JUDICIAL RELIANCE ON EXTRA-CLINICAL FACTORS IN

ATKINS DETERMINATIONS: BEYOND CLINICAL

DEFINITIONS AND DATA

by

KRYSTAL ANNE HEDGE

KAREN L. SALEKIN, COMMITTEE CHAIR
FRANCES A. CONNORS
HARVEY N. SWITZKY

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ABSTRACT

The influence of extra-clinical factors on "successful" and "unsuccessful" *Atkins* cases were examined. Sixty-two judicial opinions were included in this study, 31 successful and 31 unsuccessful cases. Extra-clinical factors (e.g. *Briseno* Factors, activities typical of most adults, behavior in prison) served as the independent variables, and the final outcome of the hearings served as the dependent variable. The influence of Antisocial Personality Disorder on case outcome was examined. Differences in the rate of successful and unsuccessful claims as a function of the state where the case was heard was compared to state trends in the rate of executions. In addition, the rate of deficits in functional academics was also examined. Analyses indicated that opinions were not influenced by extra-clinical factors to the extent hypothesized, and a history of Antisocial Personality Disorder did not predict final case outcome. The rate of successful and unsuccessful claims did not follow state trends in the rate of execution as expected. As hypothesized, functional academics was the most often cited area of deficits in successful and unsuccessful cases. It should be noted that a number of analyses in this study contained few participants across groups, which likely contributed to non-significant findings. Additional limitations of this study and recommendations for future research are discussed.

DEDICATION

This thesis is dedicated to my greatest supporter, Anthony. He is a constant source of encouragement and happiness, even during the most challenging moments. For this, I am grateful each and every day.

LIST OF ABBREVIATIONS AND SYMBOLS

B	Unstandardized coefficient
χ^2	Chi-square
df	Degrees of freedom
CI	Confidence interval
M	Mean (arithmetic average)
Max	Maximum value
Min	Minimum value
N	Number of participants
p	Probability
p.	Page number
r	Pearson's correlation (measure of association between variables)
S.E.	Standard error
Sig.	Significance
<	Less than
=	Equal to

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1. Introduction

Intellectual Disability and Capital Crimes

In *Atkins v. Virginia* (2002), the United States Supreme Court held that execution of individuals with intellectual disability (ID) was a violation of the Eighth Amendment's protection against cruel and unusual punishment. Diminished culpability, due to difficulties in information processing and understanding, were among the justifications given for the Court's decision regarding the excessive nature of the death penalty in cases in which the claimant has ID. The Court also questioned whether retribution and deterrence, two of the main reasons for the implementation of the death penalty, could meaningfully be applied to these defendants.

Definitions and assessment of ID. Although the *Atkins* Court ruled it unconstitutional to execute individuals with ID, the justices left the definition of ID to individual states (Ellis, 2003). Currently, the two most widely used definitions are those of the American Association on Intellectual and Developmental Disabilities (AAIDD; American Association on Mental Retardation, 2010) and the American Psychiatric Association (APA; American Psychiatric Association, 2000). Both definitions require individuals to meet three criteria: (a) limitations in intellectual functioning, (b) limitations in adaptive behavior, and (c) these limitations must originate prior to the age of 18. For both organizations, sub-average intellectual functioning is considered to be an overall IQ score at least two standard deviations below the mean (i.e., <70) on a validated measure of intellectual functioning.

Though similar, the diagnostic criteria for adaptive behavior are not identical for the AAIDD and the APA. The AAIDD requires significant deficits (i.e., scores at least two standard

deviations below the mean) in at least one of three adaptive behavior domains (i.e., conceptual, social, and practical), or a composite score that reflects significant deficits in overall functioning. In contrast, the APA requires deficits in at least two of 10 narrow skill areas. These skill areas are as follows: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, and health and safety (APA, 2000, p. 41). With regard to the evaluation of adaptive behavior, both organizations stress the importance of using standardized testing, but also recognize that clinical judgment is essential to the diagnostic process.

Clinical judgment in the evaluation of ID. The AAIDD employs the following definition of clinical judgment:

> …a special type of judgment rooted in a high level of clinical expertise and experience; it emerges directly from extensive data. It is based on the clinician's explicit training, direct experience with those with whom he or she is working, and specific knowledge of the person and the person's environment. Clinical judgment is characterized by its being (a) *systematic* (i.e., organized, sequential, and logical), (b) *formal* (i.e., explicit and reasoned), and (c) transparent (i.e., apparent and communicated clearly). (AAIDD, 2010; p. 86).

While elements of clinical judgment are typically used in test interpretation and diagnoses, it should not be used to supersede valid and convergent objective test results. However, clinical judgment can and should be used as the basis for diagnostic decision-making in instances in which objective testing is problematic, such as situations in which testing is rendered invalid, or when a clinician obtains highly discrepant objective testing results from a number of measures.

Characteristics of Defendants with ID

While empirical research on the characteristics of capital crimes committed by individuals with ID is in its infancy, researchers have examined some of the more general characteristics of these defendants. Salekin and Olley (2009), described most defendants with ID to be in the mild range of severity, which is typically considered to be those individuals with an IQ score between 55 and 70. Individuals with mild ID often live independently, have steady employment, and marry. However, individuals unfamiliar with ID may not recognize this population's ability to engage in such activities because they are more familiar with individuals at the severe end of the spectrum.

General characteristics of offenders with ID include poor decision-making skills, difficulty in planning, reliance on social cues to guide behavior, and a desire to please others, all of which may lead to the exploitation or self-incrimination of individuals with ID (Salekin & Olley, 2009; Keyes, Edwards, & Derning, 1998). In addition, many individuals with ID maintain a "cloak of competence" (Edgerton, 1993), which stems from a desire to pass as "normal." The cloak of competence is often accomplished through acquiescence to authority and general overcompensation related to one's deficits (Keyes, Edwards, & Derning, 1998). Within the criminal justice system, this tendency may manifest in actions that have a great impact on one's legal case. Examples of such legal processes include waiving *Miranda* rights, passive compliance during legal proceedings, and, due to characteristics such as suggestibility, naivety, and poor decision making, they may falsely confess to crimes. The attempt of individuals with ID to mask their disability can also manifest in their physical presentation. For example, an individual may

give great care to hygiene and general appearance, which may be in contrast to the false belief that all individuals with ID have impairments in grooming that can easily be detected by mainstream society. The cloak of competence may be highly effective in masking one's disability, and may result in more difficult identification and diagnosis of those with ID within the criminal justice system (Patton & Keyes, 2006).

   Influence of stereotypes within the legal system. There are several common stereotypes and misconceptions regarding defendants with ID. For example, lay people often perceive individuals with ID to be more dangerous, less moral (i.e., have less internalized notions of "right" and "wrong"), and less able to appreciate potential consequences of their actions (Reichard, Spencer, & Spooner, 1980). Stereotypes also exist regarding the limitations of individuals, particularly those with mild ID, with regard to activities of daily living. For example, it is commonly assumed that people with ID are incapable of independent living, undertaking gainful employment, marrying, rearing children, and/or driving. The aforementioned stereotypes have the potential to greatly influence *Atkins* proceedings because many claimants with legitimate *Atkins* cases may take part in those activities, and as such, their claims may be denied do to the presence of stereotypes. At the time of writing, there were no empirical studies regarding the influence of stereotypes in determining *Atkins* claims. While there is a lack of such research, it is likely such stereotypes not only exist, but also are used in the decision-making of judges in these cases. For example, the court in *Ex Parte Briseno* (2004) stated, "[t]he more complex the crime, the less likely the person is mentally retarded." The Court did not define complexity, but examples cited in judicial opinions include planning the alleged crime, stalking

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victims, providing an alibi, and recruiting others to assist with the crime. It appears these stereotypes directly influence decisions in cases in which a diagnosis of ID is at issue.

Impact of extralegal factors on jury decision-making. Research on jury decision-making has shown that there are many extra-legal factors that influence juries. Foley (1987) found that extralegal factors such as gender, race, and age impacted sentencing determinations in death penalty cases. Specifically, males in that study were sentenced to death more often than were females, there appeared to be greater judicial leniency in sentencing when victims were African American rather than when white, and young defendants were convicted at a higher rate than were older defendants. Additional extralegal factors found to affect sentencing include the defendant's income level, prior arrest record, and length of time between the commission of a crime and arrest (Clarke & Koch, 1976).

The tendency for juries to consider factors outside of those critical to determination of guilt or innocence may also influence *Atkins* determinations in judges and juries. For example, a judge or jury may dismiss an *Atkins* claim if an individual specifically formed a relationship with a victim in order to harm him or her, or kidnapped and murdered a child and drove across state lines. Such a dismissal may be predicated on the notion that an individual with ID would be incapable of such tasks, rather than consideration of all of the evidence of the case and that provided by expert witness testimony. It is also possible that factors such as the heinousness of the crime may bias the trier-of-fact against a finding of ID, as that finding would eliminate the death penalty as a sentencing option. Since research has exposed a number of stereotypical views of ID (Patton & Keyes, 2006; Reichard, Spencer, & Spooner, 1980), and given that many

extralegal factors are considered in court cases (Foley, 1987; Clarke & Koch, 1976), it is imperative that researchers begin to examine how elements of crime, stereotypes regarding ID, and other extralegal factors influence opinions in *Atkins* cases.

Extra-clinical Factors in *Atkins* Cases

In this study, extra-clinical factors are those factors considered by clinicians and triers-of-fact in a diagnosis of ID that are outside the formal definitions and generally accepted practices set forth by the AAIDD and APA (e.g., IQ approximately 70 or below, deficits in adaptive functioning, age of onset prior to 18 years). As previously mentioned, the AAIDD and the APA provide explicit criteria for diagnosing ID. Not unlike a medical diagnosis, in order to be diagnosed with ID an individual must meet specific criteria, and factors unrelated to these criteria provide a context for understanding individual claimants, but are not dispositive one way or the other. For instance, a person with asthma may also be diagnosed with chronic obstructive pulmonary disease (COPD), and while there may be similarities and/or overlap in symptoms, the two exist independent of each other. The important component in accurate assessment is to rule-out competing theories of disability (e.g., COPD versus asthma versus the dual diagnosis) and ensure that factors irrelevant to the diagnostic criteria (e.g., socioeconomic status) are not used to make the differential diagnosis. This is true in the evaluation of ID, as there are often competing theories underlying the presence of the intellectual and adaptive behavior deficits necessary for this diagnosis. For example, the presence of Antisocial Personality Disorder is used in attempts to exclude a diagnosis of ID (*Ex Parte Briseno,* 2004; *Green v. Johnson*, 2008; *Lambert v. State*,

2005), as deficits are attributed to willfulness rather than a lack of ability. However, diagnosis of one disorder does not preclude diagnosis of the other.

Despite clearly defined statements regarding the process of making a differential diagnosis, triers-of-fact do not have to adhere solely to these criteria, nor are they restricted from considering extra-clinical factors in arriving at their legal determination. Of import, in the context of an *Atkins* case, the determination of ID is made by the trier-of-fact, and testimony of clinicians is something they can consider, if they choose to do so. The trier-of-fact has the right to control the testimony of the expert and can prevent the expert from opining on the ultimate legal question, in this case the presence or absence of ID. If precluded from giving an ultimate opinion, the expert simply provides data for the judge to consider, but cannot state their belief regarding the presence or absence of the diagnosis.

The "*Briseno* Factors." At the time of this writing, there exist cases in which the triers-of-fact cite extra-clinical factors as part of the basis for their determination. In one state, case law mandates such considerations. In *Ex Parte Jose Garcia Briseno* (2004), the Court of Criminal Appeals of Texas stated that in order to establish whether a claimant had ID, seven questions "may be considered," only one of which is part of the clinical assessment of ID. The following excerpt illustrates the Court's thoughts with regard to the assessment of adaptive behavior:

> The adaptive behavior criteria are exceedingly subjective, and undoubtedly experts will be found to offer opinions on both sides of the issue in most cases. There are, however, some other evidentiary factors that fact finders in the criminal trial context might also focus upon in weighing evidence as indicative of mental retardation or of a personality disorder:

1. Did those who knew the person best during the developmental stage-his family, friends, teachers, employers, authorities-think he was mentally retarded at that time, and, if so, act in accordance with that determination?
2. Has the person formulated plans and carried them through or is his conduct impulsive?
3. Does his conduct show leadership or does it show that he is led around by others?
4. Is his conduct in response to external stimuli rational and appropriate, regardless of whether it is socially acceptable?
5. Does he respond coherently, rationally, and on point to oral or written questions or do his responses wander from subject to subject?
6. Can the person hide facts or lie effectively in his own or others' interests?
7. Putting aside any heinousness or gruesomeness surrounding the capital offense, did the commission of that offense require forethought, planning, and complex execution of purpose?

The Court went on to state that the diagnosis of ID in the context of *Atkins* is not one for a mental health expert, but instead, one that lies in the hands of the trier-of-fact. It is the trier-of-fact that is charged with "weighing" the evidence, and coming to a conclusion, "based upon all of the evidence and determinations of credibility." Under the assumption that the Court desires an empirical foundation on which to rest their decision, it should reason that the evidence they consider has a basis in research and/or in observations based on many years of clinical practice (i.e., clinical judgment of an expert) that has been repeatedly cited in the literature. In the case of the *Briseno* Factors, as they have come to be called, only one Factor is considered to be a hallmark of ID, that of lack of leadership skills or gullibility.

