How Immigration Status, Ethnicity of Defendant, and Mock Jurors’ Cognitive Processing Relate to Capital Jurors’ Sentencing Verdicts and Endorsements and Weighing of Aggravators and Mitigators

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Abstract

During deliberations, capital jurors are expected to properly weigh aggravators and mitigators (i.e., factors that make the defendant more or less worthy of the death penalty) to arrive at an appropriate sentencing verdict. They are instructed to exclude extralegal factors irrelevant to the case. Bias might impede this ideal if verdicts and weighing are influenced by juror characteristics (e.g., cognitive processing traits) or irrelevant defendant characteristics (e.g., ethnicity and immigration status). In the current 3 x 2 between-subjects experiment, death qualified mock capital jurors read a trial summary based on a real case, endorsed aggravating and mitigating circumstances, reported how they weighed mitigators relative to aggravators, rendered a verdict, and completed measures of cognitive processing. The defendant in the trial summary was a U.S. born Caucasian American, a documented Mexican immigrant, or an undocumented Mexican immigrant. The number of aggravators and mitigators were also manipulated: Participants read a case with either 4 aggravators and 2 mitigators, or 2 aggravators and 4 mitigators. Results suggest documented Latino immigrants fall within the “normative window” of prejudice (i.e., the normative acceptability of prejudice expression towards them is ambiguous). With some caveats, participants with less experiential processing traits tended to display bias toward the documented Mexican immigrant, whereas participants with more experiential processing traits tended to display a bias toward the undocumented Mexican immigrant. In addition, participants with more rational processing traits were better able to weigh aggravators and mitigators. Overall, experimental manipulations, individual differences in information processing, and the interaction between them most strongly accounted for variation in aggravator
endorsement, and most weakly for variation in sentencing verdicts. Legal implications, particularly for attorneys, are noted and discussed.
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Immigration policy is at the center of current political and social agendas (e.g., the DREAM Act, Arizona’s SB 1070, Alabama’s HB 56, Obama’s executive Deferred Action for Childhood Arrival revisions; DACA). Often, the immigration debate portrays Latinos as the default immigrant ethnicity (Chavez, 2013). This highlights the image of the prototypical American as Caucasian (Devos & Banaji, 2005) and the prototypical undocumented immigrant as Latino (Chavez, 2013; Pew Research Center, 2015).¹ Thus, any prejudice or discrimination which stems from negative attitudes towards immigrants may indirectly affect Latinos, regardless of whether they are immigrants (documented or undocumented) or citizens of the United States, simply because of the association between Latinos and illegal immigration. When Latinos enter the criminal justice system this bias might affect juror decision-making and in turn lead to negative outcomes for Latino defendants, particularly if they are immigrants.

Previous research examined immigrant bias in sentencing verdicts in a capital punishment trial (Alvarez & Miller, 2014). Immigrant defendants (documented or undocumented) were more likely to receive a death penalty verdict than a U.S. born defendant. Additionally, a Latino immigrant defendant, whether documented or undocumented, was more likely to receive a death sentence than a Canadian immigrant. A more recent study illustrated similar results, albeit in a non-capital case: Mock jurors were more likely to convict an undocumented Mexican immigrant of low socioeconomic status than any other defendant type (e.g., an undocumented Canadian immigrant of low or high socioeconomic status or a documented Mexican immigrant of low or high

¹ For the current paper, the term “Latino” will “refer to those groups whose origins derive from a common Spanish colonial experience within the Americas” (Espinoza & Willis-Esquada, 2014, p. 1). Mexican Americans are the largest Latino group in the U.S. (Espinoza & Willis-Esquada, 2014; Pew Research Center, 2015).
socioeconomic status; Espinoza, Willis-Esquada, Toscano, & Coons, 2015). Neither of these studies investigated the process by which jurors make verdicts (e.g., weighing aggravators and mitigators), nor did they investigate the role of jurors’ cognitive processing. The current study therefore replicates and expands on these previous studies.

This study manipulates defendant type to determine whether jurors express bias in their verdicts against Mexican immigrant defendants compared to Caucasian American defendants. The study also manipulates the case type (i.e., high aggravators or high mitigators). Jurors reading a case with high aggravators should give the death penalty more than jurors reading a case with high mitigators. This “proper” weighing is expected in the Caucasian American condition, but bias against immigrants might lead to “improper” weighing (i.e., no difference between case fact conditions; see Miller & Bornstein, 2006, for a similar manipulation) in immigrant conditions.

This research is important because any bias toward Latinos threatens their Sixth Amendment right to a fair trial. Thus, the primary purpose of the current study is to investigate the extent to which defendant type (i.e., the immigration status/ethnicity of the defendant) relates to jurors’ ability to properly endorse and weigh aggravators and mitigators and reach an unbiased sentencing verdict. Prejudice expressed toward Latino immigrant defendants might be the result of intergroup bias. Latino immigrant defendants might be outgroup members relative to the majority of jurors due to their immigration status or their ethnicity. Furthermore, current norms allow for prejudice to be expressed toward undocumented immigrants (Crandall, Eschleman & O’Brian, 2002), but are ambiguous relative to Hispanics and immigrants (Crandall, Ferguson, and Bahn,
In the context of a capital trial, individuals might find justification for the expression of bias toward a Latino immigrant (documented or undocumented).

Also of interest is the role of jurors’ cognitive processing traits and states in the legal decision-making process. According to Cognitive-Experiential Self-Theory (CEST; Epstein, 1990) there are two parallel and interactive systems of information processing: One based in logic and deliberate reason (i.e., the rational system), and one based in unconscious processes and emotion (i.e., the experiential system). These types of processing could directly influence jurors’ verdicts and evidence endorsement and weighing, but might also influence the effect of experimental manipulations (i.e., case type and defendant type). Jurors who tend to process information more rationally, for example, might be more influenced by case type than jurors who tend to process information less rationally. Similarly, jurors who process information more experientially might be more likely to express bias toward a Latino immigrant defendant than jurors who process information less experientially. In this way, the current project aims to extend past literature on CEST by examining how cognitive processing moderates case and defendant characteristics.

**The Death Penalty Process**

The death penalty in the United States had a brief recess in the second half of the 20th century when the Supreme Court of the United States ruled that the capital punishment trial scheme commonly implemented at the time violated the Eighth Amendment (*Furman v. Georgia*, 1972; see Paternoster, Brame, & Bacon, 2008, for overview of the death penalty in the U.S.). The modern period of capital punishment began not long afterward when the Supreme Court deemed a modified capital trial
scheme constitutional (Gregg v. Georgia, 1976). The ruling in that case, and other rulings revolving around various aspects of capital trials (e.g., see Wainwright v. Witt, 1985), shaped the modern capital trial. The following sections provide a brief outline of the current, predominant capital trial format.

**Jury Selection**

In order to serve on a capital jury, individuals must be deemed “death qualified.” During the death qualification process, the judge and attorneys question prospective jurors concerning the strength of their attitudes toward the death penalty. Individuals who assert their attitudes concerning the death penalty would interfere with their duty as capital jurors are dismissed; those who do not assert this are deemed “death qualified.” This is known as the Witt standard (Wainwright v. Witt, 1985). The death qualification process is controversial because death qualified individuals differ from non-death qualified individuals along key dimensions—in particular, death qualified jurors are more likely to endorse aggravating circumstances, less likely to endorse mitigating circumstances, and more likely to render death penalty verdicts (see Butler & Moran, 2002, 2007; West, McDermott, Garrick, Wood, & Miller, 2015; see also Haney, 2005, for a comprehensive review of the death penalty and related social psychological research).

**Trial Phases**

Capital trials proceed in two stages. In the first stage, jurors decide the guilt of the defendant; in the second stage, jurors decide on a penalty. This bifurcated scheme, first implemented by the state of Georgia, was found constitutional by the Supreme Court in Gregg v. Georgia (1976) and became the standard model for capital punishment trials (Palmer, 2014). The current project mimics the penalty phase, in which jurors (in most
states that have the death penalty) are instructed to weigh particular circumstances (i.e., aggravators and mitigators) that make the defendant more or less worthy of receiving a death sentence. Aggravators are circumstances that make the defendant more deserving of the death penalty (e.g., the crime was committed for pecuniary gain) and mitigators are circumstances that make the defendant more deserving of life in prison without the possibility of parole (e.g., the defendant was inebriated at the time of the crime).

Aggravators are entirely determined by statute (i.e., there are only statutory aggravating circumstances), whereas mitigating circumstances can be statutory or non-statutory (Lockett v. Ohio, 1978). Of the states that have the death penalty, only four (Oregon, Texas, Washington, and Utah) use “special circumstances” instead of statutory aggravators (see Palmer, 2014, for discussion). Thus, in the majority of capital punishment jurisdictions—the jurisdictions the present study’s procedure models itself on—jurers weigh the aggravating circumstances determined by their state, of which there must be at least one present (as was established by Zant v. Stephens, 1983), and are able to endorse virtually any circumstance as mitigating (in addition to statutory mitigators).

Hypothetically, if mitigators do not outweigh aggravators (and aggravators are deemed to justify the death penalty), jurors will render a death penalty verdict; if mitigators outweigh aggravators, jurors will render a life in prison verdict. Miller and Bornstein (2006) found that when the number of aggravators and mitigators were manipulated in the case, there was a direct effect on sentencing verdicts; that is, when aggravators outnumbered mitigators, jurors were more likely to yield a death sentence, and when mitigators outnumbered aggravators, jurors were more likely to yield a life sentence. This suggests that, in general, mock jurors properly weigh aggravators and
mitigators. Improper weighing can be operationalized as sentencing verdicts incongruent with the number aggravators relative to mitigators present in the case type.²

Immigrants and the Legal System

The hotly contested issue of immigration policy has received attention in part due to President Obama’s executive action on immigration policy (i.e., revisions to the DACA). One of the aims of the executive action is to remove the threat of deportation for undocumented immigrants who have been living in the U.S. (Ehrenfreud, 2014). The conservative attitude in response to the action is best represented by the aptly-titled legislation drafted in the house: The “Preventing Executive Overreach on Immigration Act” (“House Republicans…,” 2014). More recently, immigration policy has received increased attention due to comments made by Republican presidential candidate Donald Trump. In his presidential bid announcement, for example, Trump suggested the majority of Mexican immigrants to the U.S. are criminals, and that he would “immediately terminate President Obama’s illegal executive order on immigration, immediately” (“Full text…,” 2015). Thus, the presence of clashing attitudes concerning immigration in American public discourse appears clear.

Certainty is lacking concerning the general relationship between immigrants—particularly Latino immigrants—and crime (Camarota & Vaughan, 2009). According to the Pew Research Center, the foreign-born, non-citizen population in the U.S. has steadily increased from 1.7% in 1970, to 7% as of 2013 (Pew Research Center, 2015). Whereas the majority (i.e., 67.8%) of the foreign-born population consisted of European or Canadian immigrants in 1970, by 2013 this same group represented only 14.2% of the

² It should be stressed that the subjective weight of aggravators and mitigators does not equate with the objective number of aggravators and mitigators.
foreign-born population—Mexican immigrants represented about two times that proportion (i.e., 28%; Pew Research Center, 2015). A similar, and perhaps related, trend exists for federally sentenced offenders: As of 2012, non-citizen Latinos made up the majority (i.e., 37%) of federally sentenced offenders (Light, Lopez, & Gonzalez-Barrera, 2014). Not surprisingly, 75% of federally convicted offenders who were undocumented immigrants were convicted of immigration, or immigration-related, offenses; nineteen percent were convicted for drug offenses, and 6% were convicted for other crimes (Light et al., 2014). Undocumented immigrants convicted of these offenses are more likely to be incarcerated than documented immigrants and U.S. citizens (Wolfe, Pyrooz, & Spohn, 2011). Somewhat contrary to expectation, undocumented immigrants generally receive shorter sentences than U.S. citizens and documented immigrants (Wolfe et al., 2011). It is important to note, though, that immigration status interacts with ethnicity to influence sentences: Latino citizens receive shorter sentences than Caucasian citizens, but undocumented Latinos receive longer sentences than undocumented Caucasians (Wolfe et al., 2011).

Camarota and Vaughan (2009) reviewed a plethora of studies concerning immigrants and crime and concluded, “[T]here is no clear evidence that immigrants commit crimes at lower or higher rates than [non-immigrants]” (p. 26). In what has been termed the “Latino Paradox,” despite early work that suggested a positive relationship between immigration and crime, recent work has found that Latino immigration does not influence crime rates, or perhaps is even negatively related to crime rates (Sampson & Bean, 2006; Taylor, Decker, Provine, Lewis, & Varsanyi, 2014; see Lee, Martinez, & Rosenfeld, 2001). Camarota and Vaughan (2009) note, however, that “in many parts of
the country, immigrants are responsible for a significant share of crime” (p. 26).

Typically in jurisdictions with increased immigration and/or negative public perceptions of immigration (e.g., perceptions of immigrants as an economic threat; Capps, 2010), state or local law enforcement officers are charged with enforcing federal immigration law (Hanser, 2015). This can potentially lead to issues of racial profiling and build distrust between police and communities (Hanser & Gomila, 2014; see also Arizona v. United States, 2012), especially communities with a substantial Latino population (Hanser, 2015). This is one way in which bias toward Latino immigrants might permeate the criminal justice system; this bias might also lead to prejudice in legal proceedings for Latino immigrant defendants (see Espinoza et al., 2015).

**Prejudice**

Negative trial outcomes for immigrant defendants might be the result of prejudice. The expression of prejudice, in turn, might be the result of intergroup processes and/or societal norms. The following are two models that could account for prejudice toward immigrant defendants.

**Intergroup Bias**

Intergroup bias is the tendency to favor members of one’s ingroup relative to members of one’s outgroup (see Hewstone, Rubin, & Willis, 2002, for review). In general, jurors are more punitive toward outgroup members than ingroup members (Taylor & Hosch, 2004). Racial outgroup bias affects verdicts and sentencing decisions (Austin & Allen, 2000; Mitchell, Haw, Pfeifer, & Meissner, 2005; Mustard, 2001; Williams & Holcomb, 2001). European American jurors, in particular, rate Latino defendants of low socioeconomic status as more culpable than European American
defendants (Espinoza & Willis-Esqueda, 2014; Willis-Esqueda, Espinoza, & Culhane, 2008) and are more likely to convict undocumented Latino immigrant defendants of low socioeconomic status than other defendant types, including documented Latino immigrants of low socioeconomic status (Espinoza et al., 2015). Moreover, Caucasian Americans are generally more supportive of capital punishment than most racial and ethnic minorities (e.g., Ellsworth & Gross, 1994, and Boots, Heide, & Cochran, 2004, found that Hispanics and Caucasians did not differ in their support for capital punishment; see Padilla, Miller, & Broadus, 2008, for review of Hispanic attitudes toward the legal system) and Caucasian capital jurors are more likely to initially (i.e., pre-deliberation) render a death penalty verdict than African American capital jurors (Eisenberg, Garvey, & Wells, 2001).

