: 10.1007/s11002-006-5928-2
- Lamberth, J., Krieger, E., & Shay, S. (1982). Juror decision making: A case of attitude change mediated by authoritarianism. *Journal of Research in Personality*, *16*, 419-434. doi: 10.1016/0092-6566(82)90003-4
- Lieberman, J. D., & Sales, B. D. (2007). *Scientific jury selection*. Washington, DC: American Psychological Association.
- Leippe, M. R., Eisenstadt, D., Rauch, S. M., Seib, H. M. (2004). Timing of eyewitness expert testimony, jurors' need for cognition, and case strength as determinants of trial verdicts. *Journal of Applied Psychology*, 89, 524-541. doi: 10.1037/0021-9010.89.3.524

- Leone, C. (1989). Self-generated attitude change: Some effects of thought and dogmatism on attitude polarization. *Personal and Individual Differences*, *10*, 1243-1252. doi: 10.1016/0191-8869(91)90109-O
- Levin, I. P., Huneke, M. E., & Jasper, J. D. (2000). Information processing at successive stages of decision making: Need for cognition and inclusion-exclusion effects. *Organizational Behavior and Human Decision Processes*, 82, 171-193. doi: 10.1006/obhd.2000.2881
- Lyon, A. D. (2008). But he doesn't look retarded: Capital jury selection for the mentally retarded client not excluded after Atkins v. Virginia. *Depaul Law Review*, *57*, 701-720. Retrieved from www.law.depaul.edu/
- MacCoun, R. J., & Kerr, N. L. (1988). Asymmetric influence in mock jury deliberation: Jurors' bias for leniency. *Journal of Personality and Social Psychology*, *54*, 21-33. doi: 10.1037/0022-3514.54.1.21
- McAuliff, B. D., & Kovera, M. B. (2008). Juror need for cognition and sensitivity to methodological flaws in expert evidence. *Journal of Applied Social Psychology*, *38*, 385-408. Retrieved from www.bellpub.com/jasp/
- McCauliff, C. M. A. (1982). Burdens of proof: Degrees of belief, quanta of evidence, or constitutional guarantees? *Vanderbilt Law Review*, *35*, 1293-1335. Retrieved from www. Vanderbiltlawreview.org
- McClelland, K. & Linnander, E. (2006). The role of contact and information in racial attitude change among White college students. *Sociological Inquiry*, 76, 81-115. Retrieved from http://www.wiley.com/bw/journal.asp?ref=0038-0245
- McFarland, S. (2010). Authoritarianism, social dominance, and other roots of generalized prejudice. *Political Psychology*, *31*, 453-477. doi: 10.1111/j.1467-9221.2010.00765.x
- Mitchell, H. E., & Byrne, D. (1973). The defendant's dilemma: Effects of jurors' attitudes and authoritarianism on judicial decisions. *Journal of Personality and Social Psychology*, 25, 123-129. doi: 10.1037/h0034263
- Narby, D. J., Cutler, B. L., & Moran, G. (1993). A meta-analysis of the association between authoritarianism and jurors' perceptions of defendant culpability. *Journal of Applied Psychology*, 78, 34-42. doi: 10.1037/0021-9010.78.1.34
- Ogloff, J. R. P. (1991). A comparison of insanity defense standards on juror decision making. *Law and Human Behavior*, *15*, 509-531. doi: 10.1007/BF01650292
- O'Neil, K. M., Patry, M. W., & Penrod, S. D. (2004). Exploring the effects of attitudes toward the death penalty on capital sentencing verdicts. *Psychology, Public Policy, and Law, 10*, 443-470. doi: 10.1037/1076-8971.10.4.443

- Palmer, D. L., & Kalin, R. (1985). Dogmatic responses to belief dissimilarity in the "bogus stranger" paradigm. *Journal of Personality and Social Psychology*, 48, 171-179. doi: 10.1037/0022-3514.48.1.171
- People v. Vasquez, 84 P.3d 1019 Colo. (2004).
- Poulson, R. L., Braithwaite, R. L., Brondino, M. J., & Wuensch, K. L. (1997). Mock jurors' insanity defense verdict selections: The role of evidence, attitudes, and verdict options. *Journal of Social Behavior and Personality*, 12, 743-758. Retrieved from www.sbp-journal.com/
- Reardon, M. C., O'Neil, K. M., & Levett, L. M. (2007). Deciding mental retardation and mental illness in capital cases: The effects of procedure, evidence, and attitudes. *Psychology, Crime & Law*, 13, 537-557. doi: 10.1080/10683160601160018
- Roid, G. (2003a). *Stanford-Binet Intelligence Scales Fifth Edition*. Itasca, IL: Riverside Publishing.
- Rokeach, M. (1954). The nature and meaning of dogmatism. *Psychological Review*, *61*, 194-204. doi: 10.1037/h0060752
- Rokeach, M. (1960). The open and closed mind: Investigations into the nature and belief systems and personality systems. New York: Basic Books, Inc.
- Salerno, J. M., & McCauley, M. R. (2009). Mock jurors' judgments about opposing scientific experts: Do cross-examination, deliberation and need for cognition matter? *American Journal of Forensic Psychology*, 27, 36-60. Retrieved from www.forensicpsychology.org/journal.htm
- Shaffer, D. R., & Case, T. (1982). On the decision to testify in one's own behalf: Effects of withheld evidence, defendant's sexual preferences, and juror dogmatism on juridic decisions. *Journal of Personality and Social Psychology*, 42, 335-346. doi: 10.1037/0022-3514.42.2.335
- Shaffer, D. R., Plummer, D., & Hammock, G. (1986). Hath he suffered enough? Effects of jury dogmatism, defendant similarity, and defendant's pretrial suffering on juridic decisions. *Journal of Personality and Social Psychology*, 50, 1059-1067. Retrieved from 10.1037/0022-3514.50.5.1059
- Simon, R. J. (1969). Judges' Translations of burden of proof into statements of probability. In J. J. Kennelly & J. P. Chapman (Eds.), *The trial lawyer's guide* (pp. 103-114). Mundelein, IL: Callaghan & Company.
- Simon, R. J. (1970). Beyond a reasonable doubt. *Journal of Applied Behavioral Science*, *6*, 203-209. Retrieved from www.jab.sagepub.com/

- Simon, R. J., & Mahan, L. (1971). Quantifying burdens of proof: A view from the bench, the jury, and the classroom. *Law and Society Review*, *5*, 319-330. Retrieved from http://www.wiley.com/bw/journal.asp?ref=0023-9216
- Siperstein, G. N., Norins, J., Corbin, S., & Shriver, T. (2003). *Multinational study of attitudes towards individuals with intellectual disabilities*. Washington, D.C.: Special Olympics.
- Sommers, S. R., & Kassin, S. M. (2001). On the many impacts of inadmissible testimony: Selective compliance, need for cognition, and the overcorrection bias. Personality and Social Psychology Bulletin, 27, 1368-1377. doi: 10.1177/01461672012710012
- State v. Jimenez, 924 A.2d 513 N.J. (2007).
- Stones, C. R. (2006). Antigay prejudice among heterosexual males: right-wing authoritarianism as a stronger predictor than social-dominance orientation and heterosexual identity. *Social Behavior and Personality*, *34*, 1137-1150. doi: 10.2224/sbp.2006.34.9.1137
- Sue, S., Smith, R. E., & Pedroza, G. (1975) Authoritarianism, pretrial publicity, and awareness of bias in stimulated jurors. *Psychological Reports*, *37*, 1299-1302. Retrieved from http://ammons.ammonsscientific.com/php/toc.php
- Tillers, P., & Gottfried, J. (2006). Case comment United States v. Copland, 369 F. Supp. 2d 275 (E.D.N.Y. 2005): A collateral attack on the legal maxim that proof beyond a reasonable doubt is unquantifiable. *Law, Probability, and Risk*, 5, 135-157. doi: 10.1093/lpr/mg1015
- Veraldi, D. M. & Veraldi, L. (2008). The death penalty and the mentally retarded. *American Journal of Forensic Psychology*, 26, 5-27. Retrieved from www.forensicpsychology.org/journal.htm
- Verkuyten, M., & Hagendoorn, L. (1998). Prejudice and self-categorization: The variable role of authoritarianism and in-group stereotypes. *Personality and Social Psychology Bulletin*, 24, 99-110. doi: 10.1177/0146167298241008
- Verplanken, B., Hazenberg, P. T., & Palenewen, G. R. (1992). Need for cognition and external information search effort. *Journal of Research in Personality*, *26*, 128-136. doi: 10.1016/0092-65669290049-A
- Wainwright v. Witt, 469 U.S. 412 (1985).
- Weinstein, J. B., & Dewsbury, I. (2006). Comment on the meaning of 'proof beyond a reasonable doubt'. *Law, Probability, and Risk*, 5, 167-173. doi: 10.1093/lpr/mg1016
- Werner, C. M., Kagehiro, D. K., & Strube, M. J. (1982). Conviction proneness and the authoritarian juror: Inability to disregard information or attitudinal bias? *Journal of Applied Psychology*, 67, 629-636. doi: 10.1037/0021-9010.67.5.629

- Whitley, B. E., Jr. (1999). Right-wing authoritarianism, social dominance orientation, and prejudice. *Journal of Personality and Social Psychology*, 77, 126-134. doi: 10.1037/0022-3514.77.1.126
- Whitley, B. E., Jr. & Lee, S. E. (2000). The relationship of authoritarianism and related constructs to attitudes toward homosexuality. *Journal of Applied Social Psychology*, *30*, 144-170. doi: 10.1111/j.1559-1816.2000.tb02309.x
- Witherspoon v. Illinois, 391 U.S. 510 (1968).
- Wolraich, M. L., & Siperstein, G. N. (1983). Assessing professionals' prognostic impression of mental retardation. *Mental Retardation*, 21, 8-12. Retrieved from www.aaidd.org
- Wolraich, M. L., Siperstein, G. N., & O'Keefe, P. (1987). Pediatricians' perceptions of mentally retarded individuals. *Pediatrics*, 80, 643-649. Retrieved from pediatrics.aappublications.org/
- Wood, P. B. & Sonleitner, N. (1996). The effect of childhood interracial contact on adult antiblack prejudice. *International Journal of Intercultural Relations*, 20, 1-17. doi: 10.1016/0147-1767(96)00038-7
- Wylie, L., & Forest, J. (1992). Religious fundamentalism, right-wing authoritarianism and prejudice. *Psychological Reports*, 71, 1291-1298. doi: 10.2466/PR0.71.8.1291-1298
- Yazbeck, M., McVilly, K., & Parmenter, T. R. (2004). Attitudes toward people with intellectual disabilities: An Australian perspective. *Journal of Disability Policy Studies*, *15*, 97-111. doi: 10.1177/10442073040150020401
- Young, B., Boccaccini, M. T., Conroy, M. A., & Lawson, K. (2007). Four practical and conceptual assessment issues that evaluators should address in capital case mental retardation evaluations. *Professional Psychology*, *38*, 169-178. doi: 10.1037/0735-7028.38.2.169

Appendices

Appendix A

Research announcement

Study Name: "Determinations of Mental Retardation: You Be the Juror"

Description: Participants will be asked to read one trial transcript and to complete a few questionnaires that relate to the case. There is also one questionnaire that requires information about things such as age, level of education, prior experiences as a juror and the like.

Eligibility Requirements: Participants must be able to read and speak English fluently and be at least 18 years of age or older.