Adequate functioning in a prison setting. There are many factors that impede the assessment of ID in the context of *Atkins* cases. The fact that the claimant is outside the developmental period in which ID should be diagnosed is one factor. The fact that prior assessment of ID likely never occurred or the records are no longer available is also a factor. One of the more glaring problems is how adaptive behavior can be assessed when the person's

"typical" setting is a correctional facility. By design, correctional facilities impede the ability of claimants to exhibit the full range of behaviors that would be typical of a community setting. For example, most correctional facilities do not allow inmates to wash and dry their own clothes, use tools to perform basic maintenance tasks, access a sharp knife to prepare food, go on group dates, or provide opportunities to obey traffic lights and *Walk/Don't Walk* signs, which are skills each assessed by the Vineland Adaptive Behavior Scales- Second Edition (Sparrow, Cicchetti, & Balla, 2005), one of the most widely used measures of adaptive behavior. Furthermore, individuals are known to function better in environments that are highly structured, where their daily responsibilities are commensurate with their level of ability, and where they have access to support systems (e.g., fellow inmates, correctional officers, simple procedures to access medical services). Such a highly structured setting is provided by correctional settings. In addition, compliance with activities of daily living is mandated within correctional settings, and failure to attend to such tasks might be met with disciplinary actions (e.g., loss of canteen privileges). Thus, inmates may take part in these activities solely to avoid punishment. It should also be noted that inmates with ID tend to be compliant and responsive to authority, and as such, they may appear as the "typical inmate" (K. L. Salekin, personal communication, November 18, 2011).

Cases such as *Ramirez v. Ryan* (2010), *Lambert v. State* (2005) and *Arbaleaz v. Florida* (2010), are only a few *Atkins* cases in which functioning within prison was one factor used to rule-out the diagnosis of ID. In instances in which behavior in prison is considered in an *Atkins* case, these behaviors are typically used to demonstrate either strengths or deficits in adaptive behavior. However, MacVaugh and Cunningham (2009) state that, "institutional adaptation

should generally not be regarded as dispositive of adaptive functioning in the open community"

(p. 161). Furthermore, the AAIDD (2010) mandates that "adaptive behavior was assessed in reference to typical and actual functioning in the community" (p. 46). The highly-structured, artificial setting of prisons does not allow for a sampling of typical community behavior. Furthermore, at the time of writing, standardized measures approved for use in prison settings do not exist, as an individual's adaptive functioning must be considered in comparison to same-age peers in the general community. In general, consideration of adaptive behavior in prison is outside the acceptable methods for diagnosing ID, but yet, this practice continues to be used in *Atkins* cases.

Issues Related to the Use of Extra-Clinical Factors in Diagnosis of ID

The use of extra-clinical factors as part of a diagnostic decision is concerning in that the Court is trying to determine the presence of ID without having scientific proof that the evidence aids in this determination. Also, the *Briseno* Factors have been used to rule out a diagnosis of ID based on strengths, rather than on weaknesses as mandated by AAIDD (2010). For example, judges that consider *Briseno* Factors in Texas may perceive basic communication skills as evidence against the presence of ID. Similarly, there is a potential for the inclusion of such information to act as a red herring that moves the trier-of-fact farther away from the accepted diagnostic criteria. For example, the trier-of-fact may focus on the presence of a personality disorder in order to explain intellectual and/or adaptive behavior deficits, such that these deficits are viewed as the product of willfulness rather than lack of ability. Of course, the diagnosis of a personality disorder does not preclude a diagnosis of ID, as was demonstrated in *Lambert v. State*

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(2005). Finally, consideration of one's criminal behavior during the index offense relies on a narrow sampling of behavior, rather than on the typical performance required by AAIDD (2010). As such, details of the alleged offense in isolation should not be used to support or refute a diagnosis of ID.

The *Briseno* Factor*s* undermine best practices in the assessment of ID and generally rely on stereotypes to assess the presence of ID. While the *Briseno* Factors were specifically discussed in numerous recent cases (e.g. *Lizcano v. Texas*, 2010; *Woods v. Texas*, 2009; *Lambert v. State*, 2005; *Moore v. Quarterman,* 2009), there is no available research regarding the role the Factors play in judicial decision-making, or how/if the characteristics represented in the Factors manifest in individuals with ID. The *Briseno* Factors are perhaps the most specific and salient use of extra-clinical factors being used to decide *Atkins* claims, but there are likely many other, more subtle instances in which these factors are used to influence judicial decision-making. That is, other states may consider similar factors when examining claimants' *Atkins* claims even though they do not formally accept the *Briseno* Factors.

Available Research on *Atkins* Claims

Empirical research on the topic of ID and the death penalty is scant. To date, there have been only six empirical studies conducted on *Atkins* cases. Blume, Johnson, and Seeds (2009) examined trends in 234 *Atkins* cases. Their article presented data regarding three broad areas of interest: rate of *Atkins* claims, wins (i.e., ruling in favor of ID) and losses (i.e., denial of a ID claim) in light of the three prongs of the diagnosis, and the effects of race. With regard to rate of *Atkins* claims, these authors found that only 7% of more than 3,000 inmates on death row waged

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an *Atkins* claim. Of the 7% of inmates with *Atkins* claims, nearly 40% of the claims were substantiated. This information is notable as it refuted Justice Scalia's dissenting opinion in *Atkins v. Virginia*, which warned that frivolous claims regarding ID would be made as a result of the Court's categorical exclusion from execution for individuals with ID. This study also produced a number of other interesting findings.

It should be noted that Blume, Johnson, and Seeds's (2009) data revealed significant differences in the rate of successful *Atkins* claims as a result of the jurisdiction in which the claim was made. According to the authors, these between state differences were hypothesized to be the result of funding for post-conviction proceedings. Individual states' definition of ID are also hypothesized to contribute to regional differences, such that states with a strict IQ cutoff of 70, for example (e.g. Virginia), would likely have fewer successful *Atkins* claims than states with a less restrictive cutoff (e.g. North Carolina) that allow IQ scores of "approximately" 70. This study also revealed that 56% of unsuccessful *Atkins* claimants failed to meet both the necessary deficits in IQ and significant limitations in adaptive functioning. Of the 232 cases surveyed, *Stallings v. Bagley* (2010) and *State v. Strode* (2007) were unsuccessful solely on the failure to meet the diagnostic requirement of deficits present within the developmental period. In successful *Atkins* cases, deficits in functional academics was the most often cited impairment in adaptive functioning (55%), followed by social skills (40%), and then deficits in work skills (20%). Blume, Johnson, and Seeds (2009) found that nearly 30% of unsuccessful *Atkins* cases relied, at least in part, on prison behavior to reach a conclusion regarding ID. The authors found adaptation to

prison and receiving education while incarcerated to be the most often cited reasons against a finding of ID.

Kan, Boccaccini, McGorty, Noland, and Lawson (2009) conducted another empirically-based *Atkins* study. While this study had several methodological flaws, foremost among these flaws being the use of pre-*Atkins* cases, it used transcripts of Texas capital cases to examine the types of information presented to jurors during the trial phase of capital murder cases. After examining 19 transcripts of pre-*Atkins* capital cases, the authors found that information related to adaptive behavior was more often presented than information related to intellectual ability, and the more face valid of the ten skill areas of adaptive behavior the more often these facets were presented. Specifically, functional academics was addressed in each of the 19 cases, self-direction was addressed in 18 cases, communication in 17 cases, social skills in 16 cases, and work in 13 cases. Information regarding health and safety, leisure, and community use were found to be the skill areas least often presented in *Atkins* cases. Of the 19 cases examined, only five presented evidence from standardized testing of adaptive behavior. The authors found a variety of standardized tests used to evaluate adaptive behavior were from measures not explicitly designed for that purpose, such as the Wechsler Memory Scale, Wide Range Achievement Test-3, and California Verbal Learning Test.

Most relevant to the current study, the authors found that 68.4% of the cases studied presented information related to criminal behavior in relation to the claimant's level of adaptive functioning. On average, there were nine items of criminal behavior-related information presented per claimant. Foremost among the information presented was that believed to be direct evidence

of the claimant's self-direction abilities (e.g. use of disguises, cutting phone lines at the crime scene, planning).

Dematteo, Marczyk, and Pich (2007) examined the statutory definitions of ID in states with and without the death penalty. The authors found that five states (DE, ID, NC, ND, OK) used the American Psychiatric Association's definition from the Diagnostic and Statistical Manual- 4th Edition- Text Revision (DSM-IV-TR; 2000), and six states (CT, FL, OR, TX, VA, WA) used the 2002 AAIDD definition in their legislation. One state (MD) was found to use the American Psychological Association's definition, which differs from the definition used in the DSM-IV-TR and by the AAIDD as it requires age of onset prior to 22 years, rather than 18 years. The remaining 36 states used criteria that differed in definition or specificity from the aforementioned definitions. Of these 36 states, 11 states (AL, CO, GA, HI, ME, NV, NJ, OH, SC, WV) defined ID using the three-prong approach put forth by the DSM-IV-TR, AAIDD, and APA, but did not operationalize key terms, such as "subaverage," when referring to the necessary deficits on a standardized measure of intellectual ability. These 11 states also failed to define the number and type of deficits required in adaptive behavior, as well as the necessary age of onset. Intellectual disability was defined by the use of all three prongs of the DSM-IV-TR (APA, 2000) and AAIDD definition, but with only one or two of these elements defined in 16 of these 36 states (AZ, CA, IN, KY, LA, MI, MN, MO, MS, NY, PA, RI, SD, TN, UT, WY). The authors found that four states (AK, IA, MA, VT) define ID by using only two of the three prongs. These four states do not use the age of onset prong in their definition.

Four states (AR, IL, NE, NM) acknowledge presumptive evidence of ID in cases in which a claimant's IQ is below a specific cut-off, regardless of the age of onset and presence of deficits in adaptive behavior. It should be noted that the requisite IQ cut-off varied by 10 points across these four states, with Arkansas requiring a score of 65 and Illinois requiring a score of 75. Kansas uses the AAIDD definition, but also requires an impairment of the claimant's capacity to appreciate the criminality of his conduct or ability to conform his conduct to the requirements of the law as a result of deficits in intellectual functioning. The authors were unable to identify the definition of ID used in Montana and Wisconsin's statutes. In summation, the authors found that "the large majority of states, both overall and specifically among death penalty states, use criteria for mental retardation that are not entirely consistent with accepted clinical standards" (2007; p.781).

Reardon, O'Neil, and Levett (2007) conducted two internet-based mock juror studies that examined the influence of procedural, evidentiary, and attitudinal variables in deciding *Atkins* cases. In both studies, death qualified mock jurors were provided with a summary of a capital crime. In the first study, evidence was presented by the defense and prosecution regarding the claimant's mental retardation claim. The manipulations included presentation of evidence related to the claimant's level of practical adaptive behavior skills, level of social skills, and age of onset of deficits. In addition, the study included manipulation of aggravating (e.g., prior criminal history, future dangerousness) and mitigating (e.g., model prisoner behavior, volunteer efforts in prison) factors, as well as the potential role of ID in the commission of the crime (i.e., inability to appreciate the nature of the criminal act, being led by others). Participants provided a final

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decision with regard to the ultimate *Atkins* issue. The instructions provided to mock jurors when making the final determination were manipulated on the basis of the standard of proof, the side assigned the burden of proof, and the definition of ID used. The point at which the issue of ID was raised was also manipulated, such that one half of participants were asked to consider the issue as if it occurred mid-trial and the other half were instructed to consider the issue after the claimant was found guilty in the trial phase. Attitudinal variables were also assessed through the use of a questionnaire.

Results of Reardon et al.'s (2007) first study revealed procedural evidence (e.g., the phase at which ID was considered, standard of proof, party that carries the standard of proof) plays a more significant role than does evidentiary variables (e.g., heinousness of the crime, deficits in practical skills). Results indicated participants were less likely to find the claimant to have ID when the defense bore the burden of proof than when the prosecution had to disprove ID; the preponderance of the evidence standard was used in the aforementioned conditions. Evidence related to deficits in social skills was the only evidentiary variable found to affect decision making. There was a marginally significant result when the claimant had deficits in social skills, such that the individual was more likely to be found to have ID than when such deficits were not present. Deficits in practical skills did not significantly influence mock juror decision making. When evidence was presented in the sentencing hearing that linked ID to the crime, jurors were less likely to find the claimant to have ID. This finding, according to Reardon et al. (2007) suggested that the stage of the legal process in which the determination is made is significant to the final outcome. Results also indicated jurors were more likely to deem a claimant to have ID if

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their crime was presented as attributable to ID, or when a "nexus" (p. 539) between the crime and ID were highlighted.

The second study used a similar approach to that of the first study. However, that study aimed to assess the influence of mental illness on mock juror decision making. Manipulations included whether the claimant raised a mental illness or *Atkins* claim, the severity of the issue raised, heinousness of the crime, and stage of the legal process during which the aforementioned issues were being raised. Results indicated that it is generally more difficult to persuade a jury that a claimant has a mental illness than it is to convince them a claimant has ID. The authors described an interaction effect between heinousness and mental problems. Heinousness was found to be predictive of mental problems, but only when evidence presented indicated less severe mental problems and jurors held the belief that defendants with a mental illness should not be punished. In situations in which an especially heinous crime was described and paired with severe mental disorder, mock jurors were more likely to reach a death verdict and less likely to find in favor of mental illness or ID.