Latino immigrant defendants might be outgroup members relative to jurors due to their ethnicity (i.e., Latino), but also because of their immigration status (e.g., documented or undocumented Latino immigrant). Immigration is a particularly salient issue in the U.S. In an analysis of survey data with samples of Canadian and U.S. citizens, Canadian respondents were more supportive of immigration, yet both samples preferred high job status immigrants to low job status immigrants (Harell, Soroka, Iyengar, & Valentino, 2012). This supports the economic threat hypothesis; that is, anti-immigration attitudes are driven by a fear that immigrants will directly or indirectly harm the economy. The economic threat hypothesis has support from cross-national data as well: In a sample of German citizens, indicating financial and economic worries was associated with being worried about immigration (Fitzgerald, 2012; see also Pereira, Vala, & Costa-Lopes, 2010).
Economic or legal concerns might independently, or in combination with ethnic bias, influence legal decision-making relative to Latino immigrants (e.g., in support for immigration policy; see Lee & Ottati, 2002; see also Diaz, Saenz, & Kwan, 2011; Valentino, Brader, & Jardina, 2013). One article found prejudice toward immigrants was more likely to be expressed when the immigrant was Mexican than when the immigrant was a different (e.g., Canadian or British)—or undefined—ethnicity (Hartman, Newman, & Bell, 2014; see also Espinoza et al., 2015). When participants read scenarios of legal transgressions committed by immigrants, Hartman et al. (2014) found Caucasian Americans rated the transgressions as more serious when the immigrant was specifically Mexican. Importantly, Lyons, Coursey, and Kenworthy (2013) note outgroup bias effects are dictated by a myriad of variables (p. 331); in their article, they identified an interaction between national ingroup identification (e.g., “I feel proud to be an American”) and group narcissism (e.g., “America is the best country in the world”), such that national ingroup identification was positively associated with negative attitudes toward undocumented Latino immigrants, but only at average or high levels of group narcissism (Lyon et al., 2013; this association was present even when controlling for attitudes toward documented immigrants).

Intergroup bias based on U.S. citizenship might work in conjunction with intergroup bias based on ethnicity to influence attitudes toward, and treatment of, Latino immigrants. Jurors might express bias toward undocumented Latino immigrant defendants because they are perceived as an economic threat, are violating immigration law, and are an ethnic outgroup. Similarly, jurors might express bias toward documented Latino immigrant defendants because they are perceived as an economic threat and/or are
an ethnic outgroup. This study hypothesizes defendant type will be associated with jurors’ endorsements of and weighing of aggravators and mitigators, as well as with sentencing verdicts. For example, when the defendant is an undocumented Mexican immigrant, jurors will be less likely to agree that mitigators exist in the case (i.e., mitigator endorsement) than when the defendant is a U.S. born American. Further, case type (high aggravators or high mitigators) and defendant type might interact to result in improper weighing (e.g., case type might only influence verdicts when the defendant is a Caucasian American, but not when the defendant is a documented or undocumented Mexican immigrant).

**Justification-Suppression Model and the Normative Window of Prejudice**

The Justification-Suppression Model (JSM) proposes that the experience of prejudice is automatic, but the expression of prejudice is dependent on social norms (Crandall & Eschleman, 2003; Crandall et al., 2002; Crandall & Warner, 2005). Individuals are motivated to not appear prejudiced, and thus are more likely to express prejudice when there is a justifying factor present and the expression is not met with any negative consequences (Crandall & Eschleman, 2003, see Figure 1 on p. 417 for conceptual map of JSM; Crandall et al., 2002). A disparaging joke, for instance, can serve as justification for the expression of prejudice. Disparaging humor allows for the expression of prejudice, promoting tolerance of prejudice aimed at certain groups (i.e., groups moving toward social acceptability, such as Muslims) but not others (e.g., terrorists; Ford, Woodzicka, Triplett, Ochersberger, & Holden, 2014; see also Crandall et al., 2002). Thus, prejudice might be justified in some circumstances (e.g., the defendant is illegally in the U.S.) but suppressed in others (e.g., the defendant is legally in the U.S.).
Whether prejudice is justified (and/or suppressed) is regulated by what Crandall and colleagues (2013) call the “normative window.” Over time, it becomes more or less acceptable to express prejudice against certain groups (e.g., minorities, homosexuals)—it is not “hearts and minds that change, but rather the normative acceptability of certain prejudices” (Crandall et al., 2002, p. 374; see also Crandall & Warner, 2005). Crandall, Ferguson, and Bahn (2013) posit a continuum of prejudices organized into three groups (see Table 3.2, p. 60). At one end of this continuum are targets for which prejudice is unsuppressed (e.g., murderers, pedophiles); on the other end are targets for which prejudice is virtually non-existent (e.g., grandparents, working mothers). In between these two extremes, the norms guiding prejudice expression are ambiguous (i.e., the normative window). Groups within this category include, for example, Hispanic Americans, Arab Americans, and immigrants.

The location of Latino immigrants on this continuum of prejudices is somewhat unclear, and might vary according to immigration status (i.e., documented or undocumented). Whereas Crandall et al. (2002) found the expression of prejudice toward undocumented immigrants was “unalloyed, unabashed” (p. 374), later work placed Hispanic Americans and immigrants within the normative window (Crandall et al., 2013). Based on this configuration, mock jurors in the current study might overtly express prejudice toward an undocumented Mexican immigrant defendant (see Espinoza et al., 2015). Conversely, prejudice toward a documented Mexican immigrant defendant requires justification and could be more subtle (see Crandall et al., 2002). Therefore, jurors might “unabashedly” yield more punitive sentencing verdicts when the defendant is an undocumented Mexican immigrant, whereas jurors might express bias more subtly
toward the documented Mexican immigrant defendant (e.g., in aggravator and mitigator
derendorsement, but not sentencing verdicts). Using the JSM and normative window as
theoretical foundations, it will be determined whether the defendant’s ethnicity and status
as an immigrant (documented or not) influences mock jurors’ endorsement of aggravators
and mitigators, weighing of mitigators relative to aggravators, and sentencing verdicts.

**Cognitive Processing**

While intergroup processes and/or societal norms might dictate whether prejudice
toward immigrant defendants is expressed in a capital trial context, individual differences
in the way case and trial information is processed might moderate this effect. For
example, individuals who tend to process information more rationally might be less likely
to exhibit an immigrant bias compared to individuals who process information less
rationally. Thus, cognitive processing might interact with defendant type to affect
verdicts, as well as have its own direct effect on verdicts. The subsequent section
provides an overview of the model the current study invokes.

**Cognitive-Experiential Self-Theory**

Cognitive-Experiential Self-Theory ("CEST"; Epstein, 1990) posits there are two
distinct information processing systems: One rational and one experiential. The
experiential system is quick, intuitive and emotional, whereas the rational is slow, logical
and deliberate; the former is preconscious and the latter is conscious (Epstein, 1990).
Each of the systems guides behavior differently: In the experiential system, behavior is
largely guided by feelings; in the rational system, behavior is largely guided by logical
analysis of stimuli (Epstein, 1990). The experiential system relies on heuristics and is
automatic, making it more efficient than the rational system; thus, it is employed more
often on a day-to-day basis (Epstein, 1990; Lieberman 1997). The dominance of the experiential system is a critical reason advertisements aim to elicit an emotional reaction (Lieberman, 1997).

According to CEST, both systems can operate simultaneously, independently and in conjunction (Epstein, 1990). Though the experiential system generally tends to dominate, individuals differ in the degree to which they use each system (Epstein, Pacini, Denes-Raj, & Heier, 1996). The tendency to use the rational system is measured by the Need for Cognition scale (NFC), and the tendency to use the experiential system is measured by the Faith in Intuition scale (FI). While an individual’s tendency to use one system to process information is enduring (i.e., processing trait), this can vary at any given moment and can be measured by scores on rational logic problems (i.e., cognitive processing state). Rational logic problems typically take the form of vignettes that present two scenarios in which the protagonist in each experiences the same consequences and are equally responsible. Despite each protagonist being equally responsible for the outcomes they experience, respondents in less rational states will attribute more foolishness to one of the protagonists than the other (Epstein, Lipson, Holstein, & Huh, 1992).

CEST is notably differentiated from other dual process models primarily in its emphasis on the role of emotion, the independence of each processing system, and its acknowledgment of stable individual differences in processing. Emotional reactions, according to CEST, are indicative of “cognitions in the experiential system,” as well as “important schemas in a personal theory of reality” (Epstein, 1990, p. 170). According to CEST, emotional-laden experience is more influential in the creation of heuristics than
experience in general, and situations with emotionally relevant stimuli are more likely to
be processed by the experiential system than the rational system. Thus, the amount of
emotionally relevant stimuli in a situation—not just the level of motivation, ability, or
cognitive resources of the individual—can determine which system will be employed.
Individual motivation to use the rational or experiential system varies; that is, information
processing style is a personality trait.

The current study invokes CEST (rather than other dual processing models)
because CEST explains differences in processing on a dispositional and situational level.
Moreover, due to CEST’s emphasis on emotion, it suggests that differences in cognitive
processing might partially explain sensitivity to seemingly unrelated variables such as
prejudice. For example, individuals with particular processing traits and in particular
processing states might be more likely to express an ethnic bias because they are more
sensitive to intergroup dynamics.

**CEST and Decision-Making**

Individual processing traits relate to variations in decision-making. This is
partially because individuals with contrasting processing styles are differentially
influenced by cues. For instance, individuals who score high in NFC are more influenced
by the quality of arguments than by peripheral cues (Cacioppo, Petty, Feinstein, & Jarvis,
1996). Conversely, individuals who score low in NFC are more influenced by peripheral
cues (Cacioppo et al., 1996). Generally, then, high NFC scorers follow a deliberate,
rational thought process when making a decision. Higher scores on the NFC are also
associated with increased amounts of information recall compared to lower scores, even
across varying presentation mediums (Cacioppo et al., 1996). There has been less
research concerning direct relationships between experiential processing and decision-making, though FI positively predicts heuristic processing in response to vignettes (i.e., the aforementioned “rational logic problems;” Epstein et al., 1992). Experiential processing also moderates the influence of emotions induced by some messages, suggesting that individuals high in FI are more likely to be persuaded by messages using emotional appeals (Nan, 2009; see Sladek, Bond, & Philips, 2010, for review of how cognitive processing relates to individual characteristics).

The general relationships between CEST measures and decision-making are applicable to a capital trial process (e.g., there is a negative relationship between NFC and punitiveness; see Sargent, 2004; Tam, Au, Leung, 2008). During the sentencing phase, jurors are instructed to weigh aggravators and mitigators in order to reach a verdict. Verdicts are decisions, and thus the perceptions and weighing of aggravators and mitigators are steps in the legal decision-making process (e.g., see West, Yelderman, & Miller, 2015). Cognitive processing traits and states, in turn, might affect this process, and therefore be related to verdicts.

The processing state individuals are in relates to the degree of influence of certain factors. Individuals who are in an experiential state, for example, might be more influenced by extralegal factors than individuals in a rational state. Lieberman (2002) tested this by manipulating juror’s processing state. Participants acting as mock jurors were primed to process experientially or rationally, and the attractiveness of the defendant was manipulated. Mock jurors primed to process information experientially awarded more damages to the plaintiff when the defendant was unattractive than when the defendant was attractive; there was no effect of attractiveness in the rational group.
(see also Gunnell & Ceci, 2010). In addition to being more influenced by attractiveness, the more experiential a mock jurors’ processing state is, the more likely they will be influenced by “feelings about the case” (Miller, 2006). Thus, jurors who process information experientially tend to be more influenced by intuitive factors.

This tendency for jurors in experiential states to be susceptible to intuitive factors might explain why they are more influenced by certain types of expert testimony. For example, in a sexually violent predator civil commitment case, mock jurors in an experiential state were most influenced by clinical testimony, whereas mock jurors in a rational state were most influenced by actuarial testimony (Lieberman, Krauss, Kyger, & Lehoux, 2007); however, this affect only occurred for male participants (the authors suggest this might have been because the case concerned sexual violence). This interaction effect found by Lieberman et al. (2007), except for the gender differences, was also found in a capital punishment case (see Krauss, Lieberman, & Olson, 2004).

Instead of priming participants to process information experientially or rationally, Miller, Wood, and Chomos (2013) scored responses to vignettes (i.e., rational logic problems, which the current study also uses) as a measure of cognitive processing state in a capital punishment case. Scores on these rational logical problems were negatively related to support for the death sentence (i.e., increases in rationality were associated with decreases in support for the death sentence). Additionally, scores on the NFC scale were negatively related to support for the death sentence, whereas scores on the FI scale were positively related to support for the death sentence.

The current study proposes cognitive traits/states will be related to verdicts. Specifically, it is hypothesized low scores on the NFC scale, high scores on the FI scale,
and low scores (i.e., less rational scores) on logic problems will be associated with death sentence verdicts, as was found by Miller et al. (2013). Furthermore, because cognitive traits/states affect how influential certain case facts are in rendering a verdict, it is predicted there will be a relationship between cognitive processing traits/states and endorsements of and weighing of aggravating and mitigating circumstances. This has not been addressed in previous literature. There might also be interaction effects between cognitive processing states and traits and defendant type. For instance, those high in FI might be more likely to show prejudice toward a Mexican immigrant defendant than a Caucasian American defendant.

**Overview of Study**

The purpose of this study was to examine whether defendant type and cognitive processing traits and states relate to endorsements of aggravators and mitigators, weighing of aggravators and mitigators, and sentencing verdicts. This study implemented a 3 (defendant: Caucasian American, documented Mexican immigrant, undocumented Mexican immigrant) x 2 (case type: high aggravators, high mitigators) between-subjects experimental design. Mock jurors were randomly assigned to read a trial scenario in which the defendant was a documented Mexican immigrant, an undocumented Mexican immigrant, or a U.S. born Caucasian American. The number of aggravators and mitigators within the trial summary was also manipulated (i.e., high aggravators or high mitigators). After mock jurors read the trial summary, they indicated the extent to which they agreed that individual aggravators and mitigators were present in the case, as well as the weight of mitigators relative to aggravators. They then indicated their sentencing verdict (death penalty or life in prison without possibility of parole) on a
certainty scale. Mock jurors subsequently completed measures of cognitive processing traits and states. Lastly, mock jurors filled out a demographic questionnaire.

It was expected that mock jurors who read a trial summary in which the defendant was an undocumented Mexican immigrant (compared to a Caucasian American) would be more likely to endorse aggravators and less likely to endorse mitigators as being present in the case, be less likely to endorse mitigators as outweighing aggravators, be more likely to render a death penalty verdict, and be unable to properly weigh aggravators and mitigators. Theoretically, this was because the defendant is an outgroup member relative to mock jurors or because the defendant’s group falls within the normative window of prejudice. It was also anticipated that cognitive processing traits and states would relate to verdicts. Based on Miller et al. (2013), it was expected that low scores on the NFC, high scores on the FI, and low scores on rational logic problems would be associated with a death penalty verdict, an increased likelihood of endorsing aggravators and a decreased likelihood of endorsing mitigators, a decreased likelihood of endorsing mitigators as outweighing aggravators, and improper weighing. Furthermore, this study sought to address potential interactions between experimental conditions and cognitive processing traits and states.