Duration of participation: 120-180 minutes.

Credits: 4.5 for the completion of the study.

Researcher: Debra Chen

Office: Gordon Palmer 359C Email: drchen@crimson.ua.edu

Appendix B

Demographic Information Form

1.	Please write down your age:								
2.	Please indicate your gender (please circle response): Male Female								
3.	Please indicate your race (please circle response or write on the space provided):								
African	n-American Asian Caucasian Hispanic Native American Pacific Islander								
Other:_									
4.	Please indicate the number of years of post-high school education:								
5.	Please indicate your political affiliation: Republican Democrat Independent								
Other: None									
6.	Have you ever served on a jury before (please circle response): Yes No								
a.	If yes to Question 8, what type of case (please circle response):								
b.	Civil Criminal								
7.	Do any members of your immediate family work as judges (please circle response): Yes								
No									
8.	Do any members of your immediate family work as defense attorneys (please circle								
respons	se): Yes No								
9.	Do any members of your immediate family work as prosecuting attorneys (please circle								
respons	se): Yes No								
a.	Do any members of your immediate family work as other professionals in the legal field								
(please	circle response): Yes No <u>If yes, what is this persons/these peoples job title or what do</u>								
they do in the legal field?									
10.	Please identify what state you identify as home:								
11.	Have you ever been employed in a mental health setting? YES NO								
If yes, p	please describe the place of employment, what you did as an employee, and how long you								
worked there.									

13. Do you have knowledge or experience with people with developmental	disabilities suc
as mental retardation, autism, Down Syndrome, and the like? YES NO)
If yes, check <u>all</u> that apply and describe your experience:	
□Classes in school/college:	
□Classroom training outside of school/college:	
□Employment:	
□Volunteer experience:	
☐ I have a family member who lives or <u>has lived with me</u> who has a development	ental disability:
☐ I have a family member who <u>has never lived with me</u> who has a development	tal disability
☐ I have a friend/acquaintance with a developmental disability:	

Appendix C

Instructions – Group 1 [Nonquantified/POE standard]

Imagine that you are a juror in the following case and your job is to decide if you think that the defendant has mental retardation or does not have mental retardation. The prosecutor and the defendant have each hired an expert to support their positions; the prosecution expert will testify that their view of the data indicates that the defendant does not have mental retardation. In contrast, the defense expert's opinion of the data is that the defendant does have mental retardation. What you have in front of you is a transcript of a real hearing. The transcript has been shortened because the hearing went on for many, many hours. What is important for you to know is that the data not important to your job was removed. Of course the names of the people and some other identifying information in the real case have been changed so that their privacy is protected.

What I want you to do is read all of the documents very carefully and then decide for yourself if the defendant has mental retardation.

In this case, burden is on the defendant to prove that he has mental retardation. This means that the defendant's attorneys have to convince you that he has mental retardation. You are probably wondering how sure you need to be in making this decision and in this case the defendant has to convince you by preponderance of the evidence that he has mental retardation. The standard of proof in this case is preponderance of the evidence. Preponderance of evidence has been described as just enough evidence to make it more likely than not, that what the defendant seeks to prove is true. In other words, in this case you need to think that it is more likely than not that the defendant has mental retardation. Remember, the defense attorneys have to convince you that all of the data that is presented, including anything that the prosecution expert brings forward, leads you to think that it is more likely than not that he has mental retardation.

Appendix D

Instructions – Group 2 [Nonquantified/CAC standard]

Imagine that you are a juror in the following case and your job is to decide if you think that the defendant has mental retardation or does not have mental retardation. The prosecutor and the defendant have each hired an expert to support their positions; the prosecution expert will testify that their view of the data indicates that the defendant does not have mental retardation. In contrast, the defense expert's opinion of the data is that the defendant does have mental retardation. What you have in front of you is a transcript of a real hearing. The transcript has been shortened because the hearing went on for many, many hours. What is important for you to know is that the data not important to your job was removed. Of course the names of the people and some other identifying information in the real case have been changed so that their privacy is protected.

What I want you to do is read all of the documents very carefully and then decide for yourself if the defendant has mental retardation.

In this case, burden is on the defendant to prove that he has mental retardation. This means that the defendant's attorneys have to convince you that he has mental retardation. You are probably wondering how sure you need to be in making this decision and in this case the defendant has to convince you by clear and convincing evidence that he has mental retardation. The standard of proof in this case is clear and convincing. The clear and convincing standard has been described as being persuaded by the evidence that it is substantially more likely than not that what the defendant is claiming is true. In other words, in this case you need to think that it is substantially more likely than not that the defendant has mental retardation. Remember, the defense attorneys have to convince you that all of the data that is presented, including anything that the prosecution expert brings forward, leads you to think that it is substantially more likely than not that he has mental retardation.

Appendix E

Instructions – Group 3 [Quantified/POE standard]

Imagine that you are a juror in the following case and your job is to decide if you think that the defendant has mental retardation or does not have mental retardation. The prosecutor and the defendant have each hired an expert to support their positions; the prosecution expert will testify that their view of the data indicates that the defendant does not have mental retardation. In contrast, the defense expert's opinion of the data is that the defendant does have mental retardation. What you have in front of you is a transcript of a real hearing. The transcript has been shortened because the hearing went on for many, many hours. What is important for you to know is that the data not important to your job was removed. Of course the names of the people and some other identifying information in the real case have been changed so that their privacy is protected.

What I want you to do is read all of the documents very carefully and then decide for yourself if the defendant has mental retardation.

In this case, burden is on the defendant to prove that he has mental retardation. This means that the defendant's attorneys have to convince you that he has mental retardation. You are probably wondering how sure you need to be in making this decision and in this case the defendant has to convince you by preponderance of the evidence that he has mental retardation. The standard of proof in this case is preponderance of the evidence. Preponderance of evidence has been described as just enough evidence to make it more likely than not that what the defendant seeks to prove is true. In other words, in this case you need to be at least 51% certain that the defendant has mental retardation. Remember, the defense attorneys have to convince you that all of the data that is presented, including anything that the prosecution expert brings forward, leads you to think that it is more likely than not that he has mental retardation.

Appendix F

Instructions – Group 4 [Quantified/CAC standard]

Imagine that you are a juror in the following case and your job is to decide if you think that the defendant has mental retardation or does not have mental retardation. The prosecutor and the defendant have each hired an expert to support their positions; the prosecution expert will testify that their view of the data indicates that the defendant does not have mental retardation. In contrast, the defense expert's opinion of the data is that the defendant does have mental retardation. What you have in front of you is a transcript of a real hearing. The transcript has been shortened because the hearing went on for many, many hours. What is important for you to know is that the data not important to your job was removed. Of course the names of the people and some other identifying information in the real case have been changed so that their privacy is protected.

What I want you to do is read all of the documents very carefully and then decide for yourself if the defendant has mental retardation.

In this case, burden is on the defendant to prove that he has mental retardation. This means that the defendant's attorneys have to convince you that he has mental retardation. You are probably wondering how sure you need to be in making this decision and in this case the defendant has to convince you by clear and convincing evidence that he has mental retardation. The standard of proof in this case is clear and convincing. The clear and convincing standard has been described as being persuaded by the evidence that it is substantially more likely than not that what the defendant is claiming is true. In other words, in this case you need to be at least 75% certain that the defendant has mental retardation. Remember, the defense attorneys have to convince you that all of the data that is presented, including anything that the prosecution expert brings forward, leads you to think that it is substantially more likely than not that he has mental retardation.

Appendix G

Transcript

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF NORTH CAROLINA MIDDLE DIVISION

JUSTIN STEVENS,) Case No. CV05-Pr-5782-M			
) Raleigh, North Carolina			
Petitioner,) December 5, 2007			
VS)			
) 10:00 a.m.			
MARK THOMAS, Commissioner)			
North Carolina Department Corrections,)			
Respondent.)			

TRANSCRIPT OF HEARING
HELD BEFORE THE HONORABLE CHRISTOPHER MARSHALL
UNITED STATES MAGISTRATE JUDGE

APPEARANCES:

FOR THE PETITIONER: GREGORY SMITH

SMITH & SONS Law Firm

805 48th Street Raleigh, NC 27602

FOR THE RESPONDENT: JENNA EVANS

Office of the Attorney General North Carolina State House 11 South Union Street Raleigh, NC 27602

Christina Johnson, RPR, RMR Federal Official Reporter

JUDGE: Good morning, folks. For the record, I'm Christopher Marshall. I'm a U. S. Magistrate Judge here in the Northern District of North Carolina. And the matter here today is Justin Stevens versus Mark Thomas, and the issue regards whether or not the Petitioner has mental

retardation.

First off, I want to have each of the attorneys identify themselves for the record. We'll start over here.

MR. SMITH: I'm Gregory Smith. I'm with the Smith & Sons law firm. I will be representing Justin Stevens and arguing the side that he does in fact have mental retardation.

MS. EVANS: My name is Jenna Evans. I work in the North Carolina Attorney General's Office.

JUDGE: The issue of mental retardation has been raised by the petitioner in this matter. And so I would presume that the petitioner will bear the burden since they've raised the issue alleging that he is mentally retarded. As a result I am going to require that the petitioner goes first in terms of presenting a case.

MR. SMITH: Yes, sir. Petitioner calls Shirley Carson, a clinical psychologist.

PETITIONER'S WITNESS, SHIRLEY CARSON, SWORN

THE CLERK: State your name for the record.

THE WITNESS: Shirley Carson.

DIRECT EXAMINATION BY MR. SMITH:

Q Dr. Carson, in preparing for your testimony here today, would you please tell the Court what activities you engaged in?

A I reviewed records. I contacted family members, correctional officers, and I attempted to contact Mr. Stevens's ex-wives. I was not able to successfully contact his ex-wives. I also met with Mr. Stevens for interviewing and assessment.

Q What tests did you administer to Mr. Stevens?

A I administered the Stanford-Binet-5, which is a well-established and commonly used IQ test in the field of psychology. I also gave the Woodcock-Johnson, which is a measure of broad cognitive abilities.

Q And you administered a Mini-Mental Status Exam?

A Yes. I was using it as a general orientation instrument. I would ask him if he knew the day of the week, what time it was, where he was. He couldn't do some of the attention questions because it required spelling. He didn't know the seasons of the year.

In general, he showed good concentration and attention.

Q Did you administer any other formal tests?

A I administered the Scales of Independent Behavior Revised to Mr. Stevens's brothers. It is a measure of adaptive behavior. The reason that I did not give it to Mr. Stevens was that the point of measuring adaptive functioning is to get somebody else's perspective of the person and their ability to function independently and adapt to changes in the environment. Typically, you want to get a broad-based home, school, community, and employment settings evaluation. They are all covered in that instrument. You ask questions about how well somebody did something. And the reason you give it to assess mental retardation is that, for one, it gives good information. But for another, the American Association For Mental Retardation has stipulated in its 2002 book that you have to in order to give a diagnosis of mental retardation.

However, the way I administered it is quite unorthodox. The problem is that Mr. Stevens is being evaluated for mental retardation prior to 18 and he's 55 now. And the only way to do that is to do a retrospective evaluation. I had to ask his brothers to remember him from almost 40 years ago.

- Q. If you would, kind of quickly go over Mr. Stevens's childhood and tell us what possible meaning this could have in your opinion that he has mental retardation?
- A First I considered risk factors. Risk factors mean they put somebody at risk for something. His mother had a longstanding alcohol problem therefore putting him at risk for not having the proper home support. He was also reportedly born breech which can actually cause anoxia and impede getting oxygen to the brain during delivery.