Boccaccini, Clark, Kan, Caillouet, and Noland (2010) conducted a study that assessed jury members' beliefs regarding the relationship between impairments in functioning and ID diagnosis. The study examined the perceptions of over 800 potential jurors recruited at a courthouse and then compared those perceptions to 80 mental health professionals (i.e., direct care staff) who worked with individuals diagnosed with ID. The authors were most interested in the manner potential jurors and mental health experts viewed romantic relationships, the ability to operate a motor vehicle, work skills, substance abuse, independent living skills, academic

performance, reading and writing skills, and criminal behavior in individuals with *Atkins* claims. Perceptions were assessed by examining participants' ratings of a number of statements that depicted skills of an individual who claimed to have ID. Statements ranged from severe deficits, indicating difficulty in even the most basic skills, to statements that indicated no impairment in abilities. Participants read each statement and were then asked to determine if the person described had ID or not. It should be noted that the authors discussed findings from their previous research that indicated the three most influential factors in determinations of ID when using mock jurors were adjustment to prison, IQ scores, and offense specific behavior, respectively.

Results indicated potential jurors believed that deficits in romantic relationships were indicative of ID. Interestingly, mental health workers were also more likely to mark "ID" when deficits in romantic relationships were described than when they were not present. Potential jurors did not perceive deficits in driving ability as indicative of ID, but mental health workers demonstrated the opposite pattern, indicating such deficits in the ability to drive were associated with ID. Differences in perception of ID as a function of work ability did not differ between potential jurors and mental health workers; both jurors and mental health workers perceived an individual with ID as being unable to be employed as a mail clerk, data entry clerk, or third grade teacher. Potential jurors were less likely than mental health workers to believe individuals with ID used illicit substances and were less likely to view a person living in the community, even with assistance, as having ID. They were also less likely to perceive an individual with ID as having been enrolled in special education classes and having received a certificate of completion. Results indicated that both potential jurors and mental health workers perceived an individual to have ID

when he did not understand that his behavior was wrong. Overall, the authors concluded that potential jurors were "more hesitant than mental health workers to classify…a person with ID" and "defaulted" to a "Not MR" decision (p. 17). The authors noted that this tendency may be similar to decision making in actual *Atkins* cases in which jurors "assume that the defendant is nondisabled until the defense meets its burden of proof in establishing MR" (p. 17). Interestingly, overall results indicated potential jurors were less likely to endorse ID when deficits were at the extreme end of the continuum.

The most recent empirical study available at the time of this writing was conducted by Hensl (2011). For her doctoral dissertation, Hensl provided a total of 204 state and federal judges with one of eight randomly selected vignettes depicting claimants with ID. She examined the relationship between the vignette-specific assessment practices, claimant history, and judicial decision making. The influence of the judges' characteristics and attributes on case outcome were also explored. In addition, Hensl assessed the judges' understanding of the assessment and diagnosis of ID.

The results of Hensl's study indicated judges were more likely to find a claimant to have ID when the deficits described were commensurate with those found in individuals with severe ID. Cases in which there was a documented history or previous diagnosis of ID were also predictive of a decision in favor of ID. Judicial self-reported understanding of ID did not predict their decision regarding ID, such that those with more knowledge of ID did not necessarily produce findings of ID/not ID more so than judges who stated little familiarity with this diagnosis. Hensl's study also demonstrated that state judges were more likely to conclude a

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claimant had ID than were judges in the federal system. According to this study, Hensl found race to predict the hearing's outcome, with African American judges more often finding claimants to have ID than did judges of other races. However, gender, years of experience with capital cases, level of experience with *Atkins* cases, and political orientation/affiliation were not significant predictors of final outcome. There was a strong positive correlation between the level of ID presented in the vignettes and that perceived by the judges. Finally, and most relevant to the current study, prison behavior, as reported by correctional officers, and offense-specific variables did not serve as significant predictors of judicial decisions. Hensl described the relationship between prison behavior, offense details, and judicial decision making as "mixed," and stated their relationship to and influence on decisions regarding ID "remains unclear" (p. 97).

Purpose

This study aimed to fill a substantial gap in the literature regarding the elements of *Atkins* cases most often used in deciding whether an individual has ID. In addition to gaining knowledge of current decision-making in *Atkins* cases, the results of this study will be of assistance in understanding the influence, if any, that extra-clinical factors have on determinations of ID, and if these factors suggest stereotypes and/or misconceptions are influential in these decisions. Examination of the role of extra-clinical factors is crucial in understanding the decision-making processes of judges and juries, as well as understanding the evidence that is given weight by the trier-of-fact. A better understanding of these issues will assist in maximizing the opportunity for *Atkins* claimants to be treated fairly within legal proceedings, as the results of this study can be used to educate attorneys, judges, juries, and testifying experts on the subject of ID.

Hypotheses

Hypothesis One

Due to the use of *Briseno* Factors in Texas, as well as other states, to refute *Atkins* claims, cases that cited these factors or those of similar content (e.g., descriptions of planning the capital crime, rational and appropriate conduct) would be more likely to find that a claimant does not have ID than those cases that did not consider these extra-clinical factors. That is, when strengths, or lack of deficits, in the seven *Briseno* Factors are discussed in judicial opinions, it is more likely the conclusion reached will not favor an *Atkins* claim. Logistic regression was used to analyze the predictive abilities of the individual *Briseno* Factors.

Hypothesis Two

Due to the tendency of the lay public to view individuals with ID as inept at participating in even the most common and/or simple activities of adulthood (e.g., operating a motor vehicle, marrying, maintaining employment, parenting; Olvera, Dever, & Earnest, 2000), a history of these experiences would predict membership in the group of claimants found not to have ID. Logistic regression was used to analyze a variety of behaviors commonly exhibited by adults with average intelligence.

Hypothesis Three

As seen in *Ex Parte Briseno* (2004) and *Lambert v. State* (2005), experts, prosecuting attorneys, and judges often assert that the presence of Antisocial Personality Disorder, or traits thereof, preclude a diagnosis of ID. As such, it is hypothesized that assertions regarding the

presence of Antisocial Personality Disorder will more often occur in unsuccessful *Atkins* claims than successful claims. This hypothesis was analyzed through logistic regression.

Hypothesis Four

One study showed that in 30% of unsuccessful *Atkins* cases, judges cited behavior in prison as evidence against deficits in adaptive behavior (Blume et al., 2009). This issue has been debated in numerous *Atkins* cases (e.g., *Ramirez v. Ryan,* 2010; *Lambert v. State,* 2005; *Arbelaez v. Florida,* 2010), and Kan, Turner, Boccaccini, Noland, and Caillouet (2006) found behavior in prison to be a highly influential factor in ID determinations. Thus, it was hypothesized that individuals will be more likely to have an unsuccessful *Atkins* claim when prison behavior is cited as evidence of strengths in adaptive behavior. Logistic regression was used to analyze, individually, a number of common behaviors in prison (e.g., attending to medical needs, corresponding with others via letter, carrying out special duties or being employed).

Hypothesis Five

Due to regional and between state differences in the rate of successful *Atkins* claims (Blume, et al., 2009; Dematteo, et al. 2007), it is hypothesized that "death penalty friendly" states, defined as the top 10% of states ($N = 3$) with the highest number of executions, will have the lowest percentage of successful *Atkins* claims. The Death Penalty Information Center's (DPIC) website was used to determine the "death penalty friendly" states, as that website maintains such up-to-date statistics. In order to test this hypothesis, frequencies (i.e., percentages) were examined.

Hypothesis Six

As a result of the deficits associated with ID, and in accordance with available research (Blume, et al., 2009; Kan, et al., 2009), functional academics was predicted to be the most often cited skill or deficit area of adaptive behavior across all *Atkins* claims. In order to test this hypothesis, frequencies (i.e., percentages) were examined.

2. Method

Design

This study utilized a known-groups design to examine factors thought to influence judicial decision-making in *Atkins* cases. The specific case variables outlined in judicial opinions served as the independent variables, which include extra-clinical factors such as the *Briseno* Factors, offender characteristics, educational and employment history, mental health history, elements of the crime (e.g. premeditation), and behavior during incarceration. The dependent variable was the judicial opinion regarding whether the evidence presented warranted a finding of ID.

Participants

Data collection was completed in April 2011, subsequent to formal approval of the thesis proposal and official approval from The University of Alabama's Institutional Review Board (IRB). This study consisted of two groups of judicial opinions, with 31 opinions in each of the two groups (total N = 62). The two groups of judicial opinions included: (1) opinions in which the trier-of-fact ruled a claimant had ID (i.e., a "successful" *Atkins* claim) and (2) opinions in which the trier-of-fact ruled the claimant did not have ID (i.e., an unsuccessful *Atkins* claim). The judicial opinions used in this study were obtained through two methods: (1) a public website/blog titled *Intellectual Competence and the Death Penalty* found at http://www.*Atkins*IDdeathpenalty.com/, and (2) another publicly viewable website titled http://www.deathpenaltyinfo.org/sentence-reversals-intellectual-disability-cases (Death Penalty Information Center; DPIC), that maintains statistics and other information. All of the judicial

opinions used in this study were public record and easily accessible via the internet, and as such, informed consent procedures were not required.

Judicial opinions were included if they met the following criteria:

(i.)   The opinion was the result of an *Atkins* hearing or was an appellate decision based on review of a decision made in a lower court. By the very nature of the cases of interest, all opinions used in this study were post- *Atkins v. Virginia* (2002).

(ii.)   The opinion specifically stated whether the claimant was found to have ID, or if at the appellate level, whether a lower court's ruling of the presence of this disorder was affirmed or denied.

Judicial opinions were excluded based on the following criteria:

(i.)   The opinion was handed down prior to the ruling in the 2002 *Atkins v. Virginia* case.

(ii.)   The opinion does not specifically address whether the claimant had or did not have intellectual disability.

(iii.) The claimant was not charged with a capital crime.

(iv.)   The claimant was younger than 18 years at the time of the crime.

Recruitment

The University of Alabama's Institutional Review Board (IRB) approved opinions to be gathered from *Intellectual Competence and the Death Penalty,* a website/blog that can be found at http://www.*Atkins*IDdeathpenalty.com/ for the purposes of this study, as well as other publicly accessible websites (IRB # 09-OR-030-R1; renewal approved on 02.17.2010). Dr. Kevin McGrew

maintains this website/blog. McGrew's stated aim of this website is, "[a]n attempt to provide understandable and up-to-date information regarding intelligence testing, intelligence theories, personal competence, adaptive behavior and intellectual disability (mental retardation) as they relate to death penalty (capital punishment) issues." This website/blog is publicly accessible and continuously updates a list of full judicial opinions regarding *Atkins* claims. Additional case names in which claimants were found to have ID were also gathered from http://www.deathpenaltyinfo.org/sentence-reversals-intellectual-disability-cases, as per the approved IRB protocol. After these case names were identified, google.com was used to access publicly viewable, complete opinions.

Identifying judicial opinions that met inclusion criteria. Opinions were selected and matched on the dependent variable (i.e., final outcome of the case regarding the presence of ID) and chosen in a quasi-random manner for each of the two groups. Quasi-random selection of opinions was achieved through the primary investigator's blind selection of cases from the list presented on the websites. Prior to inclusion and coding, each opinion was previewed to ensure the basic inclusion criteria were met.

Informed Consent. Since all opinions used in this study are public record, informed consent was not obtained.

Development of the Data Coding Sheet. The coding sheet used in this study was created after careful consideration of the factors thought to influence judicial decision-making in *Atkins* and other capital cases. These factors were derived from the literature, from observation of *Atkins* cases, and from the input of professionals with expertise in the area of ID and the legal system.

The coding sheet contained categorical variables with numerous subcategories. For example, the coding sheet contained a variable labeled "Prior Employment," which lists a variety of employment types the claimant may have held. Where appropriate, a "Not Mentioned" option was provided to accurately code opinions in which a particular variable of interest was not addressed, and as such, "Yes" or "No" would be inaccurate and insufficient when coding those variables.

Data Collection. The primary investigator and fully trained undergraduate and graduate research assistants coded the randomly selected and previewed judicial opinions. To ensure a high rate of coding accuracy, each opinion was coded by a minimum of two coders. Individual items coded in a discrepant manner, were subjected to a third coding by the primary investigator in order to reconcile differences, and as such, ensure greater accuracy. In order to minimize potential bias, the primary investigator was blind to the identity of the coders on the discrepant opinion surveys. Differences in coding were reconciled by rereading pertinent portions of the opinion to verify the most appropriate coding scheme. The primary investigator assigned coders opinions with a research number that was then coded via surveymonkey.com.

After data collection was complete, the coded data was exported from surveymonkey.com to an Excel spreadsheet. The data was then analyzed for inter-coder agreement, and cleaned in the manner described in the section entitled *Data Collection*. The Excel spreadsheets were then transferred to SPSS in order to prepare for analysis.

3. Results

Preliminary Analyses- Logistic Regression

Analyses were conducted to determine if any assumptions of logistic regression were violated. The assumption of linearity does not apply in these analyses, as all predictors were categorical. The assumption of independence of errors was not violated, as cases were not related in any way. Finally, the assumption of multicollinearity was not violated in the final analyses, as predictors were analyzed individually, rather than as models that consisted of a number of conceptually related predictors. Logistic regression was used to analyze predictors on an individual basis, as initial model building resulted in "near multicollinearity," which is the term used to describe highly correlated predictor variables (A. T. Gilpin, personal communication, June 14, 2011). As a result of the initial violation of this assumption, each predictor variable was independently analyzed using logistic regression in order to assess its individual predictive ability, and at the same time, avoid violation of key assumptions. All statistical analyses were conducted using SPSS 17.0 via the default Enter Method. It should be noted that the "Not Mentioned" category in the logistic regression analyses was entered as the reference or "baseline" category where necessary, as it was determined to be a neutral category; other categories (i.e., variations of "Yes," and "No") would be compared to this baseline category. Categories were collapsed prior to analyses where appropriate.