**Endorsements of Aggravators and Mitigators**

Jurors endorse and weigh aggravators and mitigators in determining their verdict. Aggravators make a defendant more deserving of the death penalty (e.g., “The capital felony was committed for pecuniary gain”) and mitigators make a defendant more deserving of a life sentence (e.g., “The capital felony was committed while the defendant was under the influence of mental or emotional disturbance”).
**Hypothesis 1.** There will be a main effect of defendant type on endorsements of aggravators and mitigators. Participants who read a case with an undocumented Mexican immigrant defendant will be more likely to endorse aggravators as being present in the case and less likely to endorse mitigators as being present in the case than conditions in which the defendant is a documented Mexican immigrant or Caucasian American. Social norms permit the expression of prejudice toward an undocumented Mexican immigrant (Crandall et al., 2002; see also Espinoza et al., 2015).

**Research Question 1.** Will participants be more likely to endorse aggravators and less likely to endorse mitigators when the defendant is a documented Mexican immigrant compared to a Caucasian American? If documented Mexican immigrants fall within the normative window, bias toward them might be expressed in endorsements of aggravators and mitigators because there is a lack of consequences. That is, the risk of appearing prejudiced might be low when bias is expressed in aggravator and mitigator endorsement, whereas the risk of appearing prejudiced might be high when bias is expressed in sentencing verdicts.

**Hypothesis 2.** There will be a main effect of case type on endorsements of aggravators and mitigators. Participants who read a case with more aggravators than mitigators will subsequently be more likely to endorse aggravators as being present in the case and less likely to endorse mitigators as being present in the case, as compared with participants who read a case with more mitigators than aggravators. This indicates jurors are perceiving aggravators and mitigators correctly.

**Hypothesis 3.** There will be a negative relationship between NFC and endorsements of aggravators and a positive relationship between NFC and endorsement
of mitigators. The higher participants score on the NFC scale, the more likely they will endorse mitigators as being present in the case and the less likely they will endorse aggravators as being present in the case. NFC is negatively relative to punitiveness (e.g., see Sargent, 2004; Tam et al., 2008), and in particular, NFC is negatively related to death penalty verdicts (Miller et al., 2013).

**Hypothesis 4.** There will be a positive relationship between FI and endorsements of aggravators and negative relationship between FI and endorsements of mitigators. The higher participants score on the FI, the more likely they will endorse aggravators as being present in the case and the less likely they will endorse mitigators as being present in the case. In contrast to NFC, FI is positively associated with death penalty verdicts (Miller et al., 2013).

**Hypothesis 5.** There will be a negative relationship between rational processing state and endorsements of aggravators and a positive relationship between rational processing state and mitigators. The higher participants score on rational logic problems, the more likely they will endorse mitigators as being present in the case and the less likely they will endorse aggravators as being present in the case. Jurors in less rational processing states tend to be more punitive (e.g., see Miller, 2006).

**Hypothesis 6.** There will be an association between juror type and endorsements of aggravators and mitigators. Caucasian jurors will be less likely to endorse mitigators as being present in the case and more likely to endorse aggravators as being present in the case compared to non-Caucasian jurors. Caucasians tends to be more in favor of the death penalty than non-Caucasians (Boots et al., 2004; Eisenberg et al., 2001; Ellsworth & Gross, 1994).
Hypothesis 7. There will be an interaction between juror type and defendant type. Caucasian jurors will be more likely to endorse aggravators as being present in the case and less likely to endorse mitigators as being present in the case when the defendant is an undocumented or documented Mexican immigrant, as compared with conditions in which the defendant is Caucasian American. In contrast, non-Caucasian jurors will endorse aggravators and mitigators similarly across defendant conditions. Individuals tend to favor ingroup members compared to outgroup members (Hewstone et al., 2002), and Caucasian American jurors, in particular, are more punitive toward Mexican defendants than Caucasian American defendants (Espinoza & Willis-Esqueda, 2014; Espinoza et al., 2015; Willis-Esqueda et al., 2008). Conversely, non-Caucasians tend to be less supportive of capital punishment (Ellsworth & Gross, 1994; Boots et al., 2004) and non-Caucasian jurors do not always exhibit bias toward Caucasian defendants compared to non-Caucasian defendants (e.g., in one study, Mexican American jurors did not display bias toward a Caucasian American defendant compared to a Mexican American defendant; Willis-Esqueda et al., 2008).

Hypothesis 8. There will be an interaction between defendant type and case type. The main effect of case type will only occur when the defendant is a Caucasian American. Participants who read a case with a Caucasian American defendant—but not a documented or undocumented Mexican immigrant—will endorse aggravators and mitigators properly (i.e., when the case contains high aggravators, they will be more likely to endorse aggravators and less likely to endorse mitigators, and vice versa when there are high mitigators; see Miller & Bornstein, 2006).
**Hypothesis 9.** There will be an interaction between rational processing traits and defendant type on endorsements of aggravators and mitigators. Jurors low in NFC will be more likely to endorse aggravators and less likely to endorse mitigators when the defendant is a Mexican immigrant than when the defendant is a Caucasian American compared to jurors high in NFC. Individuals low in NFC are more influenced by peripheral cues (Cacioppo et al., 1996), and therefore low NFC jurors are expected to be more influenced by the ethnicity of the defendant than high NFC jurors.

**Hypothesis 10.** There will be an interaction between experiential processing traits and defendant type on endorsements of aggravators and mitigators. Jurors high in FI will be more likely to endorse aggravators and less likely to endorse mitigators when the defendant is a Mexican immigrant than when the defendant is a Caucasian American compared to jurors low in FI. Experiential processing is associated with reliance on heuristics and emotions in decision-making (Epstein, 1990). Participants who are more likely to process information experientially are expected to be more influenced by the defendant’s ethnicity/immigration status than participants who are less likely to process information experientially, and therefore be more punitive to the documented or undocumented Mexican immigrant.

**Hypothesis 11.** There will be an interaction between cognitive processing state and defendant type on endorsements of aggravators and mitigators. Jurors in a less rational processing state will be more likely to endorse aggravators and less likely to endorse mitigators when the defendant is a Mexican immigrant than when the defendant is a Caucasian American compared to jurors in a more rational processing state. Individuals in less rational processing states are more likely to be influenced by
extralegal factors (e.g., see Lieberman, 2002), such as the defendant’s ethnicity/immigration status. Thus, the effect of defendant type is only expected to occur for participants in less rational processing states.

**Hypothesis 12.** There will be an interaction between rational processing traits and case type on endorsements of aggravators and mitigators. The main effect for case type will be significantly stronger for jurors high in NFC. For example, jurors reading a case with high aggravators and low mitigators will be more likely to endorse aggravators and less likely to endorse mitigators—but only for jurors high in NFC. Jurors low in NFC will not differ based on the case type they read. This is because jurors high in NFC would be more likely to follow legal instructions (see Sommers & Kassin, 2001) and endorse the aggravators and mitigators correctly.

**Hypothesis 13.** There will be an interaction between experiential processing traits and case type on endorsements of aggravators and mitigators. Similar to jurors high in NFC, jurors low in FI will endorse aggravators and mitigators accurately. The main effect of case type will not occur for jurors high in FI, who would be more likely to rely on their intuitions (Epstein, 1990) rather than legal instructions.

**Hypothesis 14.** There will be an interaction between cognitive processing state and case type on endorsements of aggravators and mitigators. The main effect of case type will only occur for participants in a more rational processing state. Specifically, jurors in a more rational processing state will be more likely to endorse aggravators and less likely to endorse mitigators when the case contains more aggravators than mitigators—or vice versa. Jurors in a less rational process state will endorse aggravators and mitigators whether the case contains high aggravators or high mitigators. In other
words, jurors in a more rational processing state are expected to accurately endorse aggravators and mitigators.

**Weighing of Aggravators and Mitigators**

Jurors are instructed to weigh mitigating and aggravating circumstances in determining the appropriate sentencing verdict. For instance, if mitigators outweighed aggravators—not necessarily because there are more of them, but because of the subjective weight given to them—a life sentence verdict would be more appropriate.

**Hypothesis 15.** There will be a main effect of defendant type on weighing of aggravators and mitigators. Participants who read a case with an undocumented Mexican immigrant defendant will be more likely to report that mitigators do not outweigh aggravators than conditions in which the defendant is a documented Mexican immigrant or Caucasian American. Social norms permit the expression of prejudice toward an undocumented Mexican immigrant (Crandall et al., 2002; see also Espinoza et al., 2015).

**Research Question 2.** Will participants be more likely to report that mitigators do not outweigh aggravators when the defendant is a documented Mexican immigrant compared to a Caucasian American? If documented Mexican immigrants fall within the normative window, bias toward them might be expressed in weighing of aggravators and mitigators because there is a lack of consequences. That is, the risk of appearing prejudiced might be low when bias is expressed in the weighing of aggravators and mitigators, whereas the risk of appearing prejudiced might be high when bias is expressed in sentencing verdicts.

**Hypothesis 16.** There will be a main effect of case type on weighing of aggravators and mitigators. Participants who read a case with more aggravators than
mitigators will be less likely to indicate mitigators outweigh aggravators than participants who read a case with more mitigators than aggravators. This indicates jurors are perceiving aggravators and mitigators correctly.

**Hypothesis 17.** There will be a positive relationship between NFC and weighing of aggravators and mitigators. The higher participants’ score on the NFC, the more likely they will report mitigators outweigh aggravators. NFC is negatively relative to punitiveness (e.g., see Sargent, 2004; Tam et al., 2008), and in particular, NFC is negatively related to death penalty verdicts (Miller et al., 2013).

**Hypothesis 18.** There will be a negative relationship between FI and weighing of aggravators and mitigators. The higher participants’ score on the FI, the less likely they will report mitigators outweigh aggravators. This is because FI is positively associated with death penalty verdicts (Miller et al., 2013).

**Hypothesis 19.** There will be a positive relationship between rational processing state and weighing of aggravators and mitigators. The higher participants’ score on the rational logic problems, the more likely they will indicate mitigators outweigh aggravators. Jurors in less rational processing states tend to be more punitive (e.g., see Miller, 2006).

**Hypothesis 20.** There will be an association between juror type and weighing of aggravators and mitigators. Caucasian jurors will be less likely to report mitigators outweigh aggravators compared to non-Caucasian jurors. Caucasians tends to be more in favor of the death penalty than non-Caucasians (Boots et al., 2004; Eisenberg et al., 2001; Ellsworth & Gross, 1994).
**Hypothesis 21.** There will be an interaction between juror type and defendant type. Caucasian jurors will be less likely to report mitigators outweigh aggravators when the defendant is an undocumented or documented Mexican immigrant compared with conditions in which the defendant is a Caucasian American. In contrast, non-Caucasian jurors will weigh aggravators and mitigators similarly across defendant conditions. Individuals tend to favor ingroup members compared to outgroup members (Hewstone et al., 2002), and Caucasian American jurors, in particular, are more punitive toward Mexican defendants than Caucasian American defendants (Espinoza & Willis-Esqueda, 2014; Espinoza et al., 2015; Willis-Esqueda et al., 2008). Conversely, non-Caucasians tend to be less supportive of capital punishment (Ellsworth & Gross, 1994; Boots et al., 2004) and non-Caucasian jurors do not always exhibit bias toward Caucasian defendants compared to non-Caucasian defendants (e.g., see Willis-Esqueda et al., 2008).

**Hypothesis 22.** There will be an interaction between defendant type and case type. The main effect of case type will only occur when the defendant is a Caucasian American. Participants who read a case with a Caucasian American defendant—but not a documented or undocumented Mexican immigrant—will weigh aggravators and mitigators properly (i.e., when the case contains high aggravators, they will be more likely to report mitigators do not outweigh aggravators, and when there are high mitigators they will be more likely to report mitigators outweigh aggravators; see Miller & Bornstein, 2006).

**Hypothesis 23.** There will be an interaction between rational processing traits and defendant type on weighing of aggravators and mitigators. Jurors low in NFC will be more likely to report mitigators outweigh aggravators when the defendant is a Caucasian
American than when the defendant is a Mexican immigrant compared to jurors high in NFC. Individuals low in NFC are more influenced by peripheral cues (Cacioppo et al., 1996), and therefore low NFC jurors are expected to be more influenced by the ethnicity of the defendant than high NFC jurors.

**Hypothesis 24.** There will be an interaction between experiential processing traits and defendant type on weighing of aggravators and mitigators. Jurors high in FI will be more likely to report mitigators outweigh aggravators when the defendant is a Caucasian American than when the defendant is a Mexican immigrant compared to jurors low in FI. Experiential processing is associated with reliance on heuristics and emotions in decision-making (Epstein, 1990). Participants who are more likely to process information experientially are expected to be more influenced by the defendant’s ethnicity/immigration status than participants who are less likely to process information experientially, and therefore be more punitive to the documented or undocumented Mexican immigrant.

**Hypothesis 25.** There will be an interaction between cognitive processing state and defendant type on weighing of aggravators and mitigators. Jurors in a less rational processing state will be more likely to report mitigators do not outweigh aggravators when the defendant is a Mexican immigrant than when the defendant is a Caucasian American compared to jurors in a more rational processing state. Individuals in less rational processing states are more likely to be influenced by extralegal factors (e.g., see Lieberman, 2002), such as the defendant’s ethnicity/immigration status. Thus, the effect of defendant type is only expected to occur for participants in less rational processing states.
**Hypothesis 26.** There will be an interaction between rational processing traits and case type on weighing of aggravators and mitigators. The main effect for case type will be significantly stronger for jurors high in NFC. For example, jurors reading a case with high aggravators and low mitigators will be more likely to report mitigators do not outweigh aggravators—but only for jurors high in NFC. Jurors low in NFC will not differ based on the case type they read. This is because jurors high in NFC would be more likely to follow legal instructions (see Sommers & Kassin, 2001) and endorse the aggravators and mitigators correctly.

**Hypothesis 27.** There will be an interaction between experiential processing traits and case type on weighing of aggravators and mitigators. Jurors low in FI will accurately weigh aggravators and mitigators. The main effect of case type will not occur for jurors high in FI, who would be more likely to rely on their intuitions (Epstein, 1990) rather than legal instructions.

**Hypothesis 28.** There will be an interaction between cognitive processing state and case type on weighing of aggravators and mitigators. The main effect of case type will only occur for participants in a more rational processing state. Specifically, jurors in a more rational processing state will be more likely to indicate mitigators outweigh aggravators when the case contains high mitigators compared to jurors in a less rational processing state—or vice versa when the case contains high aggravators. Jurors in less rational processing states are less likely to be influenced by legal instructions (Miller, 2006), and therefore the number of aggravators relative to mitigators will not significantly influence their weighing.

**Verdict**
Mock jury research tends to use a dichotomous verdict (e.g., death sentence or life sentence) or a verdict confidence scale (e.g., confident in life sentence to confident in a death sentence) as an outcome measure (Hunt & Devine, 2015). The current study uses the latter, operationalizing sentencing verdict as the degree of certainty in a death penalty or life sentence verdict.

**Hypothesis 29.** There will be a main effect of defendant type. Participants who read a case with an undocumented Mexican immigrant defendant will be more likely to render a death penalty verdict (i.e., report more certainty in a death penalty verdict) than conditions in which the defendant is a documented Mexican immigrant or Caucasian American. Social norms permit the expression of prejudice toward an undocumented Mexican immigrant (Crandall et al., 2002; see also Espinoza et al., 2015).