Another risk factor is limited resources, meaning that the family itself may have not had enough food, clothing, or supervision. The Department of Pensions and Securities (DPS) record is full of information about corporal punishment and those kinds of things in the home. There could have been injuries.

Spousal abuse is yet another risk factor. He witnessed spousal abuse. Also, he wasn't learning appropriate coping behaviors, frustration tolerance, any of those things that other people would, in different situations, like knowing how to handle their anger appropriately.

Also, Mr. Stevens was left unsupervised. The lack of supervision in his home apparently resulted in him doing some very dangerous things. Mr. Stevens and his brother stated that they did play on the railroad tracks, and he was actually arrested for putting things on the railroad tracks. And from his brother's report, Mr. Stevens used to crawl underneath the trains when they were slow moving and kind of scoot to the other side doing fairly dangerous behaviors. So he

was at risk for hurting himself severely.

- Q Does that have anything to say about his judgment?
- A Sure. It shows poor judgment on his part. In his case, it suggests that he's had poor judgment and impulse problems.
- Q And you read the DPS records?
- A. Yes, and they indicated that the defendant moved to an aunt and uncle's home because of the alcoholism, neglect, and spousal abuse in the home. It was a police officer who identified the children being at risk and then came in and removed them.
- Q Let me ask you: is it possible that head injuries would have anything to do with a person being mentally retarded? I understand that Mr. Stevens fell off the house at age 5 and was knocked unconscious?
- A Yes. Possible causes include biological, behavioral, social, and the interaction among those things.
- Q Dr. Carson, Mr. Stevens has had a number of jobs, including pumping gas, loading boxes onto trucks, stacking lumber and tires, and picking up cans and other junk. Are those the types of jobs that somebody with mild mental retardation could engage in?
- A Absolutely. Mr. Stevens did not hold these jobs for very long. These positions did not require a great deal of training or skill, the kinds of positions someone with mild mental retardation could do.
- Q Dr. Carson, does Mr. Stevens have the ability to make purchases?
- A His brothers told me that it was no problem for him to purchase small things at retail stores. His concept of money is pretty limited. He knows what dollars are. He can go to the store and say how much is this and they'll say three or four dollars, and he'll hand them three or four dollars. He's got that basic level of knowledge. He's less capable with change, but can handle the very basics. He can go buy a hamburger or whatever it might be. Someone with mild mental retardation can do these things. The common view of people with mental retardation is that they can't do anything and that they need constant supports and protections. That's not the case. Mr. Stevens, as well as other people with mild mental retardation can do these things. They can have families, they can parent, hold full-time jobs; they just need a little help.
- Q That brings up the issue of the trips that he made to Nashville, Chicago, Kansas, and Tennessee. Did you receive any information about how that occurred?

- A. From what I understand, he drives, picks up hitchhikers, and asks them things he wants to know like where to get a burger or a hotel and gets the information from them. He's able to negotiate well. In speaking with him, he understands landmarks, which makes sense because he's illiterate. People who can't read begin to compensate and learn different skills. And if you're talking about interstate driving and picking up hitchhikers, it makes good sense for him to be able to function in that capacity.
- Q How about financially? How is he able to move across the country like that financially?
- A Well, when I spoke with Mr. Stevens he said he had some money that was given to him. I'm not really clear where that came from. But through our discussions, he said that he was getting money from various individuals. I don't know about his engaging in stealing. Throughout his life, he will readily admit that that's how he got his money. So I am not entirely sure except for being provided with assistance by others.
- Q. If you would, kind of quickly go over Mr. Stevens's interpersonal relationships and tell us what possible meaning this could have that he has mental retardation?
- A According to multiple sources, Mr. Stevens has been married three times with all marriages ending in divorce. Available information suggests that his wives did the cooking (he could make simple things like scrambled eggs) and that his wives basically took care of his financial needs (such as paying bills and going to the bank). Mr. Stevens' jobs were all obtained for him (he never got a job on his own). All of this information suggests that Mr. Stevens never lived independently.
- Q Did you determine with any accuracy how far he went in school?
- A Between the Sixth and Seventh Grade, at the age of 15 or 16; that was when he stopped. He did two years of First Grade, two years of Second Grade, and in the Fifth Grade, he got put into some sort of special education class. But, essentially, all of the records suggest that, with the exception of the C-minus in math, he earned F's in all academic subjects.

There is a statement from the principal of his elementary school, which stated that the defendant was definitely mentally retarded, and requested that he be moved to a special school for students with mental retardation

- Q What did his teachers' comments say?
- A One of the teachers said that he did not have the ability to learn on the level of an average child. The next teacher, (a special ed teacher), said that his limitations were environmentally

based, not due to intellectual limitations. Her basis for this were some successes in math and the ability to verbally repeat phrases said to him. I have a concern about this is that these abilities provide no indication of being mentally retarded or not

Q You also spoke to Sergeant Martin in the prison. What did he have to say?

A He said that Mr. Stevens is a simpleminded fellow that has some street smarts. Because of his lack of mental skills, he would be "easy prey". And those street smarts refer to the fact that Justin has been in the criminal system for a really long time.

Q And then we have the comments by Officers Peters and Russell?

A Right. They didn't know him as well. Both had referred to him as being slow and simple, functions fine, no problems. That was across the board. Mr. Stevens is noted to function very well within the system. Officer Peters said one thing that he noticed about Justin (Mr. Stevens) is that he saves his food, and brings it out to feed the animals outside.

Q How would you evaluate his adaptive behaviors in a prison setting?

A Someone like Mr. Stevens, with mild mental retardation, should function extremely well in this kind of environment. He's got no need to do anything. He doesn't have to go and buy anything, he doesn't have to make his bed. He doesn't have to do any of the typical things that we would have to do. So, for him, he's functioning very well there, with small deficits in adaptive functioning, such as not being able to use the phone and perhaps getting taken advantage of.

Q Did you talk to Mr. Stevens about his reliance on others?

A Yes, I did. Mr. Stevens talks freely about needing other people for assistance, for writing letters, reading letters, requesting medical assistance. Also Sergeant Martin indicated that Mr. Stevens once self-administered an enema. He stated that when the nurses found Mr. Stevens, there was stool all over the room and the stench was unbearable. This is indicative of someone who was trying to help himself but used poor decision making in his attempts.

Q What is your impression of his functioning during his criminal trial?

A By reading the transcripts, I don't think he functioned well at all in during his trial. In terms of poor judgment in answering questions, there was one point when his attorney instructed Mr. Stevens not to answer the question. But then he went ahead and answered it anyway. So he's showing a lot of poor judgments and confusion. And with the leading questions, he would answer one question one way and then get taken down a route and you could tell he was confused.

- Q Did his attorney recommend that he not testify?
- A Yes, twice.
- Q Did the judge intercede and tell him that he did not have to testify?
- A Yes.
- Q And how about the district attorney?
- A Yes, they all told him not to and discussed it with him, and still he wanted to go on. After he came off the stand, Mr. Stevens started to request to go back on the stand again. The judge put a stop to it and said he wouldn't let him do that, and Mr. Stevens's response was that "I wanted to finish my sentences. I did not finish my sentences." But he did not get to go back up on the stand.
- Q Dr. Carson, let's talk about all of the tests that he's been given through the years. There were multiple tests, correct?
- A Yes.
- Q Can you please briefly mention all of the tests he has received and also the IQ scores of the average population?
- A Generally speaking, the average IQ score of the general population is 100. Specifically speaking about Mr. Stevens, between the ages of 9 and 14, he was administered 3 abbreviated IQ tests, which gave IQ scores of 49, 56, and 54. These scores all fell in the range known as "mental defective," which would now be called mental retardation. Then, from the ages of 19 and 41, Mr. Stevens was administered 6 more IQ tests, and those IQ scores were 66, 73, 69, 72, 71, and 65. The 66, 69, and 65 all fell in the Mild Mental Retardation range, and the 71, 72, and 73 all fell in the Borderline Mental Retardation range. In other words, out of the 9 times Mr. Stevens was evaluated, each score indicated mental retardation ranging from borderline to "mental defective."
- Q One of those scores, the 71, fell in the Borderline Mental Retardation range and was obtained at the Rivers Facility. But they said he was not mentally retarded in their conclusions. Did they state why?
- A Yes, they cited a number of reasons. First, they said his adaptive functioning skills were too high. Basically, he was able to communicate well with other people, clean his room, and maintain hygiene and those kinds of things. Dr. Rogers, also used the term called "street-wise" and said that Mr. Stevens was street-wise, therefore, he was not mildly mentally retarded even though the classification was appropriate.

- Q Is the term "street-wise" a term in psychology?
- A No, not at all. It is an everyday phrase that people use. Essentially what it relates to, when you can find a definition, is someone who's crafty and conniving and successfully negotiates themselves.
- Q So there wouldn't be a test for street-wiseness?
- A No. And there's no way to know if what a clinician would mean when they use that kind of a phrase.
- Q Can you please tell us about your direct observations from your time with Mr. Stevens?
- A He has trouble staying on topic. It's very difficult to get him to stay on track. It's not all the time, sometimes he can answer questions just fine and he will stop.

Sometimes during our conversations, he would get confused. At one point, he actually said, "I'm really sorry, I'm confused now and sometimes I lose track of where I am or what I'm talking about."

- Q Your second impression is he's able to talk about his life's history?
- A Yes. What Mr. Stevens told me is very consistent with his brothers' statements to me. And I never shared any information between the parties. I also found him to be polite and courteous. But, he couldn't see other's people's views. For example, he views animals as his best friends and therefore, he thinks that having sex with them is appropriate. He did not understand that other people would see sex with animals as embarrassing or strange. He talked very normally about it. I don't think he would really know that I would find that problematic.
- Q All right. You administered an IQ test? How did he do?
- A He had a full scale IQ of 58. This would certainly meet the IQ criteria for mental retardation. He did better in math skills. This makes sense since his teachers' comments were that he understood math lessons the best. Mr. Stevens also had a strength in visual spatial skills, which includes the ability to manipulate images and pictures. His scores were by no means average, they were well below average, but are considered strengths as compared to his other skills, like solving problems. His scores are in the mild mental retardation range. There are people with more severe level of mental retardation, but he falls in the mild range

In terms of his weaknesses, he had problems with solving problems, and the ability to manipulate information quickly

Q You administered the Woodcock-Johnson as a test of academic subject matter. How did

he do on that?

A He did poorly on everything. Because he can't read, I couldn't give all of the tests. His oral language and math scores fell around the those of 1st and 2nd-graders. And his academic skills and academic knowledge scores fall around kindergarten levels. He was doing quite poorly actually.

- Q All right. A couple of things. Does this make sense given his IQ?
- A Yes. They make sense together.
- Q Then we get into the adaptive behavior scales. What did you find? Tell me what these scores represent.
- A What they represent is Justin's level of adaptive functioning, or his ability to live independently and adapt to changes in his environment. In this case, according to Mr. Stevens's brother's answers to this test, what you've got there is a broad independent score of 58, which falls into the Limited range. All of his cluster scores, including his motor skills score, social/communication score, personal living score, and community living score, fell within the Limited or Limited to Very Limited range. In terms of specific subtest scores, he's doing just fine in terms of personal living and this is meal prep, eating and meal preparation, toileting, dressing, self-care. This test also indicates he is able to sweep his floor, clean his house, take out the trash, those kinds of things.
- Q According to the DSM-IV, and based upon the results of your formal testing that you conducted with Justin, and your interviews and your view of the records, do you have an opinion as to whether or not Justin Stevens has a diagnosis of mental retardation?
- A Yes, I do. I believe he falls in the mild mentally retarded range and shows deficits in two or more areas of adaptive behavior. First, functional academic skills is obviously one. Work is another. He was never able to maintain a job for an extended period of time. He held only menial labor jobs, which is consistent with someone with mild mental retardation. Some health and safety issues come up with his risk-taking behavior. I mean, part of it even comes up in his criminal history with being shot a number of times. He puts himself in risky situations such as crawling under a train. Having sex with animals is also a health safety issue.