Claimant demographic and personal information. Demographic information was coded when provided in the selected opinions. It should be noted that not all judicial opinions provided

such information. Whenever possible, the information obtained from judicial opinions included

the state in which the case was heard, judicial circuit, claimant age at the time of the alleged

capital offense, gender, race, marital status, and educational history. Given the volume of

demographic and personal information coded, Appendix A presents a summary of that

information.

Primary Analyses

      Hypothesis 1. The influence of each of the *Briseno* Factors on the final outcome of *Atkins*

hearings was tested using logistic regression. It was hypothesized that endorsement of

strengths/lack of deficits in the *Briseno* Factors would more likely favor an unsuccessful outcome

than cases in which such deficits were mentioned. Seven separate models were analyzed using

logistic regression, one for each of the Factors. The results of each of the seven single-predictor

models will be discussed below, proceeded by tables that provide a summary of the results for

each Factor.

      Briseno Factor 1: Did those who knew the person best during the developmental stage-his

family, friends, teachers, employers, authorities-think he was mentally retarded at that time, and,

if so, act in accordance with that determination?. The full model containing the aforementioned

Briseno Factor was statistically significant, χ^2 (10, $N = 62$) = 24.99, p = .005, indicating that this

Factor was a significantly better predictor of the hearing's final outcome than the default model.

This Factor explained between 33.2% (Cox and Snell square) and 44.2% (Nagelkerke R square)

of the variance in the hearing's final outcome, and accurately classified 72.6% of all cases. This

Factor correctly classified 90.3% of all not ID cases, and 54.8% of all ID cases. Of the cases included in this sample: 22 did not mention a history of others believing he/she had ID during the developmental period, 3 noted an unspecified other believed the claimant had ID, 3 had a family member that believed he/she had ID, 1 had a friend who believed he/she had ID, 10 had a teacher who believed he/she had ID, 9 had both a family member and teacher believe he/she had ID, 1 had both a friend and a teacher believe he/she had ID, 1 had both a teacher and employer believe he/she had ID, 5 had a family member, friend and teacher who believed he/she had ID, 3 had a family member, friend, teacher, and employer believe he/she had ID, and in 4 cases no one believed the claimant had ID during the developmental period. As shown in Table 1, none of the individual subcategories (e.g., family, friends, teachers, and/or employers knew the individual had ID) of this predictor were statistically significant in predicting the outcome.

Table 1

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 1

Relationship to claimant	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned, unknown			5.75	10	.836			
Unspecified	20.84	20096.46	.00	1	.999	1.12	.00	-
Family	42.41	30697.87	.00	1	.999	2.61	.00	-
Friend	.00	30697.87	.00	1	1.0	1.0	.00	-
Teacher	.00	44937.10	.00	1	1.0	1.0	.00	-

Family and teacher	22.59	20096.46	.00	1	.999	6.46	.00	-
Friends and teacher	20.98	20096.46	.00	1	.999	1.29	.00	-
Teacher and employer	42.41	44937.10	.00	1	.999	2.61	.00	-
Family, friend, teacher	42.41	44937.10	.00	1	.999	2.61	.00	-
Family, friend, teacher, employer	22.59	20096.46	.00	1	.999	6.46	.00	-
Others did not think he had ID	20.51	20096.46	.00	1	.999	8.08	.00	-
Constant	-21.20	20096.46	.00	1	.999	.00		

Briseno Factor 2: Has the person formulated plans and carried them through or is his conduct impulsive? The full model containing the aforementioned *Briseno* Facto*r* was statistically significant, χ^2 (2, $N = 62$) = 15.85, $p = .000$, indicating this *Factor* was a significant predictor of the hearing's final outcome. This Factor explained between 22.6% (Cox and Snell square) and 30.1% (Nagelkerke R squared) of the variance in final hearing outcome, and accurately classified 67.7% of cases. This Factor correctly classified 51.6% of claimants in the not ID group and 83.9% of claimants in the ID group. Of the total sample, 29 opinions did not mention this Factor (N = 14 not ID, N = 15 ID), 21 opinions indicated the *Atkins* claimant formulated plans and

carried them through (N = 16 not ID, N = 5 ID), and 12 opinions described impulsivity and/or a failure to carry through plans (N = 1 not ID, N = 11 ID). As shown in Table 2, both the ability to formulate plans and carry them through, as well as the inability to do so, significantly predicted an unsuccessful outcome (i.e., not ID).

Table 2

Logistic Regression Predicting Atkin*s Outcome Using Briseno Factor 2*

Ability to plan	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			10.21	2	.006			
Yes	-2.33	1.11	4.41	1	.036	.10	.01	.86
No	-3.56	1.16	9.37	1	.002	.03	.00	.28
Constant	2.40	1.04	5.27	1	.022	11.00		

Briseno Factor 3: Does his conduct show leadership or does it show that he is led around by others?. The model containing the aforementioned *Briseno* Factor was statistically significant, $\chi^2 (2, N = 62) = 12.35, p = .002$, indicating this Factor was a significant predictor of the hearing's final outcome. This Factor explained between 18.1% (Cox and Snell square) and 24.1% (Nagelkerke R square) of the variance in final hearing outcome, and accurately classified 67.7% of cases. This Factor correctly classified 41.9% of claimants found not to have ID, which is less than chance would have predicted, and 93.5% of claimants in the ID group were correctly classified. Of the total sample, 25 opinions did not reference the leadership abilities of the *Atkins* claimant (N = 11 not ID, N = 14 ID), 15 opinions indicated the claimant showed leadership

abilities (N = 13 not ID, N = 2 ID), and 22 opinions noted a deficit in these abilities (N = 7 not ID,

N = 15 ID). As shown in Table 3, deficits in leadership abilities/being led by others significantly

predicted an unsuccessful outcome. However, leadership abilities/not being led around by others

did not significantly predict the final outcome of the hearing.

Table 3

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 3

Leadership abilities	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			8.93	2	.012			
Yes	-.52	.61	.73	1	.393	.59	.18	1.96
No	-2.63	.89	8.82	1	.003	.07	.01	.41
Constant	.76	.46	2.77	1	.096	2.14		

Briseno Factor 4: Is his conduct in response to external stimuli rational and appropriate,

regardless of whether it is socially acceptable?. The model containing the aforementioned *Briseno*

Factor was statistically significant, χ^2 (2, N = 62) = 12.75, p = .002, indicating this Factor was a

significant predictor of the hearing's final outcome. This Factor explained between 18.6% (Cox

and Snell square) and 24.8% (Nagelkerke R square) of the variance in the hearing's final

outcome, and accurately classified 66.1% of cases. Performance on this Factor accurately

classified 35.5% of claimants without ID, and 96.8% of claimants with ID. A total of 39 opinions

in this sample did not make reference to the claimant's response to external stimuli (N = 17 not

ID, N = 22 ID), with 12 indicating the claimant's response was rational and appropriate (N = 11

not ID, N = 1 ID), and 11 opinions noted deficits in this area (N = 3 not ID, N = 8 ID). As shown

in Table 4, deficits in the ability to rationally and appropriately respond to stimuli significantly

predicted an unsuccessful outcome. However, the ability to rationally and appropriately respond

to stimuli did not significantly predict the final outcome of the hearing.

Table 4

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 4

Rational and appropriate responding	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			7.55	2	.023			
Yes	-.72	.75	.93	1	.335	.49	.11	2.11
No	-3.38	1.25	7.37	1	.007	.03	.00	.39
Constant	.98	.68	2.10	1	.147	2.67		

Briseno Factor 5: Does he respond coherently, rationally, and on point to oral or written

questions or do his responses wander from subject to subject?. The model containing the

aforementioned *Briseno* Factor was statistically significant, χ^2 (2, N = 62) = 14.74, p = .001,

indicating this Factor was a significantly better predictor of the hearing's final outcome than the

default model. This Factor explained between 21.2% (Cox and Snell square) and 28.2%

(Nagelkerke R square) of the variance in final hearing outcome, and accurately classified 67.7%

of cases. This Factor accurately classified 51.6% of cases in which the claimant did not have ID,

and 83.9% of cases in which the claimant was found to have ID. Of the total sample, 30 opinions

did not mention the claimant's ability to coherently, rationally, and relevantly respond (N = 14 not

ID, N = 16 ID), 21 noted a strength in this area (N = 16 not ID, N = 5 ID), and 11 noted deficits in

this area (N = 1 not ID, N = 10 ID). As shown in Table 5, deficits in the ability to coherently,

rationally, and relevantly respond to oral or written questions predicted a final outcome of not ID.

The ability to rationally, appropriately, and relevantly respond to oral or written questions was

marginally significant ($p = .051$) in predicting the final outcome of the hearing.

Table 5

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 5

Rational and appropriate responding	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			9.96	2	.007			
Yes	-2.17	1.11	3.81	1	.05	.11	.01	1.01
No	-3.47	1.17	8.82	1	.003	.03	.00	.31
Constant	2.30	1.05	4.82	1	.028	10.00		

Briseno Factor 6: Can the person hide facts or lie effectively in his own or others'

interests?. The model containing the aforementioned *Briseno* Factor was statistically significant,

$\chi^2 (2, N = 62) = 9.58, p = .008$, indicating this Factor was a significantly better predictor of the

hearing's final outcome than the default model. This Factor explained between 14.3% (Cox and

Snell square) and 19.1% (Nagelkerke R square) of the variance in final hearing outcome, and

accurately classified 62.9% of cases. Of the cases in which a claimant was not found to have ID,

35.5% were classified correctly, and 90.3% of cases were classified correctly in cases in which

the claimant was found to have ID. Results indicated that 45 opinions did not discuss the

claimant's ability to effectively lie (N = 20 not ID, N = 25 ID), 14 noted the ability to do so (N = 11 not ID, N = 3 ID), and 3 opinions described deficits in this ability (N = 0 not ID, N = 3 ID). As shown in Table 6, while the overall model was a statistically significant predictor of the final outcome of the hearing, examination of the claimant's level of ability to hide facts or lie effectively did not reach statistical significance.

Table 6

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 6

Hides facts and lies effectively	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			4.51	2	1.05			
Yes	-20.98	23205.42	.00	1	.999	.00	.00	-
No	-22.50	23205.42	.00	1	.999	.00	.00	-
Constant	21.20	23205.42	.00	1	.999	1.62		

Briseno Factor 7: Putting aside any heinousness or gruesomeness surrounding the capital offense, did the commission of that offense require forethought, planning, and complex execution of purpose?. The model containing the aforementioned *Briseno* Factor was not statistically significant, $\chi^2 (2, N = 62) = 1.87, p = .392$, indicating this Factor was not a significant predictor of the hearing's final outcome when compared to the default model. This Factor explained between 3% (Cox and Snell square) and 4% (Nagelkerke R square) of the variance in final hearing outcome, and accurately classified 56.5% of cases. This Factor accurately classified 54.8% of cases in which the claimant was found not to have ID, and 58.1% of cases in which the claimant

was found to have ID. Of the total sample, 32 opinions failed to discuss the claimant's level of

thought, planning, and complex execution of purpose in the alleged offense (N = 14 not ID, N =

18 ID), 23 opinions noted a strength in this area (N = 12 not ID, N = 11 ID), and 7 opinions noted

the claimant exhibited deficits in this area (N = 5 not ID, N = 2 ID). As shown in Table 7, a

claimant's ability to plan and execute a complicated crime was not a significant predictor of the

hearings' final outcome.

Table 7

Logistic Regression Predicting Atkins Outcome Using Briseno Factor 7

Forethought, planning, complex execution	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			1.74	2	.419			
Yes	1.17	.91	1.65	1	.199	3.21	.54	19.11
No	.83	.94	.79	1	.375	2.29	.37	14.32
Constant	-.916	.84	1.20	1	.273	.40		

Hypothesis 2. It was predicted that due to the tendency of the lay public to view

individuals with ID as inept at participating in even the most simple activities (e.g. operating a

motor vehicle, marrying, maintaining employment), a history of these experiences would predict

membership in the group of claimants not found to have ID by the trier-of-fact.

Marital status. Marital status was not a significant predictor of the hearing's final outcome,

$\chi^2 (4, N = 62) = 5.63, p = .229$. Marital status explained between 8.7% (Cox and Snell square) and

11.6% (Nagelkerke R square), correctly classifying 58.1% of all cases. Of the cases in which a claimant was found not to have ID, 29% of cases were correctly classified, and 87.1% of cases in which claimants were found to have ID were correctly classified. Of the 62 opinions in this sample, 40 did not mention the claimant's marital status ($N = 19$ not ID, $N = 21$ ID). Of the remaining opinions, 11 indicated the claimant was married ($N = 7$ not ID, $N = 4$ ID), 5 indicated a history of divorce ($N = 1$ not ID, $N = 4$ ID), 4 were never married ($N = 2$ not ID, $N = 2$ ID), and 2 claimants' marital status was described as "other" (e.g. cohabitating, common law marriage, separated; $N = 2$ not ID, $N = 0$ ID).