**Research Question 3.** Will participants be more likely to give a death sentence when the defendant is a documented Mexican immigrant compared to a Caucasian American? If documented Mexican immigrants fall within the normative window, bias toward them might be expressed in endorsements or weighing of aggravators and mitigators because there is a lack of consequences. Conversely, the risk of appearing prejudiced might be high when bias is expressed in sentencing verdicts. Moreover, some studies have found bias is expressed similarly toward undocumented or documented Mexican immigrants compared to Caucasian Americans or Canadian immigrants (Alvarez & Miller, 2014), whereas others have found jurors are more punitive to undocumented Mexican immigrants compared to Caucasian Americans, Canadian immigrants, or documented Mexican immigrants (Espinoza et al., 2015).
**Hypothesis 30.** There will be a main effect of case type. Participants who read a case with more aggravating circumstances than mitigating circumstances will be more likely to issue a death sentence than the participants who read a case with more mitigating circumstances than aggravating circumstances. This indicates participants are weighing aggravators and mitigators appropriately (see Miller & Bornstein, 2006).

**Hypothesis 31.** There will be a positive relationship between NFC and verdict. The higher participants score on the NFC, the more likely they will issue a sentence of life without the possibility of parole. NFC is negatively relative to punitiveness (e.g., see Sargent, 2004; Tam et al., 2008) and death penalty verdicts (Miller et al., 2013).

**Hypothesis 32.** There will be a negative relationship between FI and verdict. The higher participants score on the FI, the more likely they will issue a death penalty. This was found by Miller et al. (2013).

**Hypothesis 33.** There will be a negative relationship between rational processing state and verdict. The lower participants score on the rational logic problems, the more likely they will issue a death penalty. Jurors in less rational processing states tend to be more punitive (see Miller, 2006).

**Hypothesis 34.** There will be an association between juror type and verdict. Caucasian jurors will be more likely to render a death penalty verdict compared to non-Caucasian jurors. Caucasians tends to be more in favor of the death penalty than non-Caucasians (Boots et al., 2004; Eisenberg et al., 2001; Ellsworth & Gross, 1994).

**Hypothesis 35.** There will be an interaction between juror type and defendant type. Specifically, Caucasian jurors will be more likely to give the death penalty when it
is a documented or undocumented Mexican immigrant defendant than conditions in which the defendant is a Caucasian American. In contrast, non-Caucasian jurors will be less likely to give the death penalty when it is a documented or undocumented Mexican immigrant defendant than conditions in which the defendant is a Caucasian American. Caucasian American jurors are more punitive toward Mexican defendants than Caucasian American defendants (Espinoza & Willis-Esqueda, 2014; Espinoza et al., 2015; Willis-Esqueda et al., 2008). Conversely, non-Caucasians tend to be less supportive of capital punishment (Ellsworth & Gross, 1994; Boots et al., 2004) and non-Caucasian jurors do not consistently exhibit bias toward Caucasian defendants compared to non-Caucasian defendants (e.g., see Willis-Esqueda et al., 2008).

**Hypothesis 36.** There will be an interaction between defendant type and case type. Participants who read a case with a Caucasian American defendant will weigh aggravators and mitigators properly (i.e., render a death penalty when there are more aggravators than mitigators in the case type condition or render a life in prison sentence when there are more mitigators than aggravators in the case type condition; see Miller & Bornstein, 2006). Participants who read about a case with an undocumented or documented Mexican immigrant defendant will be unable to properly weigh aggravators and mitigators (i.e., give death penalty and life sentence equally in both case type conditions). In other words, the main effect of case type will only occur when the defendant is a Caucasian American.

**Hypothesis 37.** There will be an interaction between rational processing traits and defendant type on verdict. Jurors low in NFC will be more likely to render a death penalty verdict when the defendant is a Mexican immigrant than when the defendant is a
Caucasian American compared to jurors high in NFC. Individuals low in NFC are more influenced by peripheral cues (Cacioppo et al., 1996), and therefore low NFC jurors are expected to be more influenced by the ethnicity of the defendant than high NFC jurors.

**Hypothesis 38.** There will be an interaction between experiential processing traits and defendant type on verdict. Jurors high in FI will be more likely render a death penalty verdict when the defendant is a Mexican immigrant (documented or not) than when the defendant is a Caucasian American compared to jurors low in FI. Experiential processing is associated with reliance on heuristics and emotions in decision-making (Epstein, 1990). Participants who are more likely to process information experientially are expected to be more influenced by the defendant’s ethnicity/immigration status than participants who are less likely to process information experientially, and therefore be more punitive to the documented or undocumented Mexican immigrant.

**Hypothesis 39.** There will be an interaction between cognitive processing state and defendant type on verdict. Jurors in a less rational processing state will be more likely render a death penalty verdict when the defendant is a Mexican immigrant than when the defendant is a Caucasian American compared to jurors in a more rational processing state. Individuals in less rational processing states are more likely to be influenced by extralegal factors (e.g., see Lieberman, 2002), such as the defendant’s ethnicity/immigration status. Thus, the effect of defendant type is only expected to occur for participants in less rational processing states.

**Hypothesis 40.** There will be an interaction between rational processing traits and case type on verdicts. The main effect for case type will be significantly stronger for jurors high in NFC. Jurors high in NFC reading a case with high aggravators and low
mitigators, for example, will be more likely to render a death penalty verdict. Jurors low in NFC will not differ based on the case type they read. This is because jurors high in NFC would be more likely to follow legal instructions (see Sommers & Kassin, 2001) and endorse the aggravators and mitigators correctly.

**Hypothesis 41.** There will be an interaction between experiential processing traits and case type on verdict. Jurors low in FI will accurately weigh aggravators and mitigators (e.g., when there are high mitigators in the case, they will be more likely to render a life sentence verdict). The main effect of case type will not occur for jurors high in FI, who would be more likely to rely on their intuitions (Epstein, 1990) rather than legal instructions.

**Hypothesis 42.** There will be an interaction between cognitive processing state and case type on verdicts. The main effect of case type will only occur for participants in a more rational processing state. Specifically, jurors in a more rational processing state will be more likely to render a life sentence when the case contains high mitigators compared to jurors in a less rational processing state—or vice versa when the case contains high aggravators. Jurors in less rational processing states are less likely to be influenced by legal instructions (Miller, 2006), and therefore the number of aggravators relative to mitigators will not significantly influence their weighing.

**Method**

**Procedure**

A sample of participants was recruited via Amazon.com’s Mechanical Turk (M-Turk) survey system. The survey itself was on Qualtrics.com. After reading an information sheet, participants answered a death qualification questionnaire measuring
whether their attitudes toward the death penalty would impact their ability to follow jury instructions; participants who were not death-qualified (i.e., responded in the affirmative—their attitudes would inhibit their impartiality as a juror) were excluded from analysis. Next, participants were randomly assigned to conditions and read a 1,900-word trial summary based on a real case in North Carolina (*State v. Daniels*, 1994) that included closing arguments for the defense and the prosecution, and judicial instructions. The defendant described in the trial summary was a Caucasian American citizen, a documented Mexican immigrant, or an undocumented Mexican immigrant, and included a picture.\(^3\) The trial summary included either high aggravators or high mitigators. Participants were instructed that the defendant was previously found guilty of first-degree murder, and therefore the participant’s task was to act as a juror and decide on the sentencing verdict.

After reading the trial summary, participants rated the extent to which they agreed each of the 4 (statutory) aggravators and 5 (four statutory and one non-statutory) mitigators were present in the case. Next, they reported the extent to which mitigators present in the case outweighed aggravators. The former is a measure of participants’ endorsements of aggravators and mitigators, and the latter is a measure of their weighing of aggravators and mitigators. Participants then indicated their sentencing decision certainty (death penalty or life in prison without possibility of parole). After indicating their decision, participants completed a short demographic questionnaire and manipulation checks (see Appendix L). Lastly, participants filled out a shortened version of the Rational Experiential Inventory (REI), and two story problems (rational logic

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\(^3\) Pictures were chosen based on pilot testing so that they matched on non-manipulated characteristics (e.g., age) and so that their ethnicities were identifiable.
problems). Responding to the rational logic problems had the potential to increase a participant’s current degree rationality, thus by placing them at the end of the procedure the potential negative consequences were ameliorated.

**Participants**

Participants were paid $3 for their participation. Using M-Turk allowed for a sample of community members in the U.S to be attained, and moreover, M-Turk participants have been shown to produce reliable results in decision-making research paradigms (Goodman, Cryder, & Cheema, 2013; for further examination of M-Turk samples see, for example, Paolacci & Chandler, 2014 or Crump, McDonnell, & Gureckis, 2013). The total sample consisted of 450 community members; however, 77 participants reported that their feelings toward the death penalty would affect their ability to serve as a juror, and therefore they were excluded according to the Witt standard. This reduced the sample to a total of 373 death qualified participants.

In this death qualified sample, there was an almost even split between males (55%) and females (45%). The average age of these participants was approximately 35 years, with the majority of participants aged 25 to 45 years (i.e., $SD = 10$ years); the median age was 33 years. About 18% of participants had previously served as a juror. Roughly 14% of participants were first or second generation immigrants, 99% were U.S. citizens, and 32% of participants reported placing moderate to extreme importance on maintaining the history and tradition of their ancestors. Critically, the vast majority of participants were Caucasian (83%), with a mere 5% of the death qualified sample

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4 These variables were entered into the model to check if they interacted with defendant type to influence the dependent variables. None of the interactions were significant and they were therefore not included in the final model.
identifying as Hispanic.\(^5\) Due to this, participant ethnicity was collapsed into a dichotomous variable (i.e., juror type: Caucasian or non-Caucasian).

**Materials**

Materials (e.g., jury instructions) were based on a real case and instructions given in North Carolina (*State v. Daniels*, 1994) and included a summary of the trial (approximately 1,900 words), closing arguments for the defense and the prosecution, and judge’s instructions (See Appendices C, D and E, and F, respectively). These materials were similar to those used by Miller and Bornstein (2006) and Miller et al. (2013). Death qualification preceded the trial summary and consisted of two questions based on the *Witt* standard that assessed attitudes toward the death penalty and whether these would affect impartiality (see Appendix G). The defendant described in the trial summary was a documented Mexican immigrant, an undocumented Mexican immigrant, or a Caucasian American citizen; the summary included a picture of the defendant (see Appendix C for pictures). The case participants read contained either high aggravating circumstances (4 aggravators and 2 mitigators) or high mitigating circumstances (4 mitigators and 2 aggravators).

**Cognitive processing traits.** The Rational-Experiential Inventory (REI-10; Norris, Pacini, & Epstein, 1998) contains a ten-item scale with two subscales that can be scored for NFC and FI (i.e., processing trait; see Appendix A and Appendix M). Participants rated their agreement with certain statements (e.g., “I don’t like to do a lot of thinking”) on a Likert-scale (1= “Completely false; 7= “Completely true”). Scores on the five NFC questions were averaged to create the NFC scale (\(\alpha = 0.87\); scores on the five

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\(^5\) In the death qualified sample, 84% identified as Caucasian, 5% Hispanic, 6% African American, 7% Asian, and 1% Native American. Participants could identify with more than one racial/ethnic background.
FI questions were averaged to create the FI scale ($\alpha = 0.95$). Question scores were recoded as necessary for scale creation.

**Cognitive processing states.** Participants responded to two rational logic problems (adapted from Epstein et al., 1992) that indicated their current degree of rationality (i.e., processing state; see Appendix B and Appendix M). Participants read two vignettes that described scenarios in which two different individuals experience a negative outcome. The characters in the first scenario learn their investment would have performed better if their stock had been in different company; the characters in the second scenario are involved in a car accident when they attempt to exit their parking space. Participants were asked which character is more responsible (e.g., “Who do you think is more foolish?”) and indicated their choice on a scale from 1 (e.g., “Paul is more foolish”) to 9 (e.g., “George is more foolish”). The individuals in the vignettes are equally responsible, only differing in that one character acted and the other did not act (i.e., an act of commission vs. an act of omission, respectively). The outcomes experienced by the characters in the vignettes are arbitrary (i.e., not causally tied to the actions of, or lack thereof, the characters), and therefore the more rational the participants’ current state is, the closer their responses are to 5 (e.g., “Paul and George are equally responsible”). In contrast, experiential processing is associated with interpreting outcomes as causally related to stimuli preceding outcomes (Epstein, 2003, p. 27). Thus, an experiential processor would be more likely to find one character more responsible for the outcome. For example, although “Paul” and “George” would have equally fared better if their stocks had been in a different company, an experiential processor might deem “Paul” more foolish than “George” because “Paul” switched his
investment to a different company when he would have been better off keeping his
investment in the same company.

A cognitive processing state scale was created following the procedure used by
Miller (2006). First, participant responses to each question were scored: A response of 5
was coded as 0, a response of 4 or 6 was coded as 1, and so on. Scores on each question
were then averaged to create the rational logic problem scale. Thus, scores ranged from 0
to 4, with lower scores indicating a more rational processing state and high scores
indicating a less rational processing state.

**Endorsements of aggravators and mitigators.** Participants responded to the
instruction: “Please indicate the extent to which you agree that each of the following
aggravators are present,” and “Please indicate the extent to which you agree that each of
the following mitigators are present” using a 7-point Likert item (1=“Strongly Disagree”;
7=“Strongly Agree”). Each item had a statement that was an aggravator (e.g., “The
capital felony was especially heinous, atrocious, or cruel”; see Appendix H) or a
mitigator (e.g., “The defendant is a good candidate for successful psychological
rehabilitation”; see Appendix I). There were a total of 4 aggravator and 5 mitigator
items—because capital jurors are allowed to consider any evidence as a mitigating
circumstance, the fifth mitigator item was: “Any other circumstance arising from the
evidence which the jury deems to have mitigating value.” Scores on the aggravator items
were averaged to create a mean endorsement of aggravating circumstances scale (α =
0.60; see Appendix M). Similarly, scores on the 5 mitigator items were average to create
a mean endorsement of mitigating circumstances scale (α = 0.71; see Appendix M).
Weighing of aggravators and mitigators. Participants reported their belief that any mitigators present in the case outweighed any aggravators using one 7-point Likert item (1=“Mitigators absolutely DO NOT outweigh aggravators;” 7=“Mitigators absolutely DO outweigh aggravators”); see Appendix J and Appendix M).

Verdict. Participants indicated their verdict choice by responding to the question: “On a scale of 1 to 7, with 1 being “Very Certain in a ‘Death Penalty’ decision” and 7 being “Very Certain in a ‘Life Sentence Without the Possibility of Parole’ decision” how certain are you that your sentencing decision is appropriate?” (see Appendix J and Appendix M).

Results

To examine the hypotheses (see Appendix T for hypothesis table), aggravator endorsement, mitigator endorsement, weighing of mitigators relative to aggravators, and sentencing verdicts were regressed onto defendant type, case type, cognitive processing traits, and cognitive processing states in a linear regression model including main effects and interactions using SPSS’s GLM procedure (see Taylor, 2011, for overview). The hypothesized model was a classical general linear model (i.e., a form of the generalized linear model retaining conventional assumptions of normality, homogeneity of variance, and so on; see Nelder & Wedderburn, 1972; McCullagh & Nelder, 1989; Kéry, 2011, particularly p. 141-149; see also Neuhaus & McCulloch, 2011). A two-stage analysis procedure with $\alpha = .10$ was invoked. Contrary to convention, a two-stage analysis (i.e., $F’t’’$ in Bird & Hadzi-Pavlovic’s, 2014, notation) with $\alpha = .10$ “can signify much tighter control over type I errors than is provided by standard procedures with a nominal alpha
level of .05” (Bird & Hadzi-Pavlovic’s, 2014, p. 273; see also Hayter, 1986).  