Self direction is a third. He has never shown any kind of self-direction, never planned to get a job, sort of fell into jobs. Social and interpersonal skills is a fourth and are also important for Mr. Stevens in terms of the findings. With communication and self-care, he's fine.

- Q Do you believe that the onset of his problems were before the age of 18?
- A Yes. You know, having the principal and the teacher going to great lengths at trying to get him into a school for individuals with mental retardation. The fact that he was held back for two years, First Grade and Second Grade. He was functioning very poorly and never learned to read or write. So from what I can gather, from all of the information taken together, I'm confident in my diagnosis of mild mental retardation.
- Q Based on the AAMR definition of mental retardation, do you have an opinion as to whether or not a diagnosis of mental retardation is appropriate for Justin Stevens?
- A Yes, I do.
- Q Thank you, Dr. Carson, that's all.

CROSS-EXAMINATION BY MS. EVANS

BY MS. EVANS:

- Q Dr. Carson, my name is Jenna Evans and I represent the State of North Carolina. I have some questions for you. Is there any way to assess whether someone is faking mental retardation?
- A There's no instrument for it. Somebody would have to fake mental retardation from the time that they were a child. I'm not finding any kind of information that supports the idea that he faked mental retardation since he was little.
- Q Thank you, Dr. Carson, that's all.

JUDGE: I have a question. Mr. Steven was able to get out and work as a runner in the prison, right? And there are other tasks that he was allowed to do during the course of the time he's been in prison. Did you inquire as to what that involved?

THE WITNESS: Yes, I actually spoke with Sergeant Martin about that and he did tell me that what a runner does is walk up and down and attend to people's needs. But in the same conversation, he told me that Justin did not do that very well, and that he was not, in his opinion, capable of doing much.

JUDGE: O.K. That's all. You can leave the stand now. You can call that State's witness now. RESPONDENT 'S WITNESS, JOCELYN KASDEN, SWORN

JUDGE: State your name for the record.

THE WITNESS: Jocelyn Kasden. I am a clinical psychologist.

DIRECT EXAMINATION BY MS. EVANS

BY MS. EVANS:

- Q Dr. Kasden, what kind of evaluation were you asked to perform on Mr. Stevens?
- A I was asked to determine whether Mr. Stevens meets the diagnosis of mental retardation.
- Q In conducting your evaluation of him, did you go to the prison and interview him?
- A I did.
- Q Did you explain to Mr. Stevens the purpose of your interview?
- A I did and he understood what I said to him.
- Q Can you describe Mr. Stevens's behavior during the interview?
- A He was pleasant, very talkative, very cooperative, attentive, focused. In the course of the interview, he would occasionally make comments that were funny. He answered all of my questions, and even at times, provided additional information all of which was relevant and appropriate. He engaged in social behaviors and they were appropriate. He shook my hand appropriately. He maintained appropriate distance in our seating. There was one incident when we were going up to use the coke machine, and he stepped aside and let me use it first.
- Q You had no problems communicating with him, did you?
- A I did not. He always stayed on topic.
- Q How was his vocabulary?
- A His vocabulary was good and it was appropriate and relevant to the discussion. He answered the questions, for the most part, thoroughly enough.
- Q Did you look at his vocabulary and consider his vocabulary in the depositions?
- A I did look at that later, yes.
- Q And what did you think about his vocabulary skills as far as his deposition testimony?
- A There are words that Mr. Stevens uses in his answers in that deposition that are not consistent with somebody who is mentally retarded. They are much more advanced than somebody who is mentally retarded, and certainly much more advanced than some of the test results that Dr. Carson presented.

- Q Did he ever appear confused to you?
- A No.
- Q What about his memory?
- A His recall of information was very good, especially for remote events. What struck me as especially prominent here was that, not only was he able to recall events, but he was able to recall specifics, such as names, dates, and these were consistent with the collateral data.
- Q Did you review all of .the records that were submitted to you?
- A Yes.
- Q What did you learn from your interview of Sheriff Hall about Mr. Stevens?
- A During his discussion to me, Sheriff Hall, as did all of the officers, indicated that they never encountered difficulty communicating with Mr. Stevens during the course of their interviews.
- Q What about Captain Jeff Luce, what did he say?
- A He noted to me that he had had at least five opportunities to speak with Mr. Stevens. He felt that Mr. Stevens was very deliberate and purposeful in the conversation. And, in particular, he indicated that Mr. Stevens always avoided discussing any of the specific criminal matters that he was being brought in on, meaning he was avoiding talking about his crimes. That shows deliberation on his part, directiveness, purposefulness, that I do not believe is consistent with mild mental retardation.
- Q Who else did you talk to?
- A Joseph Harris, who was Mr. Stevens's stepson. Joseph indicated that Mr. Stevens was able to drive a car. That sometimes he did, recklessly, knowing, laughing about it while he did it. He described him as having been abusive to his mother. Also having been abusive to other people, as well. What I gathered is that when Mr. Stevens wanted to do something, he could do it. For example, he always knew what he wanted to eat at a restaurant and could order it. He could take the initiative and do things.
- Q Would you define mental retardation for the Court?
- A Mental retardation is the significant limitations in intellectual functioning, intelligence, and adaptive functioning. And those deficits, these limitations, have to start before age 18.
- Q Let's talk first about his intellectual functioning. Did you perform an IQ test on Mr. Stevens?

- A I did not.
- Q How did you reach the decision not to?
- A After I met with Mr. Stevens, I came back to my office and reviewed the records. Mr. Stevens, at that point, had been evaluated several times with intellectual assessments and I agree with the scores reported by Dr. Carson. I determined that those scores were not appropriate or consistent with a diagnosis of mental retardation. I further discerned, that there were other explanations for the low scores that we were seeing. To address the reason for the scores being low, would be the fact that he came from a very chaotic home life which didn't encourage good educational academics or school attendance. There was no encouragement to do homework. There were records that the other brothers also had failed grades and also were skipping school. It appears that he did have behavior problems in school. He told me, specifically, that one teacher would let him go wash her car because of problem behavior. She didn't want him in the classroom. Well, if he's not in the classroom, he's not being given the opportunity to learn. When he's in the classroom, he's acting up. The record shows that he had some behavior problems. These factors certainly will provide information, alternative reasons, for low IQ scores.
- Q What did you see significant about the first IQ score he received?
- A The initial test was given in 1958. My concern on that is looking at one section where he got a 43. That's the lowest score you can obtain on that section. The first thing you have to consider is poor motivation. The record includes a notation about Justin not putting forth a best effort. That, again, would be consistent with a 43, which notably he gets on the second administration, too.
- Q And the second test, you had some concerns about it, also?
- A Right. It's inappropriate to administer the same test with only 20 days between it and the previous one. And the reason that I included it in was again to note that he obtained the exact same score which is a 43, which lends some support to the notation that he did not appear to be putting forth a good effort, at least on that part. So what that says, in my mind, is that you have to be extremely cautious in interpreting the full scale IQ score.
- Q And what is your assessment of his adult IQ scores?
- A The assessment is, overall, that the full scale IQ scores are ranging within the mild mentally retarded range to borderline range. However, in my opinion, what is not consistent with mental retardation is the fact that the scores flip-flop, so these scores increase at certain times

and then decrease at other times.

- Q So one of the explanations for Mr. Stevens's low IQ scores is his ineffective academic experience, is that correct?
- A Yes. It has been shown that the IQ scores can depend heavily on school experience. He wasn't in school much, so he wouldn't score high on IQ tests.
- Q What about his mental capabilities? How did that factor in on your assessment of his intellectual functioning?
- A Mental retardation requires global deficits. That's deficits in all areas of intellectual functioning. One area, in particular, you were going to look at is memory. People with mental retardation often have difficulty with memory. It may not be in all areas of memory, but you're going to see poor memory overall. What Mr. Stevens does, in my opinion, during the trial, during interaction with me, during interaction with at least five staff members at Rivers Secure Medical Facility, shows that he has a much stronger memory capacity, overall, than you would expect with mental retardation. People with mental retardation do not remember names and addresses of places where they work. They do not recall dates from 20 or 30 years ago with such accuracy as Mr. Stevens did, not only once, but on a consistent basis. And that's what I want to point out is that this has been consistent. This wasn't just with me that he did this. He did this across different situations and across different time periods.
- Q In your opinion, is it possible that he suffers from a learning disability that affected his IQ scores?
- A Yes. And again, with his illiteracy, there are strong indications here for a reading disorder, where Mr. Stevens has a specific deficit with the area of reading. And with such deficit, this is the type of individual who is going to show difficulty in a lot of different areas because so much of what we do involves reading.
- Q Was there any support for the fact that he had a learning disability in any of the records that you reviewed?
- A Well, there was at least one mental health professional indicated that his results could be reflective of a learning disability.
- Q And what is your assessment of his intellectual functioning?
- A In my opinion, given all of the information I've looked at, including the IQ results, his functioning overall, I believe a diagnosis of borderline intellectual functioning is more

appropriate here.

- Q Would you define adaptive functioning, please?
- A In a general sense, adaptive functioning is the ability to adapt to one particular environment. I believe that Mr. Stevens has adaptive skills. He's able to survive and I believe he has adaptive skills that extend beyond that of mentally retarded people.
- Q And how did you go about assessing Mr. Stevens's adaptive functioning?
- A I looked at the collateral data that provided information about Mr. Stevens functioning at various different times.
- Q And did you perform any adaptive assessments concerning his adaptive functioning?
- A I did not.
- Q Why not?
- A For a number of reasons. First off, psychologists have not really developed a good adaptive functioning measure yet. Each one of them has their strengths and weaknesses, but
- Q Did you review the results of the Woodcock-Johnson test of achievement performed by Dr. Carson?
- A Yes. I would not have expected really good scores and some of the scores I feel are much higher than they should have been.
- Q So you were surprised by the test scores from the Woodcock-Johnson?
- A On some of them, yes.
- Q Why?
- A Well, for somebody who is illiterate and has not had good schooling, somewhere along the line, Mr. Stevens has gained some skills, gained some knowledge, and has developed particular areas in which he is able to succeed. What strikes me as important about that is that he just didn't learn some, he learned enough. And to me, that shows an ability to learn. It shows an ability to gain, take information, use it, process it, recall it, remember it, what have you, apply it; and he's able to obtain a good score. In my opinion, that is not consistent with mental retardation.
- Q Okay. From your review of the records in this case, would you say that Mr. Stevens suffers from substantial deficits in adaptive functioning as a child?
- A No, I would not.
- Q What indicated to you that he did not suffer substantial deficits in his adaptive behavior as a child?