Table 8

Logistic Regression Predicting Atkins Outcome by Marital Status

Marital status	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			2.40	4	.662			
Married	1.00	1.05	.01	1	.924	1.11	.14	8.64
Divorced	-.56	1.18	.23	1	.635	.57	.06	5.78
Other	1.39	1.50	.85	1	.355	4.00	.21	75.66
Never married	-21.20	28420.72	.00	1	.999	.00	.00	
Constant	.00	1.00	.00	1	1.00	1.00		

Level of education. Results indicated level of educational attainment was not a significant predictor of whether a claimant was found to have ID, $\chi^2 (3, N = 62) = .40, p = .941$. Level of educational attainment explained between 0.6% (Cox and Snell square) and 0.9% (Nagelkerke R square) of the hearing's final outcome, and correctly classified 51.6% of all cases. A total of 6.5% of claimants found not to have ID were correctly classified, and 96.8% of claimants with ID were

correctly classified. Of the total sample, 38 opinions did not mention the claimant's level of education, 17 reportedly dropped out of school (N = 8 not ID, N = 9 ID), 4 earned a high school diploma, and 3 earned a certificate of completion (N = 2 not ID, N = 1 ID).

Table 9

Logistic Regression Predicting Atkins Outcome by Educational Attainment

Level of education	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	95% CI for Odds Ratio Upper
Not mentioned			.38	3	.945			
Dropped out	.69	1.27	3.00	1	.584	2.00	.17	23.96
Earned diploma	.81	1.32	.38	1	.538	2.25	.17	29.77
Certificate of completion	.69	1.58	.19	1	.66	2.00	.09	44.35
Constant	-.69	1.23	.32	1	.57	.50		

Employment history. The claimants' employment history was not a statistically significant predictor of the hearing's final outcome, χ^2 (1, N = 62) = 0.7, p = .796. Employment history explained 0.1% (Cox and Snell square and Nagelkerke R square) of the variance in the final outcome of the hearing, correctly classifying 51.6% of all cases. Cases in which the claimant did not have ID were correctly classified at a rate of 61.3%, and cases in which claimants had ID were correctly classified at a rate of 41.9%. Of the 62 opinions included in the sample, 25 did not mention the claimant's employment history (N = 12 not ID, N = 13 ID), and 37 opinions indicated the claimant held at least one employment position (N = 19 not ID, N = 18 ID).

Table 10

Logistic Regression Predicting Atkins Outcome by Employment History

History of employment	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Yes	.13	.52	.07	1	.796	1.14	.41	3.16
Constant	-.05	.33	.03	1	.869	.95		

Driving. Claimant driving status was not a statistically significant predictor of the hearing's final outcome, $\chi^2 (4, N = 62) = 7.24, p = .124$. Driving history explained between 11% (Cox and Snell square) and 14.7% (Nagelkerke R square) of the variance in the hearing's final outcome, correctly classifying 61.3% of all cases. Results indicated that 41.9% of the cases in which claimants were not found to have ID were correctly classified, and 80.6% of the cases in which the claimant was found to have ID were correctly classified. A total of 25 opinions did not mention the claimant's driving behaviors (N = 11 not ID, N = 14 ID). Of the opinions that discussed driving ability, 19 claimants had a driver's license (N = 13 not ID, N = 6 ID), 2 drove without a valid license (N = 1 not ID, N = 1 ID), 13 had a history of driving, but their license status was either not mentioned or unknown (N = 6 not ID, N = 7 ID), and finally, 3 claimants had no history of driving (N = 0 not ID, N = 3 ID).

Table 11

Logistic Regression Predicting Atkins Outcome by Driving Behaviors

Driving history	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			2.79	4	.594			
Drove with license	-20.96	23205.46	.00	1	.999	.00	.00	
Drove without license	-21.98	23205.46	.00	1	.999	.00	.00	
Drove-unknown license status	-21.20	23205.46	.00	1	.999	.00	.00	
No driving history	-21.05	23205.46	.00	1	.999	.00	.00	
Constant	21.20	23205.46	.00	1	.999	1.62		

Criminal history. Results indicated the claimant's criminal history was not a statistically significant predictor of the hearing's final outcome, χ^2 (1, $N = 62$) = 3.20, $p = .074$. The claimants' criminal history explained between 5% (Cox and Snell square) and 6.7% (Nagelkerke R square) of the variance in the outcome, correctly classifying 61.3% of all cases. Results indicated 64.5% of cases in which the claimant was found not to have ID were correctly classified, and 58.1% of cases in which the claimant had ID were correctly classified. A total of 29 opinions did not mention the claimant's criminal history (N = 11 not ID, N = 18 ID), and 33 opinions discussed prior arrests and/or convictions (N = 20 not ID, N = 33 ID).

Table 12

Logistic Regression Predicting Atkins Outcome by Criminal History

Criminal history	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	.92	.52	3.12	1	.077	2.52	.90	7.02
Constant	-.43	.36	1.46	1	.227	.65		

Childbearing. Whether the claimant has children was a statically significant predictor of the final outcome of the hearing, χ^2 (2, *N* = 62) = 6.06, *p* = .048, when compared to the default model. This predictor explained between 9.3%% (Cox and Snell square) and 12.4% (Nagelkerke R square) of the variance in final hearing outcome, and accurately classified 59.7% of cases. Of the cases in which the claimant did not have ID, 45.2% of cases were correctly classified, and 74.2% of all cases in which the claimant had ID were correctly classified. Results indicated 37 opinions included in this sample did not mention whether the claimant had children (N = 17 not ID, N = 20 ID), 22 opinions indicated the claimant had at least one child (N = 14 not ID, N = 8 ID), and 3 claimants never fathered a child (N = 0 not ID, N = 3 ID). As shown in Table 13, subcategories of this predictor did not reach statistical significance.

Table 13

Logistic Regression Predicting Atkins Outcome by Parenting Status

Has children	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			1.21	2	.426			
Yes	-21.04	23205.52	.00	1	.999	.00	.00	-
No	-21.76	23205.52	.00	1	.999	.00	.00	-
Constant	21.20	23205.52	.00	1	.999	1.62		

Level of supervision while employed. Results indicated a statistically significant relationship between the level of supervision required during employment and the hearing's final outcome, χ^2 (2, $N = 62$) = 6. 59, p = .037. Level of supervision explained between 10.1% (Cox and Snell square) and 13.4% (Nagelkerke R square) of the variance in the hearing's final outcome, and correctly classified 56.5% of cases. Results indicated that 12.9% of cases in which claimants did not have ID were correctly classified, and 100% of cases in which the claimant has ID were correctly classified. The level of supervision required while employed was not mentioned in 49 cases ($N = 24$ not ID, $N = 25$ ID), 9 cases indicated the claimant required additional supervision while employed ($N = 3$ not ID, $N = 6$ ID), and 4 opinions noted that the claimant worked independently ($N = 4$ not ID, $N = 0$ ID). However, examination of the individual levels of supervision did not yield statistically significant results, as shown in Table 14.

Table 14

Logistic Regression Predicting Atkins Outcome by Employment Supervision Level

Level of Supervision	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.73	2	.694			
Additional supervision	21.24	20096.50	.00	1	.999	1.68	.00	
Independent	21.90	20096.50	.00	1	.999	3.23	.00	
Constant	-21.20	20096.50	.00	1	.999	.00		

Hypothesis 3. The presence of Antisocial Personality Disorder (APD), or antisocial traits, was hypothesized to more often result in an unsuccessful *Atkins* claim than a successful claim. Results indicated the presence of APD was not a statistically significant predictor of the hearing's final outcome, $\chi^2 (1, N = 62) = 2.84$, $p = .092$, and correctly classified 53.2% of all cases. This predictor explained between 4.5% (Cox and Snell square) and 6% (Nagelkerke R square) of the variance in final hearing outcome. This hypothesis was not supported, as evidence of APD did not significantly predict the final outcome of hearings. It should be noted only 2 of the 62 cases included in these analyses presented evidence of APD, which severely limits the interpretability and generalizability of these analyses and related conclusions. In both cases in which the claimant was diagnosed with APD, he/she was found not to have ID. Of the 60 cases in which APD was

not mentioned, 29 claimants were found not to have ID and the remaining 31 claimants were found to have ID.

Table 15

Logistic Regression Predicting Atkins Outcome by the Presence of Antisocial Personality

   Disorder

APD presented	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	21.27	28420.75	.00	1	.999	1.73	.00	
Constant	-21.20	28420.74	.00	1	.999	.00		

Hypothesis 4. It was hypothesized claimants would be more likely to have an unsuccessful *Atkins* claim when their behavior in prison was discussed in the judicial opinion.

Employment while incarcerated. Results indicated that a claimant's job or special duty while in prison was not a statistically significant predictor of the hearing's final outcome, χ^2 (1, N = 62) = .11, p = .739. This predictor correctly classified 51.6% of all cases and explained 0.00% (Cox and Snell square and Nagelkerke R square) of the variance in final hearing outcome. Results indicated that cases in which the claimant was found not to have ID were correctly classified at a rate of 19.4%, and cases in which the claimant had ID were correctly classified at a rate of 83.9%. Of the total sample, 51 opinions did not discuss the claimant's history of employment or special

duties while incarcerated (N = 25 not ID, N = 26 ID), and 11 opinions noted the claimant held

such a position (N = 6 not ID, N = 5 ID).

Table 16

Logistic Regression Predicting Atkins Outcome by Employment History While Incarcerated

Had job/special duty	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	.22	.67	.11	1	.74	1.25	.34	4.62
Constant	-.18	.61	.09	1	.763	.83		

Completion of commissary forms. Results indicated a claimant's ability to complete

commissary forms was not a statistically significant predictor of the hearing's final outcome, χ^2

$(3, N = 62) = 3.82, p = .282$. This predictor correctly classified 53.2% of all cases and explained

between 6% (Cox and Snell square) and 8% (Nagelkerke R square) of the variance in final

hearing outcome. Of the cases in which claimants were found not to have ID, they were correctly

classified at a rate of 9.7%, and claimants found to have ID were correctly classified at a rate of

96.8%. A total of 10 claimants were noted to have completed commissary forms, with 4 doing so

independently, 4 doing so with assistance, and 2 completing forms with a specified level of

assistance. Results indicated 52 opinions did not mention completion of commissary forms.

Table 17

Logistic Regression Predicting Atkins Outcome by Completion of Commissary Forms

Completed commissary forms	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned					.835			
Yes, independently	-21.20	28420.72	.00	1	.999	.00	.00	-
Yes, with assistance	-22.30	28420.72	.00	1	.999	.00	.00	-
Yes, independently and with assistance	-21.20	28420.72	.00	1	.999	.00	.00	-
Constant	21.20	28420.72	.00	1	.999	1.62		

Request medical/dental care. The claimants' ability to complete forms/make requests for medical or dental care was not a statistically significant predictor of the hearing's final outcome, χ^2 (3, $N = 62$) = 2.99, $p = .393$. This predictor correctly classified 53.2% of all cases. This predictor explained between 4.7% (Cox and Snell square) and 6.3% (Nagelkerke R square) of the variance in final hearing outcome. Results indicated 93.5% of cases in which the claimant did not have ID were correctly classified, and 12.9% of cases were correctly classified when the claimant had ID. The claimants' requests for medical and/or dental care was not mentioned in 55 of the opinions in this sample ($N = 28$ not ID, $N = 27$ ID). Of the remaining seven opinions ($N = 3$ not ID, $N = 4$ ID), five claimants were noted to have independently completed a form or request for

medical or dental care, one claimant made a request with assistance, and one claimant made a request with an unspecified level of assistance.

Table 18

Logistic Regression Predicting Atkins Outcome by Completion of Medical/Dental Request

   Forms

Completed requests for medical/dental	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.22	3	.975			
Yes, independently	-21.24	40192.93	.00	1	1.0	.00	.00	-
Yes, with assistance	-20.80	40192.93	.00	1	1.0	.00	.00	-
Yes, independently and with assistance	-42.41	56841.42	.00	1	.999	.00	.00	-
Constant	21.02	40192.93	.00	1	1.0	1.62		

Educational/vocational services. Results indicated a claimant's history of seeking educational and/or vocational services or classes was not a significant predictor of the hearing's final outcome, χ^2 (2, $N = 62$) = 1.40, $p = .495$. This predictor correctly classified 51.6% of all cases and explained between 2.2% (Cox and Snell square) and 3% (Nagelkerke R square) of the variance in final hearing outcome. Results indicated that 90.3% of cases in which the claimant did not have ID were correctly classified, and 12.9% of cases in which the claimant had ID were correctly classified. Of the 62 opinions in this sample, 55 did not mention whether the claimant sought educational and/or vocational opportunities (N = 28 not ID, N = 27 ID). Of the remaining

seven opinions in the sample (N = 3 not ID, N = 4 ID), six indicated the claimant sought such

services and one indicated the claimant did not seek out or take part in such opportunities when

offered.

Table 19

Logistic Regression Predicting Atkins Outcome by Involvement in Educational and/or

Vocational Services or Classes

Involved in educational and/or vocational services	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.00	2	.999			
Yes	-21.24	40192.99	.00	1	1.0	.00	.00	-
No	-21.20	40192.99	.00	1	1.0	.00	.00	-
Constant	21.02	40192.99	.00	1	1.0	1.62		

Escape. Results indicated that a history of escape from prison or jail was not a statistically

significant predictor of the hearing's final outcome, χ^2 (1, *N* = 62) = .36, *p* = .55. This predictor

correctly classified 51.6% of all cases and explained between 0.6% (Cox and Snell square) and

0.8% (Nagelkerke R square) of the variance in final hearing outcome. Results indicated 96.8% of

claimants without ID were correctly classified, and 6.5% of claimants with ID were correctly

classified. Attempts to escape from incarceration were only noted in 3 opinions (N = 1 not ID, N

= 2 ID), with no mention of this behavior in 59 opinions (N = 30 not ID, N = 29 ID).