Furthermore, and also contrary to convention, not all posthoc pairwise comparison procedures are contingent on a significant $F$-test (see Ramsey, 2002). Thus, with $\alpha = .10$—as opposed to the nominal $\alpha = .05$—there was potentially a reduced risk of type II errors.

Prior to data analysis, data were checked for assumptions using various indicators (e.g., skew, kurtosis) and plots (e.g., histograms, residual plots). Inspection of variable distributions revealed substantial skewness in rational logic problem scores, mean endorsement of mitigators, and verdict. Thus, transformations following procedures suggested by Tabachnick and Fidell (2007) and Howell (2007) were applied. Log transformations were applied to mean endorsement of mitigators and verdict, substantially reducing skew in both variables. A square root transformation was applied to rational logic problem scores and similarly reduced skewness. Cell sizes were also examined, and were deemed adequate with one notable exception: The lack of non-Caucasians in the sample resulted in multiple small cell counts (i.e., $ns < 10$). Cross-

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6 Bird and Hadzi-Pavlovic (2014) were referring to situations using MANOVA, but the logic applies to the current study. If the basis for requiring a significant omnibus $F$-test (as determined by a $p$-value exactly less than the nominal alpha level of .05) is to reduce type I errors, then analyses requiring a series of significance tests to examine the hypotheses are necessarily and progressively hindered—power incrementally decreases as the series of significant tests increases. There are methods that maintain power while addressing the risk of type I errors in circumstances of multiples significant tests. Shaffer’s (1986) method, for example, capitalizes on the logic that type 1 error changes when significant tests are conducted in a series. Compared to a procedure such as Bonferroni, Shaffer’s (1986) procedure results in a less strict $p$-value adjustment and increased power.

7 Prior to transformation, these three variables had absolute Skew values greater 5. Following transformations, absolute mitigator endorsement Skew was reduced to less than 1, and absolute verdict Skew was reduce to a value of 2.4.

8 The transformation to rational logic problem scores was not as successful as the other transformations. Prior to the transformation, the absolute Skew value was almost 9; following the transformation, Skew was reduced to 5. Thus, Skew was reduced, but was on the extreme margin of acceptability. This might be tied to the general issue of using rational logic problems as a measure of cognitive processing state—see discussion section below.
tabulation confirmed an association between juror type and case fact condition \( \chi^2(1) = 7.15, p < .01; \varphi = 0.14, p < .01 \). Although juror type was retained in the model, these unequal cell sizes inhibited meaningful interpretation of juror type effects. Thus, analyses including juror type are reported, but not interpreted.

Multivariate outlier analysis was performed using standardized residuals and (flexible) predetermined cutoffs for standard deviation, Cook’s D, and leverage (see Aiken & West, 1991, for procedural outline); no outliers were identified. Levene’s test indicated homogeneity of variance for mean endorsement of aggravators \( F(11, 361) = 0.59, p = .84 \), mean endorsement of mitigators \( F(11, 361) = 0.92, p = .53 \), weighing of mitigators relative to aggravators \( F(11, 361) = 1.65, p = .08 \), and verdict \( F(11, 361) = 0.74, p = .70 \). Finally, correlations between variables were examined (see Appendix N).

**Mean Endorsement of Aggravating Circumstances**

The overall hypothesized model accounted for 43% of the variation in aggravator endorsement \( F(20, 352) = 13.37, p < .001, \eta^2 = 0.43 \). Defendant type had a main effect on aggravator endorsement \( F(2, 352) = 5.13, p = .01, \eta^2_{\text{Partial}} = 0.03; \) hypothesis 1 supported), but this was qualified by an interaction with FI \( F(2, 352) = 2.98, p = .05, \eta^2_{\text{Partial}} = 0.02; \) hypothesis 10 supported). Similarly, case type had a main effect \( F(1, 352) = 4.15, p = .04, \eta^2_{\text{Partial}} = 0.01; \) hypothesis 2 supported) qualified by an interaction with NFC \( F(1, 352) = 4.67, p = .03, \eta^2_{\text{Partial}} = 0.01; \) hypothesis 12 supported). There were main effects of NFC \( F(1, 352) = 4.63, p = .03, \eta^2_{\text{Partial}} = 0.01; \) hypothesis 3 supported; see Appendix N) and FI \( F(1, 352) = 3.54, p = .06, \eta^2_{\text{Partial}} = 0.01; \) hypothesis 4 partially supported; see Appendix N), but these effects cannot be meaningfully interpreted in isolation due their significant interactions with defendant type and case
type.\(^9\) Juror type \((F(1, 352) = 0.93, p = .34, \eta^2_{\text{Partial}} = 0.003; \text{hypothesis 6 not supported})\) and cognitive processing state \((F(1, 352) = 1.27, p = .26, \eta^2_{\text{Partial}} = 0.004; \text{hypothesis 5 not supported})\) were not associated with aggravator endorsement. Case type did not interact with FI \((F(1, 352) = 1.07, p = .30, \eta^2_{\text{Partial}} = 0.003; \text{hypothesis 13 not supported})\) or cognitive processing state \((F(1, 352) = 0.99, p = .32, \eta^2_{\text{Partial}} = 0.003; \text{hypothesis 14 not supported})\). Defendant type did not interact with case type \((F(2, 352) = 0.31, p = .73, \eta^2_{\text{Partial}} = 0.002; \text{hypothesis 8 not supported})\), juror type \((F(2, 352) = 0.93, p = .40, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 7 not supported})\), NFC \((F(2, 352) = 1.22, p = .30, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 9 not supported})\), or cognitive processing state \((F(2, 352) = 0.74, p = .48, \eta^2_{\text{Partial}} = 0.004; \text{hypothesis 10 not supported})\).

To fully elucidate the nature of the interactions, posthoc pairwise comparisons were conducted using Bonferroni adjustments (Bird, 1975; Ramsey, 1980; see also, Bird & Hadzi-Pavlovic, 2014) for interactions with case type, and using Shaffer’s (1986) second sequentially rejective procedure for interactions with defendant type (see Rasmussen, 1993a). These posthoc tests were chosen because they are “unprotected” (i.e., do not require a significant \(F\) test),\(^10\) and in particular, Shaffer’s (1986) second procedure is essentially a modified Bonferroni procedure—used when there are 3 or more groups (e.g., defendant type)—that results in a stable type I error rate and increased power (Rasmussen, 1993b; see also Ramsey, 2002). Interactions were probed in two steps. First, levels of each categorical variable were compared with the continuous

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\(^9\) Although there is a way to examine main effects at average levels of all the other independent variables in the presence of interactions (see Cohen, Cohen, West, & Aiken, 2003, p. 261-262), the current study did not adopt this approach and instead focused on the interactions when they were significant (see also Warner, 2013).

\(^10\) Thus, even if one adheres to the conventional alpha level of .05, these tests are justified.
independent variable of interest set to one standard deviation above (e.g., “High NFC”) and below the mean (e.g., “Low NFC”) as suggested by Taylor (2011). Second, mean aggravator endorsement for high and low levels of the continuous independent variable were compared within each level of the categorical variable. For both methods, other continuous variables were treated as covariates and set to their mean value.

The first interaction probed was between NFC and case type (hypothesis 12 partially supported; see Appendix O). Participants in the high mitigator condition were less likely to endorse aggravating circumstances than participants in the high aggravator condition whether NFC was set to one standard deviation above the mean ($M_{Diff} = -1.26$, $p < .001$), or one standard deviation below the mean ($M_{Diff} = -1.68$, $p < .001$). High NFC participants did not differ from low NFC participants in the high mitigator condition ($M_{Diff} = 0.0$), but in the high aggravator condition, high NFC participants were more likely to endorse aggravators than low NFC participants ($M_{Diff} = 0.42$, $p < .001$). Thus, the interaction could not be interpreted as whether the main effect of case type is stronger for jurors high in NFC than jurors low in NFC (hypothesis 12). Instead, the interaction can be interpreted as the main effect of NFC on aggravator endorsement only occurs in cases of high aggravators.

The next interaction probed was between FI and defendant type (hypothesis 10 partially supported; see Appendix R). With FI set to one standard deviation below the mean, the documented Mexican immigrant condition had higher aggravator endorsement than the (U.S. born) Caucasian American condition ($M_{Diff} = 0.55$, $p = .01$) and the undocumented Mexican immigrant condition ($M_{Diff} = 0.60$, $p = .01$); the Caucasian American condition did not differ from the undocumented Mexican immigrant condition
(\(M_{\text{Diff}} = -0.09, p > .90\)). When FI was set to one standard deviation above the mean there were no differences between conditions (all \(ps > .99\)). Examined the other way, the interaction indicates high FI participants did not differ from low FI participants in the Caucasian American condition or the documented Mexican immigrant condition (both \(ps > .10\)), but High FI participants reported greater aggravator endorsement than low FI participants in the undocumented Mexican immigrant condition (\(M_{\text{Diff}} = 0.40, p = .02\)).

**Mean Endorsement of Mitigating Circumstances**

The omnibus test showed the model accounted for 15% of the variation in endorsement of mitigators (\(F(20, 352) = 3.01, p < .001, \eta^2 = 0.15\)). NFC (\(F(1, 352) = 6.90, p = .01, \eta^2_{\text{Partial}} = 0.02\); hypothesis 3 supported) and cognitive processing state (\(F(1, 352) = 4.0, p = .05, \eta^2_{\text{Partial}} = 0.01\); hypothesis 5 partially supported) were both positively associated with mitigator endorsement. More rational processing traits and states increased support for mitigators, but both correlations at the bivariate level were relatively weak (see Appendix N), especially the correlation between cognitive processing state and mitigator endorsement. Defendant type (\(F(2, 352) = 1.37, p = .26, \eta^2_{\text{Partial}} = 0.01\); hypothesis 1 not supported), case type (\(F(1, 352) = 0.26, p = .61, \eta^2_{\text{Partial}} = 0.001\); hypothesis 2 not supported), juror type (\(F(1, 352) = 0.10, p = .32, \eta^2_{\text{Partial}} = 0.003\); hypothesis 6 not supported), and FI (\(F(1, 352) = 2.70, p = .10, \eta^2_{\text{Partial}} = 0.01\); hypothesis 4 not supported) were unrelated to mitigator endorsement. Moreover, defendant type did not interact with case type (\(F(2, 352) = 0.37, p = .69, \eta^2_{\text{Partial}} = 0.002\); hypothesis 8 not supported), juror type (\(F(2, 352) = 1.68, p = .19, \eta^2_{\text{Partial}} = 0.01\); hypothesis 7 not supported), NFC (\(F(2, 352) = 1.33, p = .27, \eta^2_{\text{Partial}} = 0.01\); hypothesis 9 not supported), FI (\(F(2, 352) = 0.88, p = .42, \eta^2_{\text{Partial}} = 0.01\); hypothesis 10 not supported), or processing
state \( F(2, 352) = 0.83, p = .44, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 11 not supported). Case type did not interact with NFC \( F(1, 352) = 1.69, p = .20, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 12 not supported), FI \( F(1, 352) = 0.27, p = .61, \eta^2_{\text{Partial}} = 0.001 \); hypothesis 13 not supported), or processing state \( F(1, 352) = 0.31, p = .58, \eta^2_{\text{Partial}} = 0.001 \); hypothesis 14 not supported).

Weighing of Mitigating Circumstances Relative to Aggravating Circumstances

The overall model accounted for 15% of the variation in how participants reported weighing mitigators relative to aggravators \( F(20, 352) = 3.08, p < .001, \eta^2 = 0.15 \).

Juror type was associated with weighing \( F(1, 352) = 5.83, p = .02, \eta^2_{\text{Partial}} = 0.02 \); hypothesis 20 supported). There was no direct influence of case type \( F(1, 352) = 1.62, p = .20, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 16 not supported), defendant type \( F(2, 352) = 2.10, p = .12, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 15 not supported), NFC \( F(1, 352) = 0.01, p = .92, \eta^2_{\text{Partial}} = 0.0 \); hypothesis 17 not supported), FI \( F(1, 352) = 0.10, p = .32, \eta^2_{\text{Partial}} = 0.003 \); hypothesis 18 not supported), or cognitive processing state \( F(1, 352) = 1.0, p = .32, \eta^2_{\text{Partial}} = 0.003 \); hypothesis 19 not supported). Defendant type did not interact with case type \( F(2, 352) = 0.11, p = .90, \eta^2_{\text{Partial}} = 0.001 \); hypothesis 22 not supported), juror type \( F(2, 352) = 0.52, p = .59, \eta^2_{\text{Partial}} = 0.003 \); hypothesis 21 not supported), NFC \( F(2, 352) = 1.36, p = .26, \eta^2_{\text{Partial}} = 0.01 \) hypothesis 23 not supported), FI \( F(2, 352) = 0.15, p = .87, \eta^2_{\text{Partial}} = 0.001 \); hypothesis 24 not supported), or cognitive processing state \( F(2, 352) = 1.15, p = .32, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 25 not supported). Case type marginally\(^1\) interacted with FI \( F(1, 352) = 3.29, p = .07, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 27 partially supported) and NFC \( F(1, 352) = 3.04, p = .08, \eta^2_{\text{Partial}} = 0.01 \); hypothesis 26 partially.

\(^1\) The term “marginal” will be used to describe significance tests with resulting \( p\)-values greater than the conventional alpha level of .05, but less than .10.
supported), but did not interact with cognitive processing state \((F(1, 352) = 0.15, p = .70, \eta^2_{\text{Partial}} = 0.0; \text{hypothesis 28 not supported}).\)

Posthoc probing of interactions was conducted with the same procedure implemented for mean aggressor endorsement. For hypothesis 26, when NFC was set to one standard deviation below the mean, jurors in the high mitigator condition were more likely report mitigators as outweighing aggravators than the high aggravator condition \((M_{\text{Diff}} = 0.93, p = .001)\). When NFC was set to one stand deviation above the mean, a slightly larger difference occurred \((M_{\text{Diff}} = 1.58, p < .001)\). The interaction was not significant when interpreted the other way: High NFC and low NFC participants did not differ significantly in the high mitigator condition \((M_{\text{Diff}} = 1.55, p > .10)\) or the high aggravator condition \((M_{\text{Diff}} = 1.59, p > .10; \text{see Appendix P}).\)

Next, the interaction between FI and case type was probed (hypothesis 27). This marginal interaction was not interpretable as significant either way. The high mitigator condition was more likely to report mitigators as outweighing aggravators compared to the high aggravator condition whether FI was set to one standard deviation above the mean \((M_{\text{Diff}} = 0.27, p = .002)\) or one standard deviation below the mean \((M_{\text{Diff}} = 0.52, p < .001)\). Further, high FI and low FI participants did not differ significantly in the high mitigator condition \((M_{\text{Diff}} = 0.13, p > .10)\) or the high aggravator condition \((M_{\text{Diff}} = 0.12, p > .10)\).