- A I recall the DPS records. In those particular records, there was no discussion, description of impaired to care for self. At times he did fine, at times he had difficulty. Within the specific discussion of his home life his home life was clearly chaotic, disorganized and yet, he is able to cope, to some degree. No one has recognized him as needing particular assistance in any particular area. So again, there was nothing to support that he was having problems with his adaptive functioning during childhood.
- Q Has Mr. Stevens demonstrated some limitations in his adaptive behavior as an adult?
- A Yes, he has.
- Q What are those limitations?
- A A lot of the limitations will focus on particular areas that would have a connection to academics, such as perhaps learning to use money appropriately, being able to compute time, not just read time, but able to compute time and so forth. It would also have to do with issues of reading.
- Q Was his lack of employment history indicative to you of the limitations of his adaptive functioning?
- No, I don't believe that poor adaptive functioning explains his employment history. Because there were obviously times when Mr. Stevens was able to work. He also, on at least one occasion, left a job to get a better job. Now, you are not going to succeed in employment if you're in and out of jail. You are not going to be able to get higher type jobs through experience, if that experience keeps getting cut off and you're going to jail. You're not going to get experience if he wanted to go and peep. You have the issue of him engaging in deliberate behaviors which interfered in his ability or any possibility for him to proceed in developing employment skills?
- Q What about the fact that he was supported by other people?
- A If somebody was supporting him, he may have chosen not to work because of that. That he didn't need to get the money because he knew the money would come from other sources.
- Q What is significant to you about his peeping behavior?
- A He admitted that his peeping behavior interfered with his employment, that he would often be late for work because he would be peeping. From both his report and the records, that he was selecting people to peep. That he was actually selecting individuals that he wanted to engage this behavior with. There is, to some degree, planning here and purposefulness here. He's

following a plan to succeed and fulfill a need and desire that he has. He's not doing this once. He's doing it consistently over time. And I think that that again shows an ability to follow through on plans, follow through on desires, follow through on needs that he had, and does it in a way that's successful. It may not be appropriate, but it's successful for him.

- Q In your opinion, is it true that he chose not to work?
- A Yes.
- Q Is that indicative of somebody that's mentally retarded?
- A Well, somebody who is mentally retarded could choose not to work, too.
- Q Did you receive any information about whether Mr. Stevens could take care of his personal needs as an adult?
- A Yes. The records indicate that he could care for himself. There are some medical records that reflect that he has had an interest in his personal health. And the interest and the information in those records indicate what I would guess to be a more sophisticated level of functioning. What I mean by this is he, in one instance, asked about a chest X-ray that had been performed. In at least two or three instances, he notes or requests specific medication for particular ailments. Pain medication for pain. All of these things were appropriate and he's naming specific medication, requesting them appropriately. What that suggests to me is a pretty good insight about his health and his functioning. And he's able to communicate successfully when he has a problem with these particular areas. And even going above and beyond that, and offer some suggestion of what might work to help him feel better.
- Q What about the visitor sheets? His ability to use a visitor sheet, to fill them out, or to give somebody the information to have visitors, what is your assessment of his ability to do that?
- A Well, the first thing I noted with the visitation log is that those are quite extensive. You have to put the names, the addresses, the relationships, and these have to be filled out on the form appropriately. Mr. Stevens did that on numerous occasions. He indeed may have copied the information, but that is a lot of information to copy. He persisted in this task, completed it successfully. And, in my opinion, this shows a much higher level of functioning again than mentally retarded people show.
- Q What about the canteen/food stand use? Did you see anything about him, his ability to get things out of the food stand?
- A Justin was using a system, some type of symbol system, so that even though he couldn't

actually read the item, he could figure out what he wanted and how to express it to someone. The importance to me, is that Justin can go above and beyond any limitations that he has. He is able to adapt. Mr. Stevens has been able to adapt in what I would view as stressful, hostile environment, despite his intellectual limitations. And he has not only been able to adapt, but been able to succeed in meeting particular desires and goals he wants.

- Q Let's just start with his escape from the Cherokee County jail. What from that indicates his adaptive behavior does not fall in the mental retardation category?
- A Mr. Stevens had to engage in a number of behaviors, a number of steps, to escape. He actually got the correctional officer, the jailer's gun, and locked the jailer up. He then proceeds to obtain a vehicle and he drives this vehicle around numerous different states. He's able to drive to all of these different places successfully. He doesn't run out of gas on the side of the road. He finds places to stay. He finds places where he can get something to eat. I believe that he used an alias at one point
- Q What about the crime itself? Do you see significance about the crime as far as his adaptive functioning?
- A In that course of time, he has to drive from Tennessee to this residence. He does so without being seen, or found, or captured, what have you. For example, he parked the car away from the site. As he was approaching the trailer there was a dog that was barking. He quieted the dog obviously to avoid detection. He then went up to the trailer, did not barge in, but took his time and looked through a window. He then continues to remain on escape status for a number of weeks.
- Q What about the fact that he was able to buy and sell cars during this time? What does that show you?
- A He's able to engage in a series of stepwise behavior for a particular purpose. He got cars that were able to continue running and he was able to continue driving.
- Q Did you review the transcript from his criminal hearing where he invoked his Fifth Amendment rights in there?
- A At least one time he did, yes.
- Q Did you see any evidence concerning anti-social behavior on Mr. Stevens's part?
- A Yes, I did.
- Q And what's the significance of his anti-social tendencies or his behavior as far as his

mental retardation?

- A In the anti-social personality disorder, people with anti-social tendencies, there's a higher incident of lying amongst these people. He lied, he peeped. He then engages in other sexual offenses such as rape. He engages in break-ins. He's stealing and what have you. In my opinion, you have to consider anti-social behaviors, anti-social tendencies, and consider that that may be one explanation for why somebody may not have succeeded in school or holding a job for a long time. I think a diagnosis of antisocial personality disorder is more appropriate for Mr. Stevens than mental retardation.
- Q You don't see any problems with his motor skills?
- A Not that I saw, no.
- Q Did you see in the DPS records that he had been active in the Boy Scouts?
- A There was some notation that he was in the Boy Scouts. And I believe it was just a brief statement on that.
- Q After considering all of the circumstances concerning his adaptive functioning, what is your assessment of his adaptive functioning?
- A My assessment of the adaptive functioning is that he functioned adaptively at a level higher than mental retardation. He is able to engage in sophisticated behaviors that require steps. And yet, he is able to not only engage in behaviors during non stressful times, he's also able to successfully perform behaviors under stressful instances, like when he's running from the police.
- Q And in your opinion, under the DSM-IV definition, or under the AAMR definition, is Mr. Stevens mentally retarded?
- A I don't believe he meets the criteria for mental retardation, no.
- Q Thank you, Dr. Kasden. No more questions.

CROSS EXAMINATION BY MR. SMITH:

- Q Do you believe Mr. Stevens is mentally retarded?
- A I do not think Mr. Stevens is not mentally retarded.
- Q What criteria did you use to determine that?
- A What criteria? I used the review of the voluminous records, the interview with Mr. Stevens, and looking at all of that information and coming up with a diagnosis.

- Q Are you aware that the American Association on Mental Retardation requires that you assess him using an individual intellectual IQ test?
- Α For a diagnosis of mental retardation, yes.
- Q But you didn't do that?
- Α No.
- You didn't do an intelligence test. You did not do an adaptive behavior scale rating, did O you?
- Α No, I did not.
- As a matter of fact, you didn't conduct any tests, did you? O
- Α I did not.

JUDGE: Why not?

THE WITNESS: Testing is required to make the diagnosis of mental retardation. In my opinion, after reviewing behavioral examples of Mr. Stevens, it was clear that his adaptive functioning was higher than would be expected with somebody with mental retardation. Additionally, throughout the records, there are numerous factors that provide alternative explanation for the IQ results that were obtained. The IQ results that have been obtained are not consistent with what you would expect from somebody with mental retardation.

JUDGE: Are you saying, then, that it is necessary to test to confirm a diagnosis that he is mentally retarded, but it is not necessary to test to confirm a diagnosis that he is not? THE WITNESS: Yes, exactly.

JUDGE: Okav.

BY MR. SMITH

- Q Dr. Kasden, there were many diagnoses of mental retardation in his past?
- A There were some people who rendered the diagnosis of mental retardation.
- And when you went in to evaluate him, it had been approximately 13 years since his last Q evaluation, correct?
- Α Correct.
- Q Yet, you did not see that it was necessary to conduct a formal evaluation of this individual to determine whether or not he was mentally retarded?
- I did not feel that it was necessary or that conducting psychological testing was going to Α provide anything more than what I had here already.

- Q But you did not rule out his mental retardation by doing formal tests?
- A Testing rules "in" mental retardation.
- Q Testing never rules "out" mental retardation?
- A You can if you want to do that.
- Q What I'm asking you is: why would you not test him for mental retardation when there were former diagnoses of mental retardation, and the requirement of using formal tests with an individual to determine whether or not he is mentally retarded, according to the American Association on Mental Retardation?
- A Again, because after I had left, I came back and reviewed the records. My intention was to go back to test Mr. Stevens. However, after I reviewed all of the records, there were also diagnoses in which he was not given, or there were diagnoses made, that did not include mental retardation. I then also looked at the test results that were administered. I looked at all of the information provided. Mr. Stevens has been on death row for 17 years. He has not had opportunities, experiences, therefore, to apply these tests in this situation.

MR. SMITH:

Your Honor, we would respectfully ask that Dr. Kasden's testimony, as well as her report, be stricken from the record. She has not complied with the directions of this Court in a manner that would allow this Court to have the information necessary to make a determination as to whether or not Mr. Stevens was mentally retarded.

JUDGE: Denied. I think she has provided the information that certainly hits on the factors that the Supreme Court suggested should be relied upon, even if she didn't necessarily test him in an empirical test for adaptive functioning. While it is expected that an individual should be tested, as she said, in her opinion, it's to rule "in" mental retardation, or could be used to rule "out" mental retardation. In her case, she made a determination, based on her discussions with him, that he was not mentally retarded. So your motion is denied.

BY MR. SMITH:

- Q People with mild mental retardation drive all the time, don't they?
- A Some do, yes.
- Q Being able to drive doesn't mean that he's not mentally retarded, right?
- A Right.
- Q And there was a lot of conversation about his trips around the southeast. If he had the

help of somebody who was hitchhiking, in terms of direction, that would not be unreasonable or exclude him from a diagnosis of mental retardation, either, would it?

- A That in and of itself, no.
- Q A lot of people with mental retardation know how to use the phone, don't they?
- A Certainly.
- Q And, as a matter of fact, we've talked about mental retardation as if there's only one type of mental retardation. There's grades of mental retardation, are there not?
- A Correct.
- Q We know that the wide range is mild, moderate, severe; correct?
- A Correct.
- Q But within the mild range, everyone has their own strengths and weaknesses, as well, correct?
- A Correct
- Q So there are gradients and there are a lot of things that a mentally retarded person, who's functioning in the mild range, can do?
- A Sure. There's a lot of things they can do, yes.
- Q And one of those things would be that you have an expectation that they could go out and get a job and hold a job; correct?
- A They could. Some of them possibly could, yes.
- Q And the types of jobs that they would hold are the types of jobs that have been listed in Dr. Carson's report, packing chickens, or moving boxes at the chicken house, or pumping gas, or those types of lower level skills; correct?
- A Menial labor jobs, yes. Absolutely.
- Q None of those skills or none of the jobs that he has would be considered a skilled type of job; correct?
- A Correct.
- Q Now, there was also some conversation related to his filling out a visitor log. And you said there were three things that he had to put down there. He had to put the name down, he had to put the address of the person and he had to put the relationship?
- A At least that much information, yes.
- Q So, if somebody wrote that out for him, he could copy it down letter by letter, correct?