Table 20

Logistic Regression Predicting Atkins Outcome by Known Attempts at Escaping from

Prison/Jail

Escape or attempted	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	-.73	1.25	.34	1	.561	.48	.04	5.62
Constant	.69	1.23	.32	1	.571	2.00		

Written communication. Writing letters and/or notes while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (5, *N* = 62) = 3.39, *p* = .64. This predictor correctly classified 54.8% of all cases and explained between 5.3% (Cox and Snell square) and 7.1% (Nagelkerke R square) of the variance in final hearing outcome. Of the claimants who did not have ID, 93.5% were correctly classified, and 16.1% of all claimants with ID were correctly classified. Of the total sample, 50 opinions did not mention whether the claimant engaged in writing letters or notes while incarcerated (N = 26 not ID, N = 24 ID), and 5 opinions indicated writing was completed independently (N = 3 not ID, N = 2 ID). Of the remaining seven opinions (N = 2 not ID, N = 5 ID), two indicated the claimant wrote letters or notes with assistance, one wrote letters or noted both independently and with assistance, three wrote letters or notes with an unspecified level of assistance, and one claimant did not produce written correspondence while incarcerated.

Table 21

Logistic Regression Predicting Atkins Outcome by Writing Behaviors While Incarcerated

Wrote letters/noted	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.53	5	.991			
Yes, independently	-.77	1.26	.38	1	.538	.46	.04	5.42
Yes, with assistance	-1.10	1.53	.52	1	.472	.33	.02	6.65
No	-.69	1.87	.14	1	.711	.50	.01	19.56
Yes, independently and with assistance	20.51	40192.97	.00	1	1.00	8.08	.00	-
Yes, assistance unknown	20.51	40192.97	.00	1	1.00	8.08	.00	-
Constant	.69	1.23	.32	1	.571	2.00		

Reading. Results indicated that a history of reading books or magazines while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (2, N = 62) = .22, p = .896. This predictor correctly classified 51.6% of all cases and explained between 0.4% (Cox and Snell square) and 0.5% (Nagelkerke R square) of the variance in final hearing outcome. Results indicated that 9.7% of cases in which the claimant did not have ID were correctly classified, and 93.5% of cases in which claimants had ID were correctly classified. Of the total sample, 53 opinions did not mention whether a claimant read while incarcerated (N = 26 not ID, N = 27 ID),

5 opinions stated that the claimant was capable of reading (N = 3 not ID, N = 2 ID), and 4

opinions noted the claimant did not read (N = 2 not ID, N = 2 ID).

Table 22

Logistic Regression Predicting Atkins Outcome by History of Reading While Incarcerated

Read	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			.22	2	.898			
Yes	.04	1.04	.00	1	.971	1.04	.14	7.93
No	-.41	1.35	.09	1	.765	.67	.05	9.47
Constant	.00	1.00	.00	1	1.00	1.00		

Utilized library services. Results indicated that the use of library services while

incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (2, N =

62) = 1.66, *p* = .436. This predictor correctly classified 53.2% of all cases and explained between

2.6% (Cox and Snell square) and 3.5% (Nagelkerke R square) of the variance in final hearing

outcome. Of the cases in which the claimant did not have ID, 12.9% were correctly classified, and

93.5% of cases in which the claimant had ID were correctly classified. Of the total sample, 56

opinions did not mention the claimant's use of library services (N = 27 not ID, N = 29 ID). Of the

remaining six opinions (N = 4 not ID, N = 2 ID), five claimants were noted to have used such

services, and one claimant did not use available library services.

Table 23

Logistic Regression Predicting Atkins Outcome by History of Using Library Services While

    Incarcerated

Used library services	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			.25	2	.882			
Yes	21.27	40192.88	.00	1	1.00	1.74	.00	-
No	20.80	40192.88	.09	1	1.00	1.08	.00	-
Constant	-21.20	40192.88	.00	1	1.00	.00		

Maintained clothing. Claimants' maintenance of their clothing through washing, drying, pressing, and/or folding while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (2, $N = 62$) = 1.40, $p = .496$. This predictor correctly classified 51.6% of all cases and explained between 2.2% (Cox and Snell square) and 3% (Nagelkerke R square) of the variance in final hearing outcome. Results indicated a correct classification rate of 96.8% for cases in which the claimant did not have ID, and a correct classification rate of 6.5% in cases in which the claimant had ID. The majority of opinions in this sample (n = 59) did not mention whether the claimant maintained clothing (N = 30 not ID, N = 29 ID). Of the remaining three opinions (N = 1 not ID, N = 2 ID), two opinions noted the claimant maintained his/her own clothing, and one claimant was described as not caring for his/her clothing.

Table 24

Logistic Regression Predicting Atkin*s Outcome by Maintaining Clothing While Incarcerated*

Maintained clothing	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.00	2	1.00			
Yes	-21.24	40192.99	.00	1	1.00	.00	.00	-
No	-21.20	40192.99	.00	1	1.00	.00	.00	-
Constant	21.203	40192.99	.00	1	1.00	1.62		

Disciplinary actions. Results indicated a history of disciplinary actions while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (2, $N = 62$) = .1.04, p = .595. This predictor correctly classified 53.2% of all cases and explained between 1.7% (Cox and Snell square) and 2.2% (Nagelkerke R square) of the variance in final hearing outcome. Of the cases in which the claimant did not have ID, 93.5% were correctly classified, and 12.9% of cases in which the claimant had ID were correctly classified. Fifty three opinions did not mention the claimant's history of disciplinary actions ($N = 27$ not ID, $N = 26$ ID), six opinions noted such a history ($N = 2$ not ID, $N = 4$ ID), and three opinions noted the claimant did not have any history of disciplinary actions while incarcerated ($N = 2$ not ID, $N = 1$ ID).

Table 25

Logistic Regression Predicting Atkins Outcome by History of Disciplinary Actions While

   Incarcerated

Disciplinary actions	B	S.E.	Wald	*df*	*p*	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Not mentioned			.98	2	.613			
Yes	.66	1.26	.27	1	.602	1.93	.17	22.55
No	1.39	1.50	.85	1	.355	4.00	.21	75.66
Constant	-.69	1.23	.32	1	.571	.50		

Cared for medical needs. Results indicated that a claimant's history of caring for medical needs through seeking medical attention, obtaining medications, and other pertinent behaviors while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (1, $N = 62$) = 3.197, $p = .074$. This predictor correctly classified 56.5% of all cases and explained explained between 5% (Cox and Snell square) and 6.7% (Nagelkerke R square) of the variance in final hearing outcome. Of the cases in which the claimant did not have ID, 96.8% were correctly classified, and 16.1% of cases in which the claimant had ID were correctly classified. The majority of opinions included in this sample (n = 56) did not mention whether the claimant cared for medical needs (N = 30 not ID, N = 26 ID) and six opinions noted the claimant engaged in this behavior (N = 1 not ID, N = 5 ID).

Table 26

Logistic Regression Predicting Atkins Outcome by History of Caring for Medical Needs While

    Incarcerated

Cared for medical needs	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	-1.75	1.13	2.42	1	.120	.173	.019	1.581
Constant	1.61	1.10	2.16	1	.142	5.00		

Meal preparation. A history of preparing meals while incarcerated was not a statistically

significant predictor of the hearing's final outcome, $\chi^2 (1, N = 62) = .00$, $p = 1.00$. This predictor

correctly classified 50% of all cases and explained 0.0% (Cox and Snell square and Nagelkerke R

square) of the variance in final hearing outcome. Results indicated that none of the cases in which

claimants did not have ID were correctly classified, and 100% of the cases in which claimants had

ID were correctly classified. It should be noted that none of the opinions examined presented

evidence of claimant meal preparation while in prison, which had a significant impact on the

validity and generalizability of this particular analysis.

Table 27

Logistic Regression Predicting Atkins Outcome by History of Meal Preparation While

    Incarcerated

Meal preparation	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	.00	1.44	.00	1	1.00	1.00	.06	16.74
Constant	.00	1.41	.00	1	1.00	1.00		

Hygiene. A history of caring for personal hygiene needs while incarcerated was not a statistically significant predictor of the hearing's final outcome, χ^2 (2, $N = 62$) = .1.50, p = .473. This predictor correctly classified 54.8% of all cases and explained between 2.4% (Cox and Snell square) and 3.2% (Nagelkerke R square) of the variance in final hearing outcome. Of the cases in which the claimant did not have ID, cases were correctly classified at a rate of 16.1%, and cases were correctly classified at a rate of 93.5% for claimants with ID. The claimant's care for personal hygiene was not mentioned in 53 opinions ($N = 25$ not ID, $N = 28$ ID). Of the remaining opinions, seven indicated the claimant cared for personal hygiene ($N = 5$ not ID, $N = 2$ ID) and two opinions noted the claimant did not care for his/her personal hygiene ($N = 1$ not ID, $N = 1$ ID).

Table 28

Logistic Regression Predicting Atkins Outcome by History of Caring for Hygiene While

   Incarcerated

Cared for hygiene	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio Lower	Upper
Not mentioned			1.37	2	.505			
Yes	.11	1.44	.01	1	.937	1.12	.07	18.86
							.02	10.02
No	-.92	1.64	.31		.577	.40		
Constant	.00	1.41	.00	1	1.00	1.00		

Other behaviors. Results indicated that a history of other behaviors presented, but not accurately captured in the aforementioned categories (e.g., played chess, created artwork, played cards, socialized with other inmates, made telephone calls, demonstrated polite behavior,

maintained a neat cell) while incarcerated, were not statistically significant predictors of the

hearing's final outcome, χ^2 (1, N = 62) = .34, p = .561. This predictor correctly classified 53.2%

of all cases and explained between 0.5% (Cox and Snell square) and 0.7% (Nagelkerke R square)

of the variance in final hearing outcome. Results indicated that 77.4% of cases in which the

claimant did not have ID were correctly classified, and 29% of cases in which the claimant had ID

were correctly classified. Results indicated that 46 opinions did not cite prison behavior of a

nature not included in the aforementioned categories (N = 24 not ID, N = 22 ID), and 16 cases

included other examples of prison behavior (N = 7 not ID, N = 9 ID).

Table 29

Logistic Regression Predicting Atkins Outcome by History of Other Behaviors While

Incarcerated

Other behaviors while incarcerated	B	S.E.	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Yes	-.34	.58	.34	1	.562	.71	.23	2.24
Constant	.25	.50	.25	1	.618	1.29		

Hypothesis Five. It was hypothesized that "death penalty friendly" states would

demonstrate higher percentages of unsuccessful *Atkins* claims than states with lower execution

rates. As of September 29, 2011, there were 34 states with the death penalty (Death Penalty

Information Center; see Appendix D for a complete list of states with the death penalty). Death

penalty friendly states were examined with regard to three time periods: (1) rate of execution since 1976, (2) rate of execution in 2010, and (3) rate of execution in 2011.

Since 1976, Texas, Virginia, and Oklahoma executed the greatest number of inmates, 475, 109, and 96, respectively. Thus, these three states were considered the most "death penalty friendly" states from a historical perspective. During 2010, Texas, Ohio, and Alabama executed the greatest number of inmates, with 17, 8, and 5 executions, respectively, which qualified these states as the most death penalty friendly in 2010. In 2011, Texas executed the greatest number of people, with 11 executions as of September 29, 2011. Alabama, Georgia, Ohio, and Arizona each executed four individuals, placing their rate of execution at the second highest in the nation. Oklahoma and Mississippi each executed two individuals in 2011, which placed these states at the third highest rate of execution in the Unites States. As such, Texas, Alabama, Georgia, Ohio, Arizona, Oklahoma, and Mississippi were considered the most death penalty friendly states in 2011.

Results indicated Florida had the highest percent of unsuccessful *Atkins* cases, with 32.3% of the unsuccessful cases in the sample (N = 31). Texas had the second highest rate of unsuccessful *Atkins* cases in this sample, with 12.9%. Louisiana held 9.7% of the unsuccessful *Atkins* cases in the sample, assuming the position of the state with the third highest rate of unsuccessful *Atkins* cases. Thus, this hypothesis was partially supported, as Texas was considered a death penalty friendly state and also fell within the top 10% of states (N = 3.4) with the highest rate of unsuccessful *Atkins* claims. However, Ohio, Alabama, Georgia, Virginia, Oklahoma, Mississippi, and Arizona were not represented in this study within the top 10% of states with

unsuccessful *Atkins* claims, although they were historically considered death penalty friendly

states when their rates of execution were compared to the national average. In sum, rates of

unsuccessful *Atkins* cases in this small, select sample do not appear to coincide with the regional

and historical trends in execution rate. The following table presents descriptive statistics for

unsuccessful *Atkins* cases (see Appendix A for descriptives of successful cases).