**Sentencing Verdict**

The hypothesized model only marginally accounted for 8% of the variation in sentencing verdicts \((F(20, 352) = 1.47, p = .09, \eta^2 = 0.08)\). There was no direct effect of defendant type \((F(2, 352) = 0.26, p = .77, \eta^2_{\text{Partial}} = 0.001; \text{hypothesis 29 not supported})\),
case type \((F(1, 352) = 0.31, p = .58, \eta^2_{\text{Partial}} = 0.001; \text{hypothesis 30 not supported})\), juror type \((F(1, 352) = 0.02, p = .89, \eta^2_{\text{Partial}} = 0.0; \text{hypothesis 34 not supported})\), NFC \((F(1, 352) = 0.26, p = .61, \eta^2_{\text{Partial}} = 0.001; \text{hypothesis 31 not supported})\), FI \((F(1, 352) = 1.11, p = .29, \eta^2_{\text{Partial}} = 0.003; \text{hypothesis 32 not supported})\), or cognitive processing state \((F(1, 352) = 0.06, p = .81, \eta^2_{\text{Partial}} = 0.0; \text{hypothesis 33 not supported})\). There was a marginal interaction between defendant type and FI \((F(2, 352) = 2.62, p = .07, \eta^2_{\text{Partial}} = 0.02; \text{hypothesis 38 supported but with caveats})\), and a significant interaction between case type and NFC \((F(1, 352) = 4.19, p = .04, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 40 supported but with caveats})\). Defendant type did not interact with case type \((F(2, 352) = 1.74, p = .18, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 36 not supported})\), juror type \((F(2, 352) = 1.19, p = .31, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 35 not supported})\), NFC \((F(2, 352) = 0.13, p = .88, \eta^2_{\text{Partial}} = 0.001; \text{hypothesis 37 not supported})\), or cognitive processing state \((F(2, 352) = 1.09, p = .34, \eta^2_{\text{Partial}} = 0.01; \text{hypothesis 39 not supported})\). Case type did not interact with FI \((F(1, 352) = 0.0, p = .98, \eta^2_{\text{Partial}} = 0.0; \text{hypothesis 41 not supported})\) or cognitive processing state \((F(1, 352) = 0.15, p = .70, \eta^2_{\text{Partial}} = 0.0; \text{hypothesis 42 not supported})\).

Again, posthoc probing followed the same procedure previously outlined for mean endorsement of aggravators. When NFC was set to one standard deviation below the mean, the case type conditions did not differ \((M_{\text{Diff}} = 0.02, p = .63)\). When NFC was set to one standard deviation above the mean the high aggravator condition was more likely to give a death penalty verdict than the high mitigator condition \((M_{\text{Diff}} = 0.14, p = .001)\). Examined the other way, high NFC participants reported more support for a life sentence compared to low NFC participants in the high mitigator condition \((M_{\text{Diff}} = 0.08,
Conversely, high NFC participants did not differ from low NFC participants in the high aggravator condition \( (M_{\text{Diff}} = -0.05, p > .20; \text{see Appendix Q}) \).

Finally, when FI was set to one standard deviation below the mean, defendant conditions did not differ (all \( ps > .99 \)). When FI was set to one standard deviation above the mean, the undocumented Mexican immigrant was more likely to receive a death penalty verdict than the documented Mexican immigrant \( (M_{\text{Diff}} = 0.15, p = .02) \) and the Caucasian American citizen \( (M_{\text{Diff}} = 0.14, p = .05) \). The documented Mexican immigrant and the Caucasian American were not significantly different \( (M_{\text{Diff}} = 0.02, p > .99) \).

When examined the other way, low FI participants did not differ from high FI participants in the Caucasian American condition or undocumented Mexican immigrant condition \( (M_{\text{Diff}} = 0.06, ps > .20) \). In the documented Mexican immigrant condition, low FI participants were marginally more likely to render a death penalty verdict than high FI participants \( (M_{\text{Diff}} = 0.10, p = .06; \text{see Appendix S}) \).

**Discussion**

Latinos are the fastest growing population in the U.S. \( (\text{U.S. Census Bureau, 2013}) \), and thus presumably, Latinos will be increasingly represented in the legal system. If jurors are biased toward Latino immigrant defendants, their constitutional right to a fair trial may be threatened. The primary purpose of the current study was to investigate the extent to which defendant type (i.e., the immigration status/ethnicity of the defendant) related to mock jurors’ ability to evaluate and properly weigh aggravators and mitigators and reach an appropriate sentencing verdict. Of additional interest was the role of individuals’ cognitive processing traits and states in the legal decision-making process. These processing traits and states were hypothesized to have independent effects, as well
as interactions with defendant type and case type to interfere with proper weighing, thus resulting in disparate sentencing verdicts. Overall, results offer mixed support for the hypotheses.

**Prejudice**

Results suggest documented Latino immigrants fall within the normative window of prejudice, whereas undocumented Latino immigrants fall within the “unsuppressed prejudice” group (see Crandall et al., 2013)—though with some important caveats. Most critically, the effect of defendant type cannot be disentangled from experiential processing in the current project. Posthoc comparisons of the interaction between defendant type and the tendency to process information experientially yielded two key results: Bias toward the documented Mexican immigrant defendant and bias toward the undocumented Mexican immigrant defendant. The former occurred when comparing the main effect of defendant type on aggravator endorsement for jurors low in experiential processing, but not when comparing defendant conditions for participants high in experiential processing. The latter was noted when comparing the main effect of defendant type on sentencing verdicts for jurors high in experiential processing, but not when comparing defendant conditions for participants low in experiential processing. Of the participants who read a trial summary including an undocumented Mexican immigrant, high experiential processors were more likely to endorse aggravating circumstances compared to low experiential processors. In contrast, of the participants who read a trial summary including a documented immigrant defendant, low experiential processors were marginally more likely to render a death penalty verdict than high experiential processors. Results did not suggest jurors expressed bias toward Mexican
immigrant defendants in mitigator endorsement or their reported weighing of mitigators and aggravators. These results relating to bias against Mexican defendants should therefore be taken with caution as they are not particularly robust (and are qualified by an interaction with experiential processing traits).

The finding that participants expressed bias toward documented Mexican immigrants in aggravator endorsement but did not strongly exhibit a similar pattern in sentencing verdicts suggests they fall within the normative window of prejudice (i.e., the normative acceptability of prejudice expressed toward them is ambiguous), as indicated by Crandall et al. (2013). Although the experience of prejudice is automatic, people are motivated to not appear prejudiced (Crandall et al., 2002; Crandall & Eschleman, 2003; Crandall and Warner, 2005). When the norms are ambiguous as to whether prejudice is acceptable, prejudice will only be expressed in subtle ways to avoid the risk the appearing prejudiced (Crandall et al., 2002). Rendering a death penalty verdict might indicate overt bias, but endorsing aggravating circumstances might be a more subtle expression of bias. Thus, bias was expressed toward the undocumented Mexican immigrants in sentencing verdicts because it is normatively acceptable to express prejudice toward them (Crandall et al. 2013), whereas bias was expressed toward the documented Mexican immigrants only in aggravator endorsement because norms regulating the expression of bias toward them are ambiguous.

This conclusion is somewhat obfuscated when also considering the differences between jurors high in experiential processing and jurors low in experiential processing. Jurors who were low in experiential processing traits, in particular, were not expected to express bias toward a documented Mexican immigrant in aggravator endorsement or
sentencing verdicts. The general pattern of results (see Appendix R and Appendix S, for graphs) suggests jurors low in experiential processing were punitive toward the documented Mexican immigrant in aggravator endorsement but treated the undocumented Mexican immigrant and Caucasian American similarly. Conversely, jurors high in experiential processing traits treated the defendants similarly, with exception of a slight bias toward undocumented Mexican immigrants. Then, in sentencing verdicts, the trends switch: Jurors high in experiential processing traits were punitive to one defendant (i.e., the undocumented Mexican immigrant) and treated the other two defendants somewhat similarly; jurors low in experiential processing traits treated all of the defendants similarly, with the exception of slight bias toward the documented Mexican immigrant.

Notably, the key factor appears to be the legal status of the Mexican immigrant (i.e., documented or undocumented). The experiential system relies on heuristics (Epstein, 1990), which could include stereotypes concerning undocumented Mexican immigrants. The global-evaluation heuristic, for example, refers to the tendency to holistically evaluate people as good or bad, and is fundamental to the experiential processing system (Epstein, 2003, p. 32). In this framework, jurors who tend to invoke the experiential system are more susceptible to bias: In judging a defendant as “good” or “bad,” extralegal characteristics (e.g., defendant attractiveness; Gunnell & Ceci, 2010) influence experiential processors’ overall evaluation of the defendant. When presented with an undocumented Mexican immigrant defendant, experiential processors might have relied on the stereotype of undocumented Mexican immigrants as criminals, and therefore deemed an undocumented Mexican immigrant as more deserving of the death penalty
compared to a Caucasian American defendant or documented Mexican immigrant
defendant. Further, high experiential processors might have perceived the stereotype of
undocumented Mexican immigrants justified simply because the undocumented Mexican
immigrant was a defendant in a trial, and/or because the undocumented Mexican
immigrant had already been convicted of murder. In other words, the stereotype might
have been reinforced by the legal circumstances of the defendant, thus leading to an
overall negative evaluation of the undocumented Mexican immigrant defendant (i.e., a
global-evaluation resulting in a judgment of the defendant as “bad;” see Epstein, 2003).

Although jurors low in experiential processing traits expressed bias, the route by
which they expressed bias might have been different than jurors high in experiential
processing traits (e.g., they did not rely on heuristics). Crandall and Eschleman (2003)
argue prejudices can be irrational or rational—the underlying processes leading to
prejudice are essentially the same (see p. 414). Thus, jurors low in experiential
processing traits might have had a similar underlying experience of prejudice jurors high
in experiential processing traits had but followed a different route by which to express
their bias. For example, jurors low in experiential processing traits might have viewed a
case with a documented Mexican immigrant as more aggravating because of the
defendant’s legal status. The defendant was legally integrated into the U.S. and
subsequently violated a serious societal norm (i.e., committed murder), perhaps making
them more culpable than an undocumented Mexican immigrant. Because norms
regulating the expression of prejudice toward a documented Mexican immigrant are
ambiguous, jurors low in experiential processing more strongly expressed bias in
agravator endorsement and not sentencing verdicts. This tentative conclusion, at the
very least, emphasizes the complexity and nuances of social psychological variables in a legal context. Given certain contexts and case conditions, jurors’ cognitive processing might influence decisions in unexpected ways. For instance, individuals high in rational processing traits are typically less punitive (e.g., see Miller et al., 2013; Sargent, 2004; Tam et al., 2008), but this does not preclude them from exhibiting bias. Jurors high in rational processing traits, when presented with inadmissible evidence and then instructed by a judge to disregard it, were unexpectedly found to “over-correct” and actually yield slightly more punitive verdicts (see Sommers & Kassin, 2001).

Despite these noteworthy findings, results did not show a bias toward the documented or undocumented Mexican immigrant defendant in the other dependent variables: Mitigator endorsement or weighing. Similarly, and contrary to predictions, defendant type did not interact with case type, juror type, rational processing traits, or cognitive processing state to account for variation in any of the dependent variables. One possible reason for this is the presence of 3- or 4-way interactions outside of the present study’s scope. For example, perhaps processing state did influence the dependent variables, but only for certain defendant conditions and case conditions. Future research with a larger sample size is necessary to fully examine these potential interactions due to the power limitations in the current study.

In addition, the current study did not allow for a robust examination of intergroup bias. The vast majority of participants were Caucasian and at minimum 3rd-generation immigrants. Although juror type appeared to have a main effect on weighing, the unequal cell sizes due to the lack of non-Caucasians inhibited meaningful interpretation. Thus, future research in this area will likely require specific sampling of participants
based on ethnicity and/or ancestral immigration. In particular, future studies would benefit from substantial recruitment of Latinos with ranging immigrant status—that is, first-generation immigrants, second-generation immigrants, and so on. Another point of research interest is interaction effects between immigration status and other variables. For example, religious identity might interact with immigration status to affect defendant outcomes in a trial. Further investigation of the relationships between immigration and other pertinent variables will contribute to a deeper understanding of how immigration is related to the legal system.

**Cognitive Processing**

Apart from their interactions with defendant type, results mostly comported with past literature on the relationship between jurors’ cognitive processing and legal decisions (e.g., see Gunnell & Ceci, 2010; Krauss et al., 2004; Lieberman et al., 2007; Miller, 2006; Miller et al., 2013). However, there were also some findings—or lack thereof—that challenge previous literature and have implications for future study.

**Cognitive processing and aggravators and mitigators.** Results generally suggest that participants with high NFC were more likely to properly weigh aggravating and mitigating circumstances than participants with low NFC. This is evident in three different results. First, “Proper” weighing, in this context, was operationalized as verdicts congruent with case type—that is, participants who read a trial summary with more mitigators than aggravators should have been more likely to render a life sentence, and vice versa when there were more aggravators than mitigators in the trial summary. Based on posthoc comparisons, case type influenced verdicts for high NFC, but not for low NFC participants. This effect is the strongest evidence in that high NFC participants
are better able to understand aggravators and mitigators and apply them appropriately;¹² two other analyses more subtly demonstrate this.

First, case type interacted with NFC to also influence aggravator endorsement. The two step approach applied in the current study to posthoc comparisons was used to robustly examine interactions between categorical and continuous variables. Posthoc probing of the interaction between NFC and case type on aggravator endorsement exemplified how the results of each step frequently had different implications in light of results from the other step. The first step (i.e., comparing the effect of case type at high and low levels of NFC) seemingly illustrated a direct effect of case type that was more-or-less augmented for high NFC participants. When examining the interaction the second way (i.e., within each case type condition), differences between high and low NFC participants only occurred in the high aggravator condition: High NFC participants were more likely to endorse aggravators than low NFC participants. Thus, on one hand these results offer further support for the notion that increased rational processing traits are associated with greater sensitivity to the aggravators and mitigators present in a case. On the other hand, high NFC jurors were not less likely to endorse aggravating circumstances when there were high mitigators in the case compared to low NFC jurors as was hypothesized. Taken collectively, the results from both interpretations of the

¹² This has an important caveat: The univariate model for verdicts had a relatively small effect size (i.e., 8%) and the omnibus test of the model was marginal (this is a caveat for the defendant type by experiential processing interaction as well). This requires a brief tangential discussion. For some, and seemingly as a matter of convention, an F-test with a p-value greater than or equal to .05 is grounds for a halt and necessarily rules further statistical examination essentially meaningless and “unpublishable” (e.g., Warner, 2013). Although there is evidence to suggest protected comparisons tests tend to have greater power (e.g., see Ramsey, 2002), their use is more a matter of convention than statistical or theoretical necessity (Ramsey, 1980, 2002; Ramsey & Ramsey, 2008; Bird & Hadzi-Pavlovic, 2014). As Ramsey (2002) points out, the power advantage sometimes found, for example, in using Tukey HSD procedure, is “completely lost when applied in [a] protected manner” (p. 507; see also Ramsey, 1978, 1981).
interaction suggest case type conditioned the influence of NFC on aggravator endorsement: High NFC jurors might only be slightly more sensitive to the aggravators—but not mitigators—present in a case compared to low NFC jurors.

Furthermore, NFC and case type did not interact to influence mitigator endorsement. Instead, NFC had an independent, positive effect: Jurors higher in NFC were more likely to endorse mitigators than jurors lower in NFC whether there were more aggravators or mitigators present in the case. Thus, it may be that high NFC jurors generally display less punitive decisions that low NFC jurors (see Miller et al., 2013), but can be more punitive when there are more aggravators than mitigators present in a case; this is because they are better at accurately weighing aggravators and mitigators.