- A Yes.
- Q So, if he's sitting in his cell for 23 hours a day, he would have plenty of time to complete visitor logs, would he not?
- A Of course.
- Q Well, you've been in here and you've heard people talk about them sending him letters, engaging in correspondence back and forth, that they had to have somebody read the letter to him, correct?
- A Correct.
- Q So is it unreasonable to assume that a person could look at the return address on the envelope and say, I would like this person to come and visit me, I want to put them on my visitor's log, would you tell me what I need to write. Is it unreasonable that someone with mental retardation could do that, right?
- A No, that's not unreasonable.
- Q What is the definition of a learning disability?
- A It's deficits in a particular academic area of functioning such as reading, arithmetic, writing. A reading disorder is one of the most common.
- Q All right. And you said that's a reasonable explanation for his problems?
- A It's a possible explanation. Reasonable in the sense he's been functionally illiterate all along.
- Q So in order to diagnose a learning disability, by definition, and by requirement, you would have to administer an individualized intelligence and achievement tests, would you not?
- A Yes.
- Q And you're offering that as an alternative to the mental retardation?
- A Correct.
- Q But you did not do any testing, did you?
- A Correct.

JUDGE: In that case, how do you come up with the conclusion that his intelligence scores could be based on a learning disability?

THE WITNESS: I'm offering that as an alternative for the low IQ scores, maybe a reading disability, explaining why the learning disability, particularly in the area of reading, may be one explanation for why the IQ scores are low.

JUDGE: So it might be mental retardation, might it?

THE WITNESS: Sure. It could also be due to mental retardation. It's my opinion that his adaptive functioning is too high and that is why the diagnosis of mental retardation in this case is not appropriate.

JUDGE: All right. The final question then is, there was some testing done by Dr. Carson. Does a score of 58, standing alone, indicate that someone is mentally retarded?

THE WITNESS: The score, standing alone, does not. You have to have the co-existing impaired adaptive functioning. I stress that the adaptive functioning level is what excludes him from a mental retardation diagnosis.

BY MR. SMITH:

Q Do you think that Dr. Carson's IQ evaluation was reliable?

A I have questions about how we get to now, I believe, a 59, when times before he is scoring as high as 72 and 71.

JUDGE: Why didn't you attempt to interview family members, like the brothers or anybody else? THE WITNESS: I had, of course, some information from the trial transcript of the father, who is now deceased. Then there was also some testimony from the brother. Again, you have the issue of reliability in the sense of can these people remember reliably and so forth. The information about his childhood was in the records. I didn't feel that there was much more that the family could offer.

JUDGE: Adaptive functioning, as it relates to his mental retardation would be something that you might get some information from them, isn't it?

THE WITNESS: But they're not with him on a daily basis.

JUDGE: But you're concluding that his adaptive functioning is such that he's not mentally retarded based on things that occurred before he was incarcerated 17 years ago; his ability to drive a car, his ability to go from state to state, his ability to hide, his ability to plan and carry out certain functions, and that sort of thing. I mean, you certainly could have gotten more information regarding that from family members, could you not?

THE WITNESS: Yes, I could have.

BY MR. SMITH:

Q On a different note, anti-social behaviors can coexist with mental retardation, can they not?

- A Yes, they can.
- Q And they can actually be a function of the mental retardation, can they not?
- A Possibly, yes.
- Q You described your interaction with Mr. Stevens when you went to Hallwick Prison, and you said he shook hands and he didn't invade your space, you experience turn-taking in your conversations, he stood up when you stood up. Those aren't skills inconsistent with mild mental retardation, are they?
- A Possibly, yes.
- Q You talked about while he was in prison asking for specific medication. Do you recall that?
- A Yes.
- Q And wouldn't that just be a function of what he had received before, and that he remembered what made him feel better in asking for that medication again?
- A Exactly, yes.
- Q And that's not inconsistent with mental retardation, is it?
- A I do believe that is somewhat higher than what somebody with mental retardation would do on a consistent basis.
- Q And you said that he used a symbol system in order to order from the canteen. Now, isn't a symbol system something they frequently use with children who have retardation?
- A I have no idea.
- Q Thank you, Dr. Kasden. I have no more questions.

 PETITIONER'S WITNESS, SHIRLEY CARSON, PREVIOUSLY SWORN DIRECT EXAMINATION BY MR. SMITH:
- Q Dr. Carson, just a few questions on rebuttal. You heard Dr. Kasden testify that she believes it's standard practice not to do an IQ test if you don't think the individual is mentally retarded. Do you have an opinion as to what the standard practice is in that regard?
- A Yes. Standard practice for psychologists is to always evaluate. Basically we do tests to address the question. So, in terms of assessing mental retardation, bipolar disorder, what have you, the standard practice is to do the assessment, to go for either side to show that it's there or not there.

JUDGE: The trick is to use appropriate test instruments, right?

THE WITNESS: Yes.

BY MR. SMITH:

Q Do you have confidence that the results of the intelligence test that you administered were accurate?

A Yes.

Q And how would you explain the low score?

A By his 17 years of incarceration, just that in and of itself is going to make Mr. Stevens have less information in terms of knowledge and other things. But also, he's aging. So the 17 years, plus the fact that he's aging is, in my opinion, resulting in a lower score. Had he been tested even five or six years ago, I think his scores would have been higher. My results are actually consistent with prior results. They're not that far apart.

Q Just one other area I need to touch on. If a person has mental retardation, will his limitations coexist with his strengths?

A Yes, absolutely. Individuals with mental retardation at all levels will have strengths and weaknesses that help them to survive. That's the whole idea behind the support system that they have in place, is to recognize where people have pretty good skills.

Q That's all. Thank you.

Appendix H

DEFINING MENTAL RETARDATION

The Diagnostic and Statistical Manual of Mental Disorders Fourth Edition – Text Revision (2000)

The Diagnostic and Statistical Manual of Mental Disorders Fourth Edition – Text Revision (DSM-IV-TR, 2000) defines mental retardation as

1. Significantly sub average general intellectual functioning (IQ scores for people with mental retardation must be below 70 (plus or minus five)

AND

- 2. Significant limitations in adaptive functioning in at least two of the following skill areas:
- Communication
- Self-care
- Home living
- Social/interpersonal skills
- Use of community resources
- Self-direction
- Functional academic skills
- Work
- Leisure
- Health and safety

AND

3. Onset must occur before age 18 years.

According to the DSM-IV-TR (2000), individuals diagnosed with mental retardation are subdivided into different levels ranging from mild to severe mental retardation based on the level of impairment.

American Association on Intellectual and Developmental Disabilities

The American Association on Intellectual and Developmental Disabilities (AAIDD, 2010), has a slightly differing definition of mental retardation.

1. Significantly sub average general intellectual functioning (score of at least two standard deviations below average)

AND

- 2. Significant limitations in adaptive functioning (two standard deviations below average) in just one of or in a measure of all three of the following skill areas:
- Conceptual skills
- Social skills
- Practical skills

AND

3. Onset must occur before age 18 years

Additionally, levels of mental retardation are defined by the amount of support needed for adequate daily functioning rather than levels of impairment.

Appendix I

Questionnaire

1. Which of the following are part of the criteria for diagnosing mental retardation (please check as many as apply): \Box IQ □Can Express Him/Herself Verbally to Others □Symptoms of Depression □ Dresses Him/Herself □Feeds Him/Herself □Cleans Him/Herself □ Reads Simple Materials □ Solves Math Problems □Can Write Coherently ☐ Manages Money and Monthly Budget ☐ Has Friends □ Needs Constant Supervision at Work ☐ Speaks Slowly ☐ Makes Friends □ Ability to Keep Secrets □Cleans His/Her Room □Gullible/Easily Taken Advantage of ☐ Uses Sign Language Instead of English ☐ Can Be President/Leader of a Group of People ☐Breaks the Law ☐ Uses Public Transportation and Other Community Activities □Plans Activities □ Solves Problems ☐ Understands Social Cues □Controls Impulses □ Requires Medication for Mental Illness ☐ Shops for Groceries and Daily Necessities □Organization Skills □ Exercises Caution ☐ Special Education Classes ☐ Has Manners □Keeps a Job for More than a Few Months □ Accepts Supervision □Leisure □ Listens to Directions □Likes Animals □Responding to One's Health Problems ☐ Safety Skills ☐Got Bad Grades in School

□Symptoms Before the Age of 18 years

2a. Did you read th	ne transcript ca	Yes	No								
2b. Did the defender Did the state's	-			,	Yes Yes	No No					
2c. Did the defendarecord? (Circle On			he state's expe No	rt's testimoi	ny be stric	ken from the					
3. How much do you agree with this statement:											
Mr. Stevens has mental retardation (please circle one number):											
1 2 Strongly Disagree	3	4	5	6		trongly agree					
4a. What IQ score range is appropriate for a diagnosis of mental retardation? (Circle One)											
a. Below 75 b. Be	etween 80-100	c. Betwe	een 101-120	d. Above 121							
4b. True or False: Adaptive behavior deficits should be measured for a diagnosis of mental retardation? (Circle One) True False											
4c. During what age range should we see symptoms of mental retardation in order to diagnose it? (Circle One)											
a. Before 18 yrs	b. Between 1	9-30 yrs	c. Between 3	31-50 yrs	d. After 5	51 yrs					
5. Does Mr. Steven	s have mental	retardatio	on? (Circle One	e)	Yes	No					
6. Who has the bur	den of proof in	n your jur	or instruction	s?							
7. What number of preponderance of the second secon	•			•		•					

8. Please indicate below if the following factors if they affected your opinion regarding whether the defendant had mental retardation, didn't have mental retardation, or if the factor had no effect on your belief either way and the degree to which it affected your opinion:

	On a scale from 1 (not at all) to 10 (very much), how much	Did this factor support mental retardation (Yes) or
	did this factor affected your opinion if this defendant had	not support a diagnosis of mental retardation (No) or
<u>Factor</u>	mental retardation?	did it have no effect?
	(Write down effect	
	on your opinion	
	1(not at all) – 5	(Circle One)
	(neutral)– 10 (very	
	much)	Yes Mental Retardation
		No Mental Retardation
Drives		No Effect
	(Write down effect	
	on your opinion	
	1(not at all) – 5	(Circle One)
	(neutral)– 10 (very	
	much)	Yes Mental Retardation
		No Mental Retardation
Can't read		No Effect
	(Write down effect	
	on your opinion	
	1(not at all) – 5	(Circle One)
	(neutral)– 10 (very	X X ID . I .:
	much)	Yes Mental Retardation
TT 1 1		No Mental Retardation
Used a payphone	All to 1 CC .	No Effect
	(Write down effect	
	on your opinion	(Cinala Ona)
	1(not at all) - 5	(Circle One)
	(neutral)– 10 (very	Yes Mental Retardation
Held jobs requiring little skill or	much)	No Mental Retardation
1 0		No Effect
training	(Write down effect	No Effect
	on your opinion	
	1(not at all) – 5	(Circle One)
	(neutral)– 10 (very	
	much)	Yes Mental Retardation
		No Mental Retardation
Was married		No Effect

Follows simple directions	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Has sexual relations with animals	on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Never paid bills	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Has friends	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Remembers things from his past	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Was referred to a school for mentally retarded children	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

IQ test results	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Has manners	Effect on opinion 1(not at all) – 5 (neutral)– 10 (very much)	Yes Mental Retardation No Mental Retardation No Effect
Communicates effectively	Effect on opinion 1(not at all) – 5 (neutral)– 10 (very much)	Yes Mental Retardation No Mental Retardation No Effect
Has an interest in his personal health	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Knows how to take his medicine	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Used an alias when running from the police	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Bought and traded cars	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

Played around moving trains	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Use of retrospective adaptive behavior measure	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Escaped from jail	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Gets travel information from hitchhikers	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Arrested several times	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Peeps on women	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

Missed a lot of school	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much) (Write down effect	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Alcoholic Mother	on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Could cook eggs	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Never had a bank account	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Considered to be slow by the officers at the prison	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
Skilled at keeping himself clean	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation
Knows what he wants to eat	arr - 1 co	No Effect
His family thought he was mentally retarded	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He was impulsive	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He was a leader in his crimes	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He hides facts or lies poorly	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
His crimes were especially gruesome	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

He understands the concept of	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation
money		No Effect
He witnessed his parents abusing each other	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He was dependant on his exwives for support	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He quit school was he was in the 7 th Grade	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He was 15 or 16 and still in the 7 th Grade	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He uses a symbol system to get food from the food stand in prison	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

He has a good memory for things in his past, especially from a long time ago	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He got money from other people and did have to work to support himself	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect
He chose in advance who we would peep on	(Write down effect on your opinion 1(not at all) – 5 (neutral)– 10 (very much)	(Circle One) Yes Mental Retardation No Mental Retardation No Effect

not Mr. Stevens had mental retardation or not? Please feel free to refer to your notes.				