Table 30

State by State Breakdown of Unsuccessful Atkins Cases in the Current Sample (N = 31)

State	Number of Unsuccessful *Atkins* Cases	Percent of Total Unsuccessful *Atkins* Cases
Florida	10	32.3
Texas	4	12.9
Louisiana	3	9.7
Arkansas	2	6.5
Ohio	2	6.5
Oklahoma	2	6.5
Virginia	2	6.5
Arizona	1	3.2
Alabama	1	3.2
Kentucky	1	3.2
Mississippi	1	3.2
Tennessee	1	3.2
Missouri	1	3.2
Total	31	100

Hypothesis Six. It was hypothesized that functional academics would be the most often

discussed skill area of adaptive behavior across both successful and unsuccessful *Atkins* claims.

This hypothesis was supported, as functional academics was the most often cited area of deficits

in the cases sampled, as 58.1% of cases (N = 36) noted deficits in this skill area (see Appendix E

for frequencies of all skill areas and domains). Of the 36 cases that noted deficits in functional

academics, 25 cases were those in which a claimant was found to have ID and in the remaining 11 cases, the claimant was not found to have ID.

4. Discussion

The Role of the Briseno Factors in Judicial Decision Making in Atkins Cases

Results indicated that six of the seven *Briseno* Factors were significant predictors of the hearings' final outcome when compared to the default model. The seventh Factor, the presence of forethought, planning, and complex execution of purpose in committing the capital offense, was not a significant predictor of the hearing's final outcome. This non-significant result is particularly interesting given that Kan et al. (2009) found criminal behavior was used as evidence of adaptive skills in 68.4% of hearings. Furthermore, the current study found this Factor was mentioned in only 48.38% of all cases, with 47.83% of cases in which the claimant was noted to have planned the crime resulting in successful *Atkins* claims and 52.17% resulting in unsuccessful claims. Thus, while details of the claimant's role in the alleged capital offense may be discussed in the majority of hearings, these details do not appear to affect significantly judicial decision making. It should be noted that the seventh *Briseno* Factor conveys an inherent assumption of the claimants' guilt. This fact may contribute to the non-significant result found in this study, as judges may be hesitant to consider this Factor as dispositive of ID due to the inherent assumption of guilt when *Atkins* claims are raised at the pre-trial level.

While six of the seven Factors served as statistically significant predictors of the hearings' final outcome when compared to the default model, examination of subcategories for each of these Factors revealed mixed results that were often in the direction opposite of that hypothesized. This pattern of results generally indicated statistically significant results, but little clinical

significance. None of the subcategories of the first Factor, which examined whether others knew the claimant had ID during the developmental period, were significant. Thus, while this Factor was a better predictor of the hearings' final outcome than the default model (i.e., chance), individual subcategories did not predict the hearings' final outcome, such that acknowledgement of ID during the developmental period by a family member, teacher, employer, friend, and/or other, did not predict whether a claimant was found to have ID. Thus, while the omnibus model was statistically significant, results did not offer a great deal of clinical significance. It is also possible that the subcategories were highly correlated, and as such, none of the subcategories were statistically significant when examined in isolation. Similar results were obtained for the sixth Factor, which assessed the claimant's ability to effectively lie and/or hide facts in his or others' interests. That is, the omnibus model was a significantly better predictor of the final outcome than the default model, but none of the individual subcategories of that predictor were dispositive of the hearings' final outcome.

The second through the fifth Factors produced statistically significant omnibus results, as well as significant subcategories. Results of the second Factor revealed that both the ability to formulate and carry through plans and a tendency to be impulsive were predictive of a final outcome of "not ID." Thus, it appears that inclusion of the second Factor in an *Atkins* hearing, regardless of whether it was indicative of a strength or deficit in the ability to plan, was likely to result in a claimant being found not to have ID. Much like the aforementioned second Factor, both deficits in and the ability to respond coherently, rationally, and relevantly to oral or written prompts (i.e., the fifth Factor) were predictive of a not ID outcome. Surprisingly, examination of

the third *Briseno* Factor, revealed that deficits in leadership abilities was a statistically significant predictor of a not ID outcome. Similarly, deficits in the ability to respond rationally and appropriately to external stimuli, the fourth Factor, was predictive of a not ID outcome.

In sum, several of the Factors supported the hypothesis linking strengths or a lack of deficits in Factors with a final outcome of not ID. However, results also indicated that deficits were predictive of a not ID outcome for several of the Factors, which is in contrast to what would be expected. This surprising pattern of results may have been influenced by a number of issues. First, it is likely that there were unexamined interactions, mediating, and/or moderating variables present in claimants' cases that produced the aforementioned pattern of results. The presence of such unexamined confounding variables may provide a great deal of explanatory power for this pattern of results. Given the categorical nature of the data and the "near multicollineairty" issues necessitating examination of individual factors, rather than more comprehensive models, it is possible results would have been different and/or more in line with the hypotheses if the data was examined through a model that included all seven of the *Briseno* Factors. It is noteworthy that the significant *Briseno* Factors, regardless of whether strengths or deficits in these abilities were presented, predicted a final outcome of not ID. It is possible that when deficits in the *Factors* were presented, they were attributed to lack of motivation and/or other personality characteristics, not a lack of ability in completing the relevant tasks. The perceived lack of motivation, rather than lack of ability, may have resulted in a final outcome of not ID.

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The Influence of Everyday Activities on Final Outcome of Atkins Cases

The second hypothesis was partially supported, as the presence of several commonplace adult activities examined in this study were predictive of a final outcome of not ID. Results indicated that bearing children and the level of supervision required while employed were better predictors of the hearings' final outcome than the default model. However, careful inspection of the predictors' subcategories revealed non-significant results. Thus, while the omnibus model was statistically significant, the results lacked clinical significance. While bearing children and the level of supervision while employed were better predictors of the hearings' final outcome than the default model, results indicated that marital status, level of education/educational attainment, employment history, driving behaviors, and criminal history were not statistically significant predictors of the hearings' final outcome. These results are contradictory to those found by Boccaccini et al. (2010), which indicated deficits in romantic relationships were dispositive of ID among potential jurors and mental health workers. Given the highly discrepant opinions of driving ability and its relationship to ID in Boccaccini et al.'s study, it is not surprising to find driving to have a non-significant relationship to the hearings' final outcome in this study.

These results appear to indicate that the stereotypes thought to exist regarding individuals with ID may not be as strong or predictive as believed. For example, it is possible that judges do not necessarily attribute the ability to marry, maintain employment, or drive as evidence against ID, but rather, they consider deficits to be dispositive of this issue. If judges are not discounting the presence of ID in light of such common behaviors, their view may be more in accordance with the AAIDD's (2002) stance that ID should not be ruled out based on strengths, but rather,

considered only in light of deficits. It is also possible that when considered in isolation the

aforementioned activities are not predictive of the hearings' final outcome, but perhaps they are

influential when considered in addition to other factors. That is, a more comprehensive model

with a number of factors potentially contributing to the hearings' final outcome may be more

predictive than analysis of these factors independent of one another.

The Role of Antisocial Personality Disorder and Related Traits in Atkins Decisions

Results indicated the hypothesized relationship between APD, or traits thereof, was not

supported. In this study, only 2 of the 62 opinions presented evidence of APD. As such, results

were non-significant. If this sample of 62 opinions is reflective of *Atkins* cases as a whole, it

appears APD is not mentioned as often in *Atkins* cases as initially believed. If APD was discussed

in more than two cases in this study, perhaps judges are making a distinction between ability and

desire with regard to adaptive behavior, and as such, the issue does not receive mention in the

final opinion. It may be that APD is not often discussed in *Atkins* cases, but when it is an issue,

those particular cases tend to be highlighted in the literature and in professional discussions. If the

inclusion of two opinions discussing APD is not representative of all *Atkins* cases, such that the

quasi-random selection used for this study underrepresented this issue across cases, conclusions

may not be generalizable.

Prison Behavior in Atkins Determinations

Previous studies found prison behavior to be a topic often discussed in *Atkins* cases

(Blume et al., 2009; Kan et al., 2006), and examination of individual cases (*Holladay v. Allen,*

2009; *Green v. VA*, 2008; *Briseno,* 2004; *Lambert v. State,* 2005) revealed that a significant

portion of court transcripts are devoted to such discussion. While this topic may often be discussed in *Atkins* cases, results of this study revealed that behavior in prison and the skills demonstrated therein are not significant predictors of the final hearing in *Atkins* cases. These results were contrary to those found by Blume et al. (2009), as they found 30% of unsuccessful *Atkins* cases presented evidence of behavior in prison. Results of this study did not support the hypothesis that discussion of behavior in prison would more often result in unsuccessful *Atkins* cases. However, the results of this study were similar to the overall findings regarding the non-significant relationship of behavior in prison to judicial decision making found in Hensl's study (2011). While a great variety of commonly discussed prison behaviors were examined in the current study, none of the behaviors were predictive of the final outcome. A history of employment or special duties while incarcerated, completion of commissary forms, requesting medical and/or dental care, seeing educational and/or vocational services, escape attempts, written correspondence, reading, use of library service, maintaining clothing, disciplinary actions, meal preparation, care for hygiene, and "other" behaviors produced non-significant results.

There are several possible explanations for the non-significant findings. The relatively small sample size may have negatively affected results by way of a Type II error, as power was limited. It is also possible that while behavior in prison and related skills are often discussed, judges are not swayed by these behaviors or skills. Furthermore, judges may not discount ID in these cases as a result of the inclusion of such behaviors or skills, as abilities in these areas should not be dispositive of ID, but rather, deficits should be the deciding factor in whether ID is present (AAIDD, 2002). Judges may also consider the artificial nature of prisons with regard to engaging

in such behaviors and skills. That is, judges may consider the fact that prisons are a highly

structured environment in which non-compliance with rules is met with punishment/disciplinary

actions. It is also possible that while behavior in prison is discussed quite often, judges consider

the fact that adaptive behavior assessments are not normed on these populations, and as such,

results of adaptive behavior measures used on incarcerated populations are considered suspect

when/if provided by expert witnesses. Similarly, it is possible that judges do not generalize a

claimant's abilities or inabilities based on the presentation of the behaviors they exhibit while in

prison, which is in line with AAIDD's standards. Finally, it is possible that judges are suspect of

the individuals providing the information related to behavior while in prison (e.g., correctional

officers, other inmates), as those individuals may not be objective in their assessment of the

claimant.

Regional Differences in Determining Atkins Cases

With regard to the incidence of unsuccessful *Atkins* cases in death penalty friendly states,

results of this study indicated Florida, Texas, and Louisiana had the highest rate of unsuccessful

Atkins cases. Thus, results partially supported the hypothesis stating that the most death penalty

friendly states would also have the highest rate of unsuccessful *Atkins* claims. National trends

indicated that Texas was one of the most death penalty friendly states from a historical

perspective, as well as in 2010 and 2011, and results of this study indicated Texas had one of the

highest rates of unsuccessful *Atkins* claims in this sample. Thus, Texas's rate of unsuccessful

Atkins claims mirrored the nation's trend regarding the rate of executions. However, results

indicated Florida and Louisiana had the other highest rates of unsuccessful *Atkins* cases in this

sample. National trends did not reveal Florida or Louisiana to be among the most death penalty friendly states during any of the aforementioned time periods. As such, the results of this study did not fully mirror the national trend in the execution rate.

A number of factors may explain this difference. It is possible that the sample used in this study did not represent the rate of executions from around the country, and as such, certain states may have been oversampled and/or others may have been undersampled. Over- and/or undersampling of certain states may have then led to the mixed results seen in this study. It is also possible that the rate of executions does not coincide with the rate of *Atkins* cases, such that the rate of *Atkins* cases does not necessarily increase with the rate of executions. Furthermore, it should be considered that the rate of unsuccessful cases may not not be predicted by the rate of executions, such that death penalty friendly states may not necessarily be less likely to find claimants to have ID.

Functional Academics in Atkins Decisions

Deficits in functional academics was the most often discussed skill area with regard to adaptive behavior in both successful and unsuccessful cases, which supported the final hypothesis in this study. Results of this study supported those of Blume et al. (2009) and Kan et al. (2009). Given that academic difficulty is a hallmark of ID, it is not surprising that deficits in functional academics were the most often cited skill area of the ten associated with the diagnostic criteria put forth by the APA (2000) and the 1992 definition put forth AAIDD (2002). Interestingly, the fact that deficits in functional academics was the most often cited deficit in both successful and

unsuccessful *Atkins* cases indicates it is not necessarily dispositive of ID, but rather, a commonly cited area of deficits across all *Atkins* cases.

Limitations

There were several limitations present in the current study. Perhaps most importantly, the sample size used in this study was a limitation, especially given the categorical nature of the data and related statistics. The use of a small sample size when employing logistic regression techniques likely limits the generalizability of results and related conclusions. Furthermore, the use of a small sample size also increases the chance of encountering a Type 2 error, as the power necessary to detect a small effect was not present. The small sample size used in this study likely contributed to the non-significant results achieved in several of the hypotheses. Specifically, the small sample size of this study likely affected results, as hypotheses with numerous subcategories may not have had enough subjects in each cell. In turn, the limited number of subjects in each cell likely resulted in non-significant results, as a limited number of subjects in subcategories that resulted from a small sample size likely contributed to a restriction of range and an inability to detect an effect if present.

Given that the study only captured the information reported by judges to have influenced their decision making in these cases, it was not possible to examine factors not explicitly discussed by judges. That is, judges may have considered additional factors outside of those specifically noted in the judicial opinion. Furthermore, there may be factors considered that were outside of the judges' conscious awareness that influenced their decisions. In both situations, there may have been influential factors that contributed to the final outcome that were not coded.