Second, posthoc probing of the interaction between NFC and case type on reported weighing of mitigators and aggravators also suggests high NFC jurors were more accurate at weighing mitigators and aggravators. Although high and low NFC jurors did not differ in their reported weighing when comparing them within each case type condition, the strength of the case type effect was larger for high NFC jurors than for low NFC jurors. This would suggest NFC conditioned the influence of case type on the weighing of aggravators and mitigators. This distinction is important because case type appeared to condition the influence of NFC on aggravator endorsement. Again, jurors high in NFC seem to be less punitive overall than jurors low in NFC, but they can be punitive when there are more aggravators than mitigators in a case. There was some evidence to indicate an interaction between case type and FI, but results only loosely suggest increased experiential processing traits decreased the impact of case type on reported weighing of mitigators relative to aggravators. Overall, rational processing
conditioned the influence of case type, whereas experiential processing conditioned the influence of defendant type. In addition, participants in a more rational processing state were marginally more likely to endorse mitigators than participants in a less rational processing state. This relationship was not particularly strong, but at least was a partial replication of Miller et al. (2013). Perhaps by manipulating processing state (e.g., see Lieberman, 2002), as opposed to measuring it, the influence of cognitive process states on jurors’ use of evidence and sentencing verdicts in cases involving Mexican immigrant defendants can be more robustly examined.

**Comparisons of NFC, FI, and rational logic problems.** NFC and FI are measures of cognitive processing traits, whereas rational logic problems are measures of cognitive processing states. NFC and FI measure the tendency to use the rational or experiential system across time, respectively (Epstein et al., 1996). Conversely, rational logic problems measure the tendency to use the rational system at a given point in time.

In the current study, cognitive processing traits were much more influential than cognitive processing states, but this could also be due to the unreliability of the rational logic problems. Previous studies have used these logic problems and found effects (see Miller, 2006; Miller et al., 2013), but the current study only found one marginal effect of cognitive processing states: Jurors in more rational processing states were more likely to endorse mitigators than jurors in less rational processing states. Replication of this study using an experimental manipulation to influence processing state along with a measure of processing state (e.g., rational logic problems) could be a promising route by which to find whether null findings are in fact due to measure reliability.
Results from this study revealed unique effects of NFC and FI, which suggests they are in fact independent information processing systems (Epstein, 1990). NFC interacted with case type to influence aggravator endorsement, weighing of mitigators and aggravators, and sentencing verdicts. NFC was related to proper weighing of mitigators and aggravators, but FI did not have an inverse effect—jurors low in FI were not better able to accurately weigh aggravators and mitigators compared to jurors high in FI. Indeed, this could support the distinct nature of the experiential system and the rational system (Epstein, 1990). Specifically, NFC and FI are not polar ends of the same construct, but instead are independent constructs that work independently. This was further illustrated by the interaction between FI and defendant type, but no interaction between NFC and defendant type. Jurors high in NFC were thus most influenced by the aggravators and mitigators present in a case in determining their verdict, but jurors high in FI were most influenced by the defendant characteristics in determining their verdict. Overall, this matches much of the literature on the effects of rational and experiential processing (e.g., see Gunnell & Ceci, 2010; Krauss et al., 2004; Lieberman et al., 2007; Miller, 2006).

**Processing and punitiveness.** More generally, results somewhat comport with past findings concerning cognitive processing and punitiveness (Miller 2006; Miller et al., 2013; Sargent 2004; Tam et al., 2008) in several ways. First, there was a main effect of NFC on endorsement of mitigators, such that increases in rational processing traits were associated with increases in mitigator endorsement. Second, high NFC jurors were more likely to render a life sentence compared to low NFC jurors, but only when there were more mitigators than aggravators in the case. Third, there was a main effect of
cognitive processing state on mitigator endorsement, such that more rational processing states were positively associated with mitigator endorsement. Finally, high FI jurors were more likely to render a death penalty verdict, but only when the defendant was an undocumented Mexican immigrant.

In Miller et al.’s (2013) study, NFC was negatively related to death penalty verdicts, and FI and less rational processing states were positively related to death penalty verdicts. Thus, the current study partially replicates these findings, but suggests the general links between cognitive processing and punitiveness are nuanced in several ways. First, NFC does seem to be negatively related to punitiveness (e.g., NFC was positively related to mitigator endorsement), but high NFC jurors were arguably more punitive than low NFC jurors in aggravator endorsement. When there were more aggravators than mitigators in the case, high NFC jurors were more likely to endorse aggravators than low NFC jurors; when there were more mitigators than aggravators in the case, high NFC jurors endorsed aggravators similarly to low NFC jurors. High NFC jurors might be less punitive in general, but more punitive in some circumstances, perhaps in part because they are better at following legal instructions (see Sommers & Kassin, 2001). Second, the current study did replicate Miller et al.’s (2013) association between FI and death penalty verdicts, but only when the defendant was an undocumented Mexican immigrant. This suggests high FI jurors might not be more punitive than low FI jurors. In fact, low FI jurors were more punitive toward a documented Mexican immigrant in their sentencing verdicts than high FI jurors. Overall, the findings concerning NFC and FI illustrate a critical point: The influences of cognitive processing traits are at least in part contingent on defendant and case characteristics.
Third, the current study failed to replicate Miller et al.’s (2013) association between cognitive processing states and death penalty verdicts. There was evidence that less rational processing states were associated with punitiveness: Jurors in less rational processing states were less likely to endorse mitigators than jurors in a more rational processing state. The lack of complete replication of Miller et al. (2013) could be because the rational logic problems were not adequate measures of cognitive processing state for this study’s sample and method. Whereas Miller et al. (2013) recruited local community members and had them complete the rational logic problems in person and in a group setting with printed materials, the current study recruited participants via Amazon’s Mechanical Turk and had them complete the rational logic problems individually using an online survey. These differences, at least in part, might have contributed to the differences in results between this study and Miller et al (2013).

Conversely, cognitive processing state could have interacted with two or more other variables to influence sentencing verdicts. For instance, jurors in less rational states might have been more likely to give the death penalty when the defendant was a Mexican immigrant and there were more aggravators than mitigators in the case. Future research can examine these potential interactions and/or examine the influence of cognitive processing state by experimentally manipulating the processing state jurors are in.

**Implications for the Criminal Justice System**

Results from the current study offer preliminary support for the notion that documented Mexican immigrants fall into the normative window category, whereas undocumented Mexican immigrants fall within the unsuppressed prejudice category. Importantly, the overall model accounted for the most variation in mean endorsement of
aggravating circumstances (i.e., over 40%) and accounted least for variation in sentencing verdicts (i.e., less than 10%). This might imply the influence of defendant type, case type, and individual differences on verdicts is negligible and of minor import. Even if this is the case, the influence of the variables on aggravator endorsement could indirectly influence death penalty verdicts. The Supreme Court has repeatedly stressed that jurors—not judges—must be the legal actors who explicitly deem aggravating evidence sufficient to seek the death penalty in a particular case (Ring v. Arizona, 2002; Hurst v. Florida, 2016). Given certain conditions (e.g., a documented Mexican immigrant), jurors might be more likely to perceive aggravating evidence, and thus be more likely deem aggravating evidence sufficient for a death penalty.

On a practical level, this project has implications for attorneys, especially capital attorneys, and voir dire. The cognitive processing traits of death qualified capital jurors, defendant immigration status/ethnicity, and case type interact to account for a substantial amount of variation in aggravator endorsement, which in turn likely influences weighing and verdicts. First, as some have suggested (see Krauss, Lieberman, & Olson, 2004), attorneys might attempt to capitalize on prospective jurors’ individual differences given particular case characteristics—put crudely, a “stacking the deck” approach (see also Lieberman, 2011). Rational processors might be expected to more appropriately weigh mitigators and aggravators, whereas experiential processors might be expected to be sensitive to defendant characteristics. Second, defense attorneys representing Latinos, particularly Latino immigrants, might anticipate bias from a death-qualified jury—at least for jurors possessing certain processing traits, and perhaps of certain ethnicities (e.g., Caucasian/European Americans; Espinoza & Willis-Esqueda, 2014; Willis-Esqueda et
al., 2008). The bias toward Latino immigrants found in the current study might be particularly pertinent to Southwestern states in which immigration is perceived as problematic (see Capps, 2010) and that use the death penalty (e.g., Texas). This bias might be ameliorated via legal procedures (e.g., deliberation, judicial instructions, and attorney arguments), which further research could identify and test.

Legal instructions could be modified in a way to potentially minimize bias in cases in which the defendant is an immigrant. For example, jurors could be explicitly told a defendant’s immigration status may not be considered an aggravating factor. This might not entirely erase bias, though. The simplest solution to reducing bias in the capital punishment process is to eliminate the use of the death penalty. If more state legislators vote to ban the death penalty (most recently in Nebraska), the death penalty might eventually stop being invoked as an optional punishment across the U.S. and at the federal level. If the death penalty remains, there is at least some evidence from the current study to suggest jurors appropriately weigh aggravators and mitigators—but only jurors high in rational processing traits. Because rational processing traits cannot be manipulated, perhaps sentencing verdicts could be modified so that jurors can express their intuitions without it influencing the punishment. Robinson and Cahill (2006) allude to a two-part verdict: One to express punishment and one to express blameworthiness. They argue a two-part verdict could indicate that a defendant is legally not punishable, but blameworthy (Robinson & Cahill, 2006). A general investigation of a two-part verdict is first required; and further, a two-part verdict might only reduce bias expressed by jurors who are more likely to rely on their intuitions (i.e., jurors high in FI). Thus, this solution is tentative (at best) but could be a promising area for future investigation.
Limitations and Future Directions

Simulated trials are often used when conducting research with mock jurors. Simulated trials do not fully capture the experience a juror would have during a real trial (e.g., trial duration, materials presented, the presence of the defendant in the courtroom, jurors being held accountable for their decisions). There are certain limitations and validity concerns that accompany mock jury research. First, participants were not really partaking in a trial (i.e., the study lacks verisimilitude) and thus external validity is low. Although participants read materials based on a real trial, they were not participating in a live trial in a courtroom. In a similar vein, construct validity might be threatened because the written trial summary might not have captured and measured the same decision-making processes that occurs for jurors in a real trial. Second, participants might not have treated the trial seriously or responded in the same way they would have in a real-life scenario; mock jurors’ decisions have no real consequences (i.e., consequentiality; Bornstein & McCabe, 2005). Due to this, the processes by which they analyze presented information might be different from jurors participating in a real trial, therefore resulting in different verdicts (Bornstein & McCabe, 2005). Past research is inconclusive about the effects of consequentiality on jurors’ verdicts, with some studies finding increased punitiveness when decisions had real consequences, while others found decreased punitiveness or no difference (Bornstein & McCabe, 2005). If simulated and real trial findings are not comparable, the conclusions drawn from the results of this study might only generalize to similar situations, such as mock trials, and not to real juries (Vidmar, 2008).
Furthermore, individual decision-making might differ from group decision-making (e.g., see Baddeley & Parkinson, 2012; Miller, Maskaly, Green, & Peoples, 2011; Peoples, Sigillo, Green, & Miller, 2012). In the current study, participants indicated their individual verdicts—that is, they did not deliberate with other jurors and reach a group decision. Individuals are affected by group influences; thus, jurors are likely to modify their opinions in the presence of others (i.e., other members of a jury). As Peoples et al. (2012) have suggested, individuals’ verdicts and opinions likely become more polarized after a group discussion. Moreover, a variety of individual differences and case characteristics relate to the chances that an individual juror will conform their decision to others’ decisions in deliberation (see Baddeley & Parkinson, 2012; Eisenberg et al., 2001; Lynch & Haney, 2011, 2015; Miller et al., 2011; Peoples et al., 2012). Thus, the verdict reached in a real-world context might differ from what an individual, on their own, might render as a verdict. Consequently, this limits the generalizability and the external validity of the study because, in the real world, jurors will always participate in deliberation to reach a verdict, whereas the current study only measures individual decisions without deliberation.

There are multiple ways future research could address the limitations of the current study. Most simply, this study could be replicated with the addition of a deliberation component. This would allow for the examination and comparison of individual- and group-level decisions. Replicating the current study with a mock trial video instead of a written trial summary might be a way to increase validity, or at least be used as a point of reference for assessing the current study’s validity. The issue of consequentiality in simulated death penalty trials might be more difficult to address.
Some authors have proposed routes by which to address the issue of consequentiality in mock jury research (e.g., see Cahoy & Ding, 2006), but this has not been directed specifically toward mock capital jury research. Using Cahoy and Ding’s (2006) theoretical framework, a future study could modify jury instructions to include a brief statement about the social utility of the death penalty. If jurors are made to reflect on death penalty verdicts and what they mean for the defendant, the victim, and society, they may be more incentivized to render an appropriate verdict. In this way, mock juror decision-making might more closely resemble real-world juror decision-making.

Future research is needed to fully examine the treatment of documented and undocumented Mexican immigrant defendants. Some studies have found jurors are equally biased toward a documented or undocumented Mexican immigrant (Alvarez & Miller, 2014), whereas others have found jurors are more punitive to undocumented Mexican immigrants than documented Mexican immigrants (Espinoza et al., 2015). In the current study, bias toward documented and undocumented Mexican immigrants was noted, but the expressions of bias appeared tied to social norms regulating the acceptance of prejudice. Based on the results of the current study, documented Mexican immigrants fall within the normative window of prejudice, but undocumented Mexican immigrants are in the unsuppressed prejudice category (see Crandall et al., 2002; Crandall et al., 2013). Future study could more robustly examine these categorical placements by replicating the current study with an additional defendant condition: A U.S. born Mexican American. This would potentially highlight the role of immigration status in jurors’ treatment of Mexican defendants, which seems to be a critical factor based on the results of this study.
On a basic level, future studies could examine bias toward Mexican immigrants in other types of cases. The current study simulated the penalty phase of death penalty trial, and thus the effects might not carry over to other types of cases—or perhaps even the guilt phase of a death penalty trial. Furthermore, it would be interesting to replicate the current study with only participants in Southwestern border states. Immigration might be a more salient issue in these states, and therefore jurors in these states might treat Mexican immigrant defendants differently than jurors in other states (e.g., Northeastern states). Relatedly, replication of this study using a sample with more 1st and/or 2nd generation immigrants, particularly Mexican immigrants, would shed light on potential intergroup bias effects based on ethnicity/immigration status. On a broad scale, it would be interesting to examine how bias toward Mexican immigrants permeates other legal decisions. For example, police officers might be more or less likely to arrest a documented Mexican immigrant compared to an undocumented Mexican immigrant—and this could also vary by jurisdiction location (e.g., police officers in Arizona compared to police officers in Michigan).

Finally, underlying the current paper is the assumption that Mexicans are representative of Latinos, which might limit this study’s generalizability. Mexicans are the largest Latino group in the U.S. (Espinoza & Willis-Esqueda, 2014; Pew Research Center, 2015), but future research is needed to examine the extent to which Mexican immigrant defendants are representative of all Latino immigrant defendants. This study, along with others (e.g., Wolfe et al., 2011; Espinoza et al., 2015), has pointed to an interaction between ethnicity and immigration status. It is important to recognize the possibility of an interaction between ethnicity, immigration status, and country of origin.
Some Latino immigrant defendants, for example, undocumented Brazilian immigrant defendants, might receive disparate treatment from Mexican immigrant defendants and/or U.S. born Caucasian Americans. Future study is necessary to address these potential differences.