Appendix J

NCS

Instructions: For <u>each</u> of the statements below, please <u>indicate to what extent the statement is characteristic of you</u>.

1	2	3	4	5
Not at all like me	Somewhat unlike me	Uncertain	Somewhat like me	Very much like me
2. I like to have the	ne responsibility of ha	andling a situation that	requires a lot of thinking	ng.
1	2	3	4	5
Not at all like me	Somewhat unlike me	Uncertain	Somewhat like me	Very much like me
3. Thinking is not	my idea of fun.			
1	2	3	4	5
Not at all like me	Somewhat unlike me	Uncertain	Somewhat like me	Very much like me
4. I would rather thinking abilities.	do something that req	uires little thought tha	n something that is sure	e to challenge
1	2	3	4	5
Not at all	Somewhat	Uncertain	Somewhat	Very
like me	unlike me		like me	much like me
5. I try to anticipa about something.	te and avoid situation	ns where there is a like	ly chance I will have to	think in dept
	te and avoid situation	as where there is a like	ly chance I will have to	think in dept
	2 Somewhat			
about something. 1	2	3	4	5

6. I find satisfaction in deliberating hard and for long hours.

Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
7. I only think as ha	ard as I have to.			
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
8. I prefer to think a	about small, daily pro	jects to long-term one	es.	
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
9. I like tasks that r	equire little thought o	nce I've learned them	1.	
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
10. The idea of rely	ring on thought to mal	ke my way to the top	appeals to me.	
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
11. I really enjoy a	task that involves cor	ning up with new solu	utions to problems.	
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me

12. Learning new ways to think doesn't exc	cite me very much.
--	--------------------

Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
13. I prefer my	life to be filled with pur	zzles that I must solve		
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
14. The notion of	of thinking abstractly is	appealing to me.		
Not at all like me	2 Somewhat unlike me Fer a task that is intelled	3 Uncertain	4 Somewhat like me	5 Very much like me
	uire much thought.			
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
16. I feel relief	rather than satisfaction	after completing a tasl	k that required a lot of i	mental effort.
Not at all like me	2 Somewhat unlike me	3 Uncertain	4 Somewhat like me	5 Very much like me
1 /. It's ellough	2	3	4	5
Not at all like me	Somewhat unlike me	Uncertain	Somewhat like me	Very much like me

18. I usually end up deliberating about issues even when they do not affect me personally.

1	2	3	4	5
Not at all	Somewhat	Uncertain	Somewhat	Very
like me	unlike me		like me	much
				like me

Appendix K

CLAS-MR

Instructions: For <u>each</u> of the statements below, please <u>indicate to what extent you agree with each statement.</u>

1. People wit	h mental retard	ation are happier	when they live	and work with	others like them.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
2. People wit	h mental retard	ation trying to hel	lp each other is	like "the blind	leading the blind."
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
3. People wit	h mental retard	ation should not b	e allowed to m	narry and have	children.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
4. A person v	would be foolish	n to marry a perso	on with mental	retardation.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
5. People wit persons.	h mental retard	ation should be g	uaranteed the s	ame rights in so	ociety as other
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
6. People wit	h mental retard	ation do not want	to work.		
1 Strongly Disagree	2	3	4	5	6 Strongly Agree

7. People wit	h mental retard	ation need someo	ne to plan their	activities for the	nem.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
8. People wit	h mental retarda	ation should not h	old public offic	ce.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
9. People with	h mental retarda	ation should not b	e given any res	sponsibility.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
10. People wi	ith mental retar	dation can organiz	ze and speak fo	or themselves.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
11. People wi	ith mental retar	dation do not care	about advance	ement in their jo	obs.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
12. People wi	ith mental retar	dation do not need	d to make choice	ces about the th	ings they will do
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
13. People wi	ith mental retar	dation should not	be allowed to	drive.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree

1 Strongly Disagree	2	3	4	5	6 Strongly Agree
15. People w	ith mental retar	dation have goals	for their lives	like other peopl	e.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
16. I would to	rust a person wi	th mental retarda	tion to be a bab	by sitter for one	of my children.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
17. People w	ith mental retar	dation cannot exe	rcise control or	ver their lives li	ke other people.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
18. People w	ith mental retard	dation can have c	lose personal re	elationships jus	t like everyone else.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
19. I would n	not want to live	next door to peop	le with mental	retardation.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
20. People w feelings of ot		dation are usually	too limited to	be sensitive to	the needs and
1 Strongly Disagree	2	3	4	5	6 Strongly Agree

14. People with mental retardation can be productive members of society.

21. People w life in the con		dation should live	in sheltered fa	cilities because	e of the dangers of
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
22. People w	ith mental retar	dation should be	encouraged to 1	obby legislator	s on their own.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
-	ith mental retard into communit		t people to give	e advice and co	unsel to others who
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
-	-	with mental retardionals in decision		•	ht than those of
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
25. People w others.	ith mental retar	dation can plan m	eetings and con	nferences withou	out assistance from
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
26. People w	ith mental retar	dation can be trus	ted to handle m	noney responsib	ply.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
27. Residents their neighbor	_	o fear from peopl	e with mental r	etardation livin	g and working in
1 Strongly Disagree	2	3	4	5	6 Strongly Agree

	e the help and s	•	ouid be in grou	p nomes or other	er facilities where
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
29. Sheltered	workshops for	people with ment	al retardation a	are essential.	
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
30. The best	care for people	with mental retard	dation is to be j	part of normal l	ife in the community
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
31. Most peo sensitive to the	•	retardation prefe	r to work in a s	sheltered setting	g that is more
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
	some control and the community	d supervision, peo	ople with ment	al retardation co	ould get in real
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
33. The right about their pr		n mental retardation	on are more im	portant than pro	ofessional concerns
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
34. Agencies	that serve peop	ole with mental re-	tardation shoul	d have them on	their boards.
1 Strongly Disagree	2	3	4	5	6 Strongly Agree

1	2	3	4	5	6
Strongly Disagree	_	-	·	·	Strongly Agree
36. Homes ar	-	people with menta	al retardation sh	nould be kept or	ut of residential
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
37. Increased	spending on pr	rograms for peopl	e with mental r	retardation is a	waste of tax dollar
1 Strongly Disagree	2	3	4	5	6 Strongly Agree
	d services for po	eople with menta	l retardation do	wngrade the ne	ighborhoods they
in. 1 Strongly	d services for po	eople with menta	l retardation do 4	wngrade the ne	6 Strongly Agree
in. Strongly Disagree 39. Profession	2	3	4	5	6 Strongly
in. 1 Strongly Disagree	2	3	4	5	6 Strongly Agree
in. Strongly Disagree 39. Professionecessary. 1 Strongly Disagree	2 nals should not	3 make decisions f	4 for people with	5 mental retardat	6 Strongly Agree ion unless absolut 6 Strongly

Appendix L

RWAS

Instructions: For <u>each</u> of the statements below, please <u>indicate to what extent you agree with each statement.</u>

1. Life imprisonment is justified for certain crimes.								
1 Very Strongly Disagree	0,	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
2. Women	should hav	e to promi	se to obey t	heir husba	nds when	they get n	narried.	
Very Strongly Disagree	0,	3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
3. The established authorities in our country are usually smarter, better informed, and more competent than others are, and the people can rely upon them.								
1 Very Strongly Disagree	0,	3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
4. It is impo	ortant to pr	otect the r	ights of rad	icals and d	eviants in	all ways.		
Very Strongly Disagree	0,	3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
5. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.								
1 Very Strongly Disagree	0,	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree

6.	Gays and	lesbians	are just as	healthy an	d moral a	as anybod	ly else.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly
Disagree								Agree

7. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the "rotten apples" who are ruining everything.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly Disagree	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly Agree

8. Atheists and other who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly
Disagree								Agree

9. The *real* keys to the "good life" are obedience, discipline, and sticking to the straight and narrow.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Mediun	Strongly	Very
Strongly Disagree	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly Agree

10. A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly Disagree	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly Agree

11. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly
Disagree								Agree

								and religion ot in people's
Very Strongly Disagree	0,	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
13. There is	absolutely	y nothing v	wrong with	nudist can	nps.			
Very Strongly Disagree	0,	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
14. There is	no "ONE	right way	" to live life	e; everyboo	dy has to c	reate their	own way	
1 Very Strongly Disagree		3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
15. Our cou	•	•	-	if we do n	ot smash t	he pervers	sions eatin	g away at
1 Very Strongly Disagree	0,	3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree
16. Homose family value		feminists	should be p	raised for	being brav	e enough	to defy "tı	raditional
1 Very Strongly Disagree		3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree

17. The situation in our country is getting so serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.											
1	2	3	4	5	6	7	8	9			
Very Strongly Disagree	0,	Medium Disagree	~ ,	Neutral	Slightly Agree	Medium Agree	Strongly Agree	Very Strongly Agree			
18. It may be considered old fashioned by some, but having a normal, proper appearance is still the mark of a gentleman, and especially, a lady.											
1	2	3	4	5	6	7	8	9			
Very Strongly Disagree	.	Medium Disagree	Slightly Disagree	Neutral	Slightly Agree	Medium Agree	Strongly Agree	Very Strongly Agree			
19. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.											
1	2	3	4	5	6	7	8	9			
Very Strongly Disagree		Medium Disagree		Neutral	Slightly Agree	Medium Agree	Strongly Agree	Very Strongly Agree			
20. A "won submissive						•		are			
1	2	3	4	5	6	7	8	9			
Very Strongly Disagree	0,	Medium Disagree	~ .	Neutral	Slightly Agree	Medium Agree	Strongly Agree	Very Strongly Agree			
21. What ou back to our		really need	ds is a stron	g, determi	ned leader	who will	crush evil	, and take us			
1	2	3	4	5	6	7	8	9			
Very Strongly Disagree	.	Medium Disagree		Neutral	Slightly Agree	Medium Agree	Strongly Agree	Very Strongly Agree			