The results and related conclusions of this study may have also been limited by the coding sheet used to document potentially influential factors in these cases. While the coding sheet was extensive and captured a great number of possible factors influencing judicial decision making in *Atkins* cases, it is possible that some factors noted in judicial opinions were not captured by the method of study. As such, they were not coded, analyzed, or considered in relation to the final conclusions.

Finally, one of the 62 opinions included in this study was handed down prior to *Atkins v. Virginia* in 2002. That opinion was coded, analyzed, and included in the Results section of this study before it was realized that it did not meet the inclusion criteria. Given the fact that the case was similar to the others included in this study, it is unlikely its inclusion had a significant impact on the overall results and related conclusions of this study. However, the inclusion of that opinion should be noted, as it is possible it affected results.

Future Research

It is recommended future research efforts build upon the current study by expanding the sample size. Such efforts would assist in producing more generalizable results and ameliorating the limitations of statistical analysis. Furthermore, replication of the current study will allow results to be compared with those of the current study in order to assess similarities and differences.

Future research should consider collapsing the "not mentioned" and "no" categories. Given the small sample size typical of most *Atkins* studies, statistical analyses, results, and generalizability of results are often limited. Collapsing these two categories may benefit the

interpretability of results. Although, the absence of strength or deficit (i.e., "no") may be categorically different than the failure to discuss that issue (i.e., "not mentioned"), it may be assumed that the issue would be addressed if it were present and/or important. Thus, collapsing the "not mentioned" and "no" categories can be justified.

Examining the influence of judges' personal characteristics may also be enlightening with regard to judicial decision making. Hensl's study (2011) found an increase in the rate of ID findings as a function of the race of judges, with African American judges more often finding claimants to be ID than judges of other races. It is possible that some of the variance in final *Atkins* decisions can be accounted for by personal characteristics. Thus, future research should consider the personal characteristics of judges in relation to decision making in *Atkins* cases.

The current study examined both appellate and trial level opinions. Future research should consider separate analysis of appellate and trial level opinions in order to assess the existence of differences in decision making. While judges typically make decisions in *Atkins* cases regarding the presence of ID, there are a few states that allow juries to hear evidence and make such decisions. As such, future research should include examination of the factors that influence jury decision making in *Atkins* cases. Factors that influence jury decision making in *Atkins* cases can then be compared to the factors influencing judicial decision making in order to assess commonalities and differences. A study that compares judicial versus jury decision making in *Atkins* cases may have important implications. If differences exist in the factors that influence the hearings' final outcome, attorneys may then change their approach to a case to better address the most influential factors given the audience. For example, if results of such a study indicate judges

and juries weigh certain types of evidence differently, attorneys can use those results to secure

expert witnesses to discuss the factors that are most influential for judges or juries.

Conclusion

This is the first study in which the influence of extra-clinical factors were assessed in

judicial opinions of successful and unsuccessful *Atkins* cases. Results generally indicated that

extra-clinical factors do not influence judicial decision making to the extent hypothesized or

discussed among professional in the *Atkins* field. However, results of this study revealed an

interesting pattern in which deficits in certain skills (e.g., planning ability, leadership skills,

rational and appropriate responses) were predictive of an unsuccessful *Atkins* claim. In sum, it

appears that while extra-clinical factors are often discussed in cases and judicial opinions, judges

are influenced by factors and/or combinations of factors outside of those assessed in this study.

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Appendices

Summary of Claimants' Demographic and Personal Information

Table 1

Success Rate by State In Which the Atkins Claim Hearing Was Heard

State	Total N	% of Total Successful Claims	% of Total Unsuccessful Claims
Alabama	4	9.7	3.2
Arizona	1	0	3.2
Arkansas	2	0	6.5
California	1	3.2	0
Florida	12	6.5	32.3
Kentucky	1	0	3.2
Louisiana	5	6.5	9.7
Maryland	1	3.2	0
Mississippi	3	6.5	3.2
Missouri	2	3.2	3.2
North Carolina	7	22.6	0
Ohio	4	6.5	6.5
Oklahoma	5	9.7	6.5
Pennsylvania	2	6.5	0
South Carolina	1	3.2	0
Tennessee	1	0	3.2
Texas	7	9.7	12.9
Virginia	3	3.2	6.5
Total	62	100.0	100.0

Table 2

Frequencies of Atkins Claims

State	Total number of *Atkins* Cases	Percentage of Cases in this Sample (N = 62)
Florida	12	19.4
North Carolina	7	11.3
Texas	7	11.3
Louisiana	5	8.1
Oklahoma	5	8.1
Alabama	4	6.5
Ohio	4	6.5
Mississippi	3	4.8
Virginia	3	4.8
Arkansas	2	3.2
Pennsylvania	2	3.2
Missouri	2	3.2
Arizona	1	1.6
California	1	1.6
Kentucky	1	1.6
Maryland	1	1.6
South Carolina	1	1.6
Tennessee	1	1.6
Total	62	100

Table 3

Judicial Circuit in Which the Atkins Hearing Was Heard

Circuit	N	% of Total Successful Claims	% of Total Unsuccessful Claims
11th	16	16.1	35.5
5th	15	22.6	25.8
4th	11	29.0	6.5
6th	7	9.7	12.9
10th	5	9.7	6.5
8th	4	3.2	9.7
3rd	2	6.5	0
9th	2	3.2	3.2
Total	62	100.0	100.0

Table 4

Atkins Issue Raised in Previous Phases

	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Atkins raised at least once	45	58.1	87.1
Not mentioned, unknown	14	32.3	12.9
Not raised previously	3	9.7	0
Total	62	100.0	100.0

Table 5

Age of Claimant at Time of Alleged Offense

Age Range	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Not mentioned, unknown	41	67.7	64.5
18-21 years old	4	6.5	6.5
22-25 years old	1	3.2	0
26-29 years old	5	6.5	9.7
30-39 years old	10	16.1	16.1
40-49 years old	1	0	3.2
Total	62	100.0	100.0

Table 6

Claimant Gender

	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Male	61	96.8	100.0
Female	1	3.2	0
Total	62	100.0	100.0

Table 7

Claimant Race

	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Not mentioned, unknown	48	87.1	67.7
Black/African American	6	3.2	16.1
Hispanic/Latino	6	3.2	16.1
White/Caucasian	1	3.2	0
Pacific Islander	1	3.2	0
Total	62	100.0	100.0

Table 8

Claimant Marital Status at Time of Alleged Offense

	N	% of Total of Successful Claims	% of Total Unsuccessful Claims
Not mentioned, unknown	40	67.7	61.3
Married	11	12.9	22.6
Divorced	5	12.9	3.2
Never married	4	6.5	6.5
Marital status: Other	2	0	6.5
Total	62	100.0	100.0

Table 9

Claimant Educational History

	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Not mentioned, unknown	31	38.7	61.3
Received special education services	22	48.4	22.6
No history of special education services	9	12.9	16.1
Total	62	100.0	100.0

Table 10

Claimant Educational Attainment

	N	% of Total Successful Claims	% of Total Unsuccessful Claims
Not mentioned, unknown	38	61.3	61.3
Dropped out of school	17	29.0	25.8
Earned high school diploma	4	6.5	6.5
Earned certificate of completion	3	3.2	6.5
Total	62	100.0	100.0

Appendix B

Number of Executions per State since 1976 (DPIC, 2011)

State	Total number of execution since 1976
Texas	475
Virginia	109
Oklahoma	96
Florida	70
Missouri	68
Alabama	54
Georgia	52
Ohio	45
North Carolina	43
South Carolina	43
Louisiana	28
Arizona	28
Arkansas	27
Indiana	20
Mississippi	15
Delaware	15
California	13
Illinois	12
Nevada	12
Utah	7
Tennessee	6
Maryland	5
Washington	5
Nebraska	3
Pennsylvania	3
Kentucky	3
Montana	3
Oregon	2
Connecticut	1
Idaho	1
New Mexico	1
Colorado	1
Wyoming	1
South Dakota	1

Appendix C

Number of Executions per State since in 2010 (DPIC, 2011)

State	Total number of execution since 1976
Texas	17
Ohio	8
Alabama	5
Virginia	3
Oklahoma	3
Mississippi	3
Georgia	2
Florida	1
Louisiana	1
Arizona	1
Utah	1
Washington	1
Missouri	0
North Carolina	0
South Carolina	0
Arkansas	0
Indiana	0
Delaware	0
California	0
Illinois	0
Nevada	0
Tennessee	0
Maryland	0
Nebraska	0
Pennsylvania	0
Kentucky	0
Montana	0
Oregon	0
Connecticut	0
Idaho	0
New Mexico	0
Colorado	0
Wyoming	0
South Dakota	0

Appendix D
Number of Executions per State Since 2011 (DPIC, 2011)

State	Total number of execution since 1976
Texas	11
Alabama	4
Georgia	4
Ohio	4
Arizona	4
Oklahoma	2
Mississippi	2
Virginia	1
Florida	1
Missouri	1
South Carolina	1
Delaware	1
North Carolina	0
Louisiana	0
Arkansas	0
Indiana	0
California	0
Illinois	0
Nevada	0
Utah	0
Tennessee	0
Maryland	0
Nebraska	0
Pennsylvania	0
Kentucky	0
Montana	0
Oregon	0
Connecticut	0
Idaho	0
New Mexico	0
Colorado	0
Wyoming	0
South Dakota	0

Appendix E

Frequencies of Deficits in Adaptive Behavior Skills and Domains

Skill areas and domains	N of cases in which deficits were noted	% of cases with deficits [% of ID cases with this deficit, % of not ID cases with this deficit]	
Functional academic skills	36	58.1	[80.6] [35.5]
Self-direction skill	34	54.8	[77.4] [32.3]
Social/interpersonal skills	29	46.8	[64.5] [29.0]
Communication skills	25	40.3	[61.3] [19.4]
Work skills	25	40.3	[58.1] [22.6]
Health and safety skills	23	37.1	[58.1] [16.1]
Self-care skills	20	32.3	[48.4] [16.1]
Home living skills	17	27.4	[41.9] [12.9]
Community resources skills	10	16.1	[32.3] [0.0]
Leisure skills	8	12.9	[16.1] [9.7]
Other skills	3	4.8	[3.2] [0.0]
Practical domain	12	19.4	[22.6] [16.1]
Conceptual domain	12	19.4	[29.0] [9.7]
Social domain	10	16.1	[22.6] [9.7]

Appendix F

List of Successful *Atkins* Cases Examined in the Current Study

Successful *Atkins* Cases	State	Year
Atkins v. Virginia	Virginia	2002
Elmore v. South Carolina	South Carolina	2010
Gumm v. Ohio	Ohio	2006
Holladay v. Allen	Alabama	2009
Lambert v. Oklahoma	Oklahoma	2005
Mclaughlin v. Polk	North Carolina	2006
Moore v. Quarterman	Texas	2009
Nelson v. Louisiana	Louisiana	2006
Plata v. Texas	Texas	2007
Thomas v. Allen	Alabama	2009
Wily v. Epps	Mississippi	2009
Hughes v. Epps	Mississippi	2010
Davis v. US	Maryland	2009
Herring v. Florida	Florida	2009
Picken v. Oklahoma	Oklahoma	2005
Hardy v. US	Louisiana	2010
Nicholson v. Branker	North Carolina	2010
In re Parkus	Missouri	2007
Campbell v. California	California	2008
Dufour v. Florida	Florida	2008
Lewis v. Ohio	Ohio	2010
Salazar v. Oklahoma	Oklahoma	2005
Jackson v. State	Alabama	2006
Ex parte Van Alstyne	Texas	2007
Commonwealth v. Joseph Miller	Pennsylvania	2008
State of North Carolina v. Johnnie Lee Spruill	North Carolina	2004
North Carolina v. Williams	North Carolina	2006
State of North Carolina v. Lorenza Donnell Norwood	North Carolina	2003
State of North Carolina v. Sherman Elwood Skipper	North Carolina	2001
State of North Carolina v. Melanie Sammons Anderson	North Carolina	2003
Commonwealth v. Gibson	Pennsylvania	2007

Appendix G

List of Unsuccessful *Atkins* Cases Examined in the Current Study

Unsuccessful *Atkins* Cases	State	Year
Beckworth v. Alabama	Alabama	2009
Anderson v. Arkansas	Arkansas	2004
Berry v. Epps	Mississippi	2006
Bevel v. Florida	Florida	2008
Black v. Tennessee	Tennessee	2005
Brown v. Florida	Florida	2009
Bowling v. Haeberline	Kentucky	2005
Green v. Virginia	Virginia	2008
Hearn v. Texas	Texas	2010
Trotter v. Florida	Florida	2006
Ex parte Briseno	Texas	2004
Ramirez v. Arizona	Arizona	2010
Stallings v. Ohio	Ohio	2008
Lizcano v. Texas	Texas	2010
Arbaleaz v. Florida	Florida	2010
Foster v. Florida	Florida	2006
Hill v. Ohio	Ohio	2008
Walker v. Kelly	Virginia	2010
Ochoa v. Workman	Oklahoma	2010
Dunn v. Louisiana	Louisiana	2010
Williams v. Louisiana	Louisiana	2009
Nixon v. Florida	Florida	2009
Franqui v. Florida	Florida	2009
Burns v. Florida	Florida	2006
Bell v. Louisiana	Louisiana	2010
Sasser v. Hobbs	Arkansas	2010
Ortiz v. US	US	2007
Wilson v. Quarterman	Texas	2009
Cherry v. Florida	Florida	2007
Hooks v. Oklahoma	Oklahoma	2005
Jones v. Florida	Florida	2007