Very Strongly Disagree	0.	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
23. The only values, put		•	-	-		-				
Very Strongly Disagree	0.	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
24. Our country <i>needs</i> free thinkers who will have the courage to defy traditional ways, even if this upsets many people.										
1 Very Strongly Disagree	0.	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
25. There is	nothing w	rong with	premarital	sexual inte	ercourse.					
1 Very Strongly Disagree	0.	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
26. It would could not go						ed magaz	ines so tha	at people		
1 Very Strongly Disagree		3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
27. It is wordon't like, a				_		-	st against t	hings they		
Very Strongly Disagree	<i>C</i> 3	3 Medium Disagree	0 3	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		

22. People should pay less attention to the Bible and the other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral.

28. What our country <i>really</i> needs, instead of more "civil rights," is a good stiff dose of law and order.										
1 Very Strongly Disagree	0,	3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
29. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the "normal way" things are supposed to be done.										
Very Strongly Disagree		3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
30. Obedience and respect for authority are the most important virtues children should learn.										
1 Very Strongly Disagree		3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
31. Nobody out lots of c				l narrow."	Instead, pe	eople sho	uld break l	loose and try		
1 Very Strongly Disagree		3 Medium Disagree	4 Slightly Disagree	5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		
32. Once ou citizen to he								patriotic		
Very Strongly Disagree		3 Medium Disagree		5 Neutral	6 Slightly Agree	7 Medium Agree	8 Strongly Agree	9 Very Strongly Agree		

33. We should treat protestors and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly
Disagree								Agree

34. The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

1	2	3	4	5	6	7	8	9
Very	Strongly	Medium	Slightly	Neutral	Slightly	Medium	Strongly	Very
Strongly Disagree	Disagree	Disagree	Disagree		Agree	Agree	Agree	Strongly Agree

Appendix M

Investigator Script 1

Is everyone here to participate in the study "Determinations of Mental Retardation: You Be the Juror?" (Address anyone who is not there for this study). Now we will go over some information with you regarding your participation in this study. (Participant Information Sheet will be handed out and all questions about the study will be answered.) Please keep this sheet for your records; it has contact information on it if you need to get in touch with anyone after the study is over.

Before we begin, let me explain a little about your rights as participants. Your names are not going to be on any of the research materials. Once you get your questionnaires you will notice that they have a number on the top – this is the way that we know that all of the forms go together. This number is not linked to you so we will never be able to tell which forms you completed.

We will ask you to write your name and campus wide ID (CWID) on a blank piece of paper. You will take this paper home with the number of hours you were here and the number of research credits you were given. We will copy this information into our form which will be kept separate from all other study materials and will be shredded at the end of the semester following this one. We are keeping them for a full semester in case there is an error in giving you course credit. Your participation in this study is completely voluntary. You may choose not to participate at all or you can decide to stop participating at any time during the study. The study requires that you read a transcript and fill out questionnaires so the only risk that we can think of is that you may become somewhat tired from reading. That said, you are all students so you are familiar with how reading effects you. If you think that reading a transcript for 1 - 2 hours will make you so tired that you are uncomfortable, then you probably don't want to be in this one. If this is o.k. for you, then this might be a good study for you to do.

The potential benefits to you are having an opportunity to get glimpse into what a real hearing on mental retardation looks like in a criminal case and you may learn things about how you see the justice system and how you would make decisions in this type of situation. Also, the information that we get from you may help judges, lawyers, and mental health professionals find ways to communicate better with jurors.

Of course you will also receive 4.5 credits for completing this study.

If you have questions about this study you can speak to me at any point during the study, or you may contact me, my adviser Dr. Salekin, or the research compliance officer at any point in the future. The contact information for all three is us is on the information sheet that you already have. Once again, please keep this for your records since you might need it in the future. Does anyone have any questions about anything that I have talked about? (Researcher will address any questions.)

(Once all questions have been answered) O.k.

Appendix N

Information Sheet

Title of Research Project: Decision-Making: You Be the Juror

It is important that you read the following explanation of this research study. This document describes the purpose, procedures, possible benefits and risks, and confidentiality of this study.

Who are the investigators? There are two investigators. The primary investigator is Ms. Debra Chen who is a graduate student in the Department of Psychology and the other is her supervisor, Dr. Karen Salekin who is an associate professor in the Department of Psychology.

What is the purpose of this study? We are interested in finding out how people make decisions about whether an offender has mental retardation. Knowing this is important because some people who are chosen to be on a jury are asked to do this – your participation would help us to understand the thoughts and feelings of typical jurors who are put in this situation.

If I decide to be in this study, what will I have to do? If you decide to serve as a juror in this study, you will fill out a few questionnaires that relate to your decision making process. This part of the study will take about one half-hour of your time. You will take a 5-minute break and then will be given a second packet. This packet will contain a transcript of a real case in which a defendant was being evaluated for mental retardation. This part of the study is the longest and will take approximately 1-2 hours of your time. The transcript is easy to read, but it takes time so in the end you will be here for two to three hours. It is important to note that you can take breaks at any point during the study.

What are the benefits of being in this study?

With the exception of fulfilling half of the research requirements for your Psychology 101 class, there are no known direct benefits to you for being in this study. However, the study is looking at a real case in which an offender was assessed for mental retardation so you will get a glimpse into what a real case looks like. You may also learn about your personal beliefs regarding justice and how you make decisions in this type of situation.

The study has benefits to the society by providing information about how potential jurors (in this case you) think about information that is used in assessing mental retardation. This knowledge will help judges, lawyers, and mental health professionals find ways to communicate better with jurors.

Are there any risks to being in this study? The only risk that we can see is that you may become slightly fatigued while reading the transcript. However, reading the transcript is not any different from reading books or articles that are required for classes at the university so you may already be familiar with how well you tolerate reading for 1-2 hours. Remember, you can take a break at any point during the study.

Will there be a way to track me down so that people can find out I was in this study?

For research purposes, your data will be identified by a number. We DO NOT want you to put your name on any of the questionnaires that you will fill out. The only place that we need your name is on a piece of paper that we will hand out to you in a few minutes. We will also need you to write your CWID on this paper since there may be another student on campus with the same name as you. Your name and CWID is being obtained for the sole purpose of giving you credit for your participation. Also, you will notice that one of the questionnaires asks questions about you such as your age, education level, prior history of serving on a jury, but none of your answers will provide any way to link the data back to you.

What do I do if I start this study and decide to stop? Your participation in this study is your choice and you can stop at anytime without any penalty. We know that you are required to get research credit for Psychology 101, but this is only one of many options for you. In addition, you can choose to complete the writing assignment instead of research, but this is something that you need to work out with your instructor. Leaving the study will not result in any penalty, and if you choose to leave at any point after one hour of participation you will receive 1.5 credits for each part hour of your time in the study.

Do I have to pay to be in this study?

No. There are no costs to you. We supply all of the materials that you need to participate.

What if I have questions about this study?

If you have any questions regarding this study you can ask them now or you can contact Debra Chen at drchen@crimson.ua.edu or Dr. Karen L. Salekin (faculty advisor for the current study) at ksalekin@bama.ua.edu or 348-0679. You can also contact Ms. Tanta Myles who works in the Office of Research Compliance if you have any questions about your rights as a research participant. Ms. Myles phone number is 205-348-8461 or you can call her toll-free at 1-877-820-3066.

Appendix O

Investigator Script 2

Before we get started I'm going to ask you to write your name and campus wide ID on a blank piece of paper. This paper will be used to confirm your attendance at this session and that you receive the appropriate number of research credits (blank pieces of paper with pens will be handed out).

Now I'm going to explain what this experiment is about. We will ask you to pretend to be a member of a jury and to think about information presented in a criminal case. You will not be asked to determine if the defendant of the case is guilty or innocent; today we will ask you to determine if the defendant has what is called mental retardation.

The first thing that you are going to do is complete the packet that I am going to pass out to you. This packet contains questionnaires that we will ask you to complete to the best of your ability. Once you finish completing this packet, please return them to me. Then you can take a 5-minute break. During this 5 minute break you can leave the room or simply sit here and relax. When your break is over I am going to hand out a second packet. This packet contains instructions, an information sheet, a transcript, and another two questionnaires. Please do not write on the transcript because we will be using them over and over again, during the course of this study. We will give you blank paper so that you can take notes on the transcript that you can use when you are answering the questionnaire.

The transcript is written like a real transcript meaning that you will see questions asked by a lawyer followed by answers provided by an expert. In this case, there are two experts – one that is hired by the prosecution (these are the attorneys who work to put people in prison and in this case want to prove that the defendant does not have mental retardation). The other expert is hired by the defense - these are the attorneys who try to get defendants found not-guilty and in this case want to prove that their client has mental retardation. The questionnaire is related to the transcript that you will have read and this is where we learn about your decision-making process and what you see to be important in making a determination of mental retardation.

Once you are done with the second packet, please return them to me. Then I will look at your sign-in sheet (the paper you just wrote your name on) and write the number of hours you spent on the study and the number of credits you will receive on it. I'll copy that information for my records to make sure you get the right number of credits. If you decide to leave early, you will get the number of credits for each partial hour you were here (up to 1 credit for each partial hour). Then I will give you a debriefing form and ask you to read it here and ask me any questions you have before you leave today.

I have one final request before you go that is crucial to this study. I need to ask all of you to make sure that you do not talk about the true nature of this study with any friends, roommates, colleagues, etc. If future participants know what this study is actually about it may invalidate the entire study. This is absolutely crucial to the validity of the study.

Does anybody have any questions? (Researcher will address any questions.)

O.k., let's get started. (researcher will hand out the first packet). (After each student completes the first packet, they will be directed to take a 5-minute break and upon their return, they will be given the second packet. Upon completion of the second packet, the investigator will write the number of hours spent and the number of research credits to be given on the sign-in sheet, and the student's name, CWID, and number of hours spent and number of credits to be given will be recorded on the Participant List. Then the participant will be given the debriefing form, asked to read it at that moment, and then directed to ask any questions they have. All questions will be addressed by the investigator and then the participant will be thanked and released from the study.)

Appendix P

Debriefing Form

To the Participant:

We did this study because we wanted to learn:

- 1. if you thought that the prosecutor had proved to a certain standard of proof if the defendant in the case was intellectually disabled
- 2. if your previous history of exposure to intellectually disabled individuals would affect your decision

There were 4 different sets of jury instructions. We used different standards of proof (preponderance of the evidence and clear and convincing). In some of the instructions, we gave numerical definitions (i.e. 50% or 75% convinced) and in some of them, we didn't. We wanted to know if changing the instructions would change the answers we received. We are not in interested in your answers by themselves. We are going to add your answers to all of the answers that we get and look at them all together.

If you have questions, please call Ms. Debra Chen. Her telephone number is 205-764-0436. You can also call Dr. Karen Salekin. Her telephone is 205-348-0679. If you have questions about your rights, you can call Ms. Tanta Myles. She is the University of Alabama Research Compliance Officer. You can call her at 205-348-8461 or toll-free at 1-877-820-3066.

If you want to know what we find out, you can call Ms. Debra Chen.

Thank you for helping us today.

Sincerely,

Debra Chen, B.S. Department of Psychology The University of Alabama Gordon Palmer Hall 214 drchen@crimson.ua.edu

Appendix Q

Institutional Review Board Approval Form