**Conclusion**

Bias has the potential to permeate the decision-making process. In a legal context, bias might result in disparate outcomes for certain defendants (e.g., Latino immigrants), thus infringing upon their constitutional right to a fair trial. This bias is especially important to investigate in a capital trial because a juror’s sentencing verdict is the difference between life and death for the capital defendant. Results from this study suggest documented Latino immigrant defendants fall within the normative window of prejudice, whereas prejudice toward undocumented Latino immigrant defendants is unsuppressed due to lack of normative restrictions. Jurors’ cognitive processing traits, but not states, also interacted with defendant type and case type to influence evidence endorsement, weighing, and sentencing verdict. In sum, the combination of cognitive processing and defendant and case characteristics account for a substantial amount of variation in mock capital jurors’ endorsements of aggravators and mitigators and sentencing verdict.
References


Appendix A: Rational-Experiential Inventory (Norris, P., Pacini, R., & Epstein, S., 1998)

Instructions: The following are some statements that may or may not be true of you and your character. Please indicate if the statements are true or false using the following scale:

<table>
<thead>
<tr>
<th>Completely True</th>
<th>Completely False</th>
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<tr>
<td>1</td>
<td>2</td>
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<td>3</td>
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I don’t like to have to do a lot of thinking.

I try to avoid situations that require thinking in depth about something.

I prefer to do something that challenges my thinking abilities rather than something that requires little thought.

I prefer complex to simple problems.

Thinking hard and for a long time about something gives me little satisfaction.

I trust my initial feelings about people.

I believe in trusting my hunches.

My initial impressions of people are almost always right.

When it comes to trusting people, I can usually rely on my “gut feelings.”

I can usually feel when a person is right or wrong even if I can’t explain how I know
Appendix B: Rational Logic Problems (adapted from Epstein, Lipson, Holstein, & Huh, 1992)

Paul, who has an average income, owned shares in company A. During the past year he switched to stock in company B. He has just learned that the stock in A has skyrocketed, and he would now be $100,000 ahead if he had kept his stock in company A.

George, who also has an average income, owns shares in company B. During the past year he considered switching stock to company A, but decided against it. He has just learned that stock in A skyrocketed and he would now be $100,000 ahead if he had made the switch.

Who do you think was more foolish, Mr. Paul or Mr. George?

Tom parked his new car in a parking lot that was half empty. His wife asked him to park in a spot where she wanted to shop, but he parked, instead, in a spot closer to where he wanted to shop. As luck would have it, when he backed out after shopping, another car opposite to him backed out at the same time and both cars sustained damage over $1,000.

Robert parked his new car in the same parking lot when there was only one parking place, so he took it. As luck would have it, when he backed out after shopping, another car opposite to him backed out at the same time and both cars sustained damage over $1,000.

Who do you think contributed more to the likelihood of the accident, and therefore is more foolish, Tom or Robert?
Appendix C: Trial Summary and Defendant Pictures (based on State v. Daniels, 1994)

Note: The name and immigration status of the defendant vary in each summary. The following is the summary for the Caucasian American defendant condition.

Instructions: As a participant, you will be asked to become a juror in a death penalty trial. A previous jury found the defendant guilty of first degree murder, a crime that is eligible for the death penalty. Your task is to determine the appropriate punishment for the defendant. You will be asked to read a brief transcript of the evidence and attorney arguments presented in the trial. Then you will be asked to make a sentencing decision and answer some questions about your perceptions of the case. Please read the materials carefully and imagine that you are an actual juror in this case.

Please respond to all questions openly and honestly, as no one except the researcher will have access to the answers you provide. Sincere responses help sustain good research!

The following case facts were established during trial:

On June 17, 1998, Michael Bradley, a Caucasian male born in the United States, arrived at his home where his girlfriend Miranda awaited him. The two had been having relationship difficulties for quite some time, largely due to ongoing financial difficulties stemming from Michael's inability to sustain full time employment. The factory where Michael had worked for four years had recently closed, and he had been unable to find another full time job. Miranda was visibly upset and informed Michael that they had received notice that they would be evicted if they did not pay several months of past due rent immediately. The two became involved in a heated argument which ended with Miranda telling Michael to move out of the house. Visibly upset, Michael got in his car and sped across town to the home of his aunt, Geraldine Spencer. Michael knew that Geraldine always kept a large amount of cash in her home and he hoped to borrow enough money to pay the past due rent.

Michael told Geraldine that Miranda had kicked him out of the house and begged her to lend him money to pay rent and allow him to move in with her until he worked out his living situation. Geraldine refused to give Michael any money because he had failed to pay back previous loans. The two began arguing fiercely. Michael became enraged and punched Geraldine in the mouth and face. She fell to the floor, semiconscious. Michael wrapped an electrical cord around her neck three times, strangling her. {{As she fought to free herself from the cord, Michael went to the kitchen and grabbed a large kitchen knife. Michael stabbed and slashed Geraldine multiple times, leaving her on the floor in a pool of blood.}} (High Aggs. Only)

Geraldine died from the injuries sustained during the altercation. Knowing where Geraldine kept her money, Michael took approximately $4500 and fled from the house. Michael returned to his home and was met by an angry Miranda who refused to allow
him to enter the house to get some of his belongings. The couple remained in the front yard, arguing for about 10 minutes before Michael pushed Miranda to the ground and went into the garage. Michael grabbed a hammer from the garage as he entered the house through the garage door and proceeded to the bedroom. Miranda met him in the hallway, yelling at him to get out of the house. Michael hit Miranda in the head several times with the hammer, and she fled from the house screaming. She ran to the home of the neighbor, Joe Blake, who phoned the police. Joe then went to Michael’s house to investigate. Michael swung the hammer at Joe, but missed. Michael screamed at Joe and threatened to kill him if he did not leave. Joe returned home to check on Miranda and wait for police.

**Defendant pictures:**
Appendix D: Prosecution’s Closing Argument (based on *State v. Daniels, 1994*)

The prosecuting attorney offered the following closing argument:

Some crimes are so terrible that the person who commits the crime should forfeit his right to expect our society to support him for the remainder of his life. The crime committed by Mr. Bradley//Mr. Ramos is a crime in that category. The law recognizes that there are certain circumstances that will make a death sentence more appropriate in some cases. There are such factors present in this case. Mr. Bradley//Mr. Ramos committed murder for money. He asked his aunt for money, she said no. So he killed her, just to get some money. And that wasn’t enough, he continued his rampage when he got back home, and attacked his girlfriend and neighbor with a hammer. These are the types of factors that also point toward a death sentence. You will read about them in the jury instructions. The law requires that you consider these factors, and all the other circumstances presented at trial, when you make your decision about the most appropriate sentence for Mr. Bradley//Mr. Ramos As you heard in the trial, the evidence clearly demonstrated that there are many circumstances that point to the only appropriate sentence: the death penalty.

Your task today as jurors is to look at all the evidence and determine the appropriate sentence. How? Well, imagine you have a scale of justice. On that scale, you will weigh all the evidence on both sides, and see which side is heavier. Is there more evidence that points to a sentence of death? Or more evidence that points to a sentence of life? That is for you to decide. I know you are probably worried about making this decision. It is a very tough decision to make, but I know you can do it.

The defense will tell you that there are things that make Mr. Bradley//Mr. Ramos less blameworthy for these crimes. But I don’t think there are any excuses to murder, no factor that can take away the blame. Everyone has the right to choose their actions, and everyone should take responsibility for their actions. Mr. Bradley//Mr. Ramos choose to kill. I urge you not to let him shirk the responsibility for his actions. Consider all the factors of this case. Are there really any excuses that relieve the blame for Mr. Bradley’s//Mr. Ramos’ actions? No. There is nothing in the case presented by the defense that outweighs the factors that indicate that the death is the most appropriate sentence.

Thank you.
Appendix E: Defense Attorney’s Closing Argument (based on State v. Daniels, 1994)

The defense attorney presented this closing argument:

As jurors, you have a life and death decision to make. It is a decision to be made carefully; a man's life is at stake. The law recognizes that, in some cases, there are reasons that the death penalty is not the appropriate sentence. The law requires you to consider these circumstances because these factors are how the law separates those who deserve the death penalty and those that do not. These factors are not excuses, but they are factors that reduce the defendant’s moral blameworthiness and are valid reasons for allowing the defendant to live the rest of his life in prison rather than sentencing him to death. Consider the extreme psychological pressure the defendant was under. The factory where he had worked for four years closed, leaving him with no way to support his family. He had problems finding a new job, and his debt was piling up. He was going to get evicted if he didn’t pay rent. His relationship was failing. Add to this the horrible fight he had with his girlfriend, and consider that she kicked him out of her home. His relationship was over. He had lost everything. His own aunt wouldn’t let him stay with her or lend him money to help his situation. In a moment of weakness, he let his temper get the best of him. He snapped. He just wanted to borrow some money, but, sorrowfully, things did not go as planned.

Although he has these tremendous psychological difficulties, he has sought counseling since then. He’s made great improvements, and his doctors say he is very likely to be able to work through his depression and anger issues. He can fix what is wrong. These are the type of factors that indicate that Mr. Bradley//Mr. Ramos doesn’t deserve to die. The law requires that you consider these circumstances that show that the best sentence is life imprisonment without parole.

The death penalty is reserved only for the most horrible and vicious criminals that are beyond help, and do not deserve to live. As you have seen, Mr. Bradley//Mr. Ramos is not among this class of criminals. He is a loving son. A caring friend. A hard worker. Though being a good person does not give anyone the right to kill, it shows that he does not deserve to die. By giving a sentence of life imprisonment, you are not excusing what he did. You are just saying that he is not among the most awful criminals who truly are not fit to walk the earth.

Thank you.
Appendix F: Judge’s Instructions (based on State v. Daniels, 1994)

There are several issues you will need to decide before moving on to making a decision regarding the appropriate punishment for the defendant. After all of the issues have been presented, you will be directed to respond to several questions that will help you make your verdict.

The first issue is,"Do you find from the evidence, beyond a reasonable doubt, the existence of one or more of the following aggravating circumstances?" A reasonable doubt is a doubt based on reason and common sense, arising out of some or all of the evidence that has been presented, or lack or insufficiency of the evidence, as the case may be. It is up to you to determine whether or not there were any aggravating circumstances presented in this case, and we therefore ask that you consider all of the case facts before you decide how to answer.

The State must prove from the evidence beyond a reasonable doubt the existence of any aggravating circumstance. An aggravating circumstance is a fact or group of facts which tend to make a specific murder particularly deserving of the maximum punishment prescribed by law. The following are the aggravating circumstances which might be applicable to this case.

{Had the defendant been previously convicted of a felony involving the threat of violence to the person? Armed robbery is by definition a felony involving the threat of violence to the person. A felony involves the threat of violence to the person if the perpetrator kills or inflicts physical injury on the victim, or threatens to do so, in order to accomplish his criminal act.} ((Extra Aggs. Condition Only))

Was this murder committed for personal compensation? A murder is committed for personal compensation if the defendant received some kind of financial gain from the commission of the crime, monetary or otherwise.

Third, was this murder especially heinous, atrocious or cruel? In this context heinous means extremely wicked or shockingly evil; atrocious means outrageously wicked and vile; and cruel means designed to inflict a high degree of pain with utter indifference to, or even enjoyment of, the suffering of others. For this murder to have been especially heinous, atrocious or cruel, any brutality which was involved in it must have exceeded that which is normally present in any killing, or this murder must have been a conscienceless or pitiless crime which was unnecessarily torturous to the victim.

Next, was this murder part of a series of crimes committed by the defendant? That is, did the defendant murder the victim during the course of committing other crimes? These other crimes may be petty, such as traffic violations or jaywalking, or serious, such as robbery, rape, or kidnapping.
Please remember that you will be asked to respond to questions regarding the existence of these aggravating circumstances in a short time.

The second issue for your consideration is, "Do you find from the evidence the existence of one or more of the following mitigating circumstances?" It is up to you to determine whether or not there were any mitigating circumstances presented in this case, and we therefore ask that you consider all of the case facts before you decide how to answer.

A mitigating circumstance is a fact or group of facts which may be considered as extenuating or reducing the moral culpability of the killing or making it less deserving of extreme punishment than other first degree murders. The defendant has the burden of persuading you that a given mitigating circumstance exists. It is your duty to consider the following mitigating circumstances, and any of the circumstances that the defendant contends is a basis for a sentence less than death, and any other circumstances arising from the evidence which you deem to have mitigating value.

First, consider whether this murder was committed while the defendant was under the influence of mental or emotional disturbance. A defendant is under such influence if he is in any way affected or influenced by a mental or emotional disturbance at the time he kills. You would find this mitigating circumstance if you find that the defendant was upset because of his failing marriage, financial and employment difficulties, the fight between the defendant and his wife, or the fight between the defendant and the victim, and that the defendant was under the influence of emotional disturbance when he killed the victim.

Second, consider whether the defendant testified truthfully on behalf of the prosecution in another prosecution of a felony. A defendant does so if he is called as a witness for the State at any stage of the prosecution of any felony and truthfully answers any questions asked by the prosecutor.

The felony need not be connected with the murder for which you are recommending punishment.

Next, consider whether the defendant is a good candidate for psychological rehabilitation. A defendant is a good candidate if it appears, to mental health professionals or to you as a juror that the defendant is likely to be able to successfully address his psychological problems and improve his mental health.

Fourth, consider whether the defendant confessed and voluntarily cooperated with the police after the commission of the crime. You would find this circumstance if you find that the defendant willfully volunteered information about the crime, including that he had committed the crime and where the crime was committed.

Finally, you may consider any other circumstance or circumstances arising from the evidence which you deem to have mitigating value.
Please remember that you will be asked to respond to questions regarding the existence of these mitigating circumstances in a short time.

The third issue is, "Do you find beyond a reasonable doubt that the mitigating circumstance or circumstances found is, or are, insufficient to outweigh the aggravating circumstance or circumstances found by you?"

In other words, do you believe that any possible aggravating circumstances you have found significantly outweigh any possible mitigating circumstances you have found? If you find from the evidence one or more mitigating circumstances, you must weigh the aggravating circumstance(s) against the mitigating circumstance(s). You should not merely add up the number of aggravating circumstances and mitigating circumstances. Rather, you must decide from all the evidence what value to give to each circumstance, and then weigh the aggravating circumstances against the mitigating circumstances, and finally determine whether the mitigating circumstances are insufficient to outweigh the aggravating circumstances.

The last issue for your consideration is, "Do you find beyond a reasonable doubt that the aggravating circumstance or circumstances you found is, or are, sufficiently substantial to call for the imposition of the death penalty when considered with the mitigating circumstance or circumstances?"

In other words, when all the possible aggravating and mitigating circumstances have been weighed against each other, would you recommend that this defendant receive the death penalty, or a life sentence without the possibility of parole? After considering the totality of the aggravating and mitigating circumstances, you must be convinced beyond a reasonable doubt that the imposition of the death penalty is justified and appropriate in this case if you recommend the death penalty. Conversely, if you find from the evidence that the imposition of the death penalty is not advisable, you must recommend that the defendant be given a life sentence without the possibility of parole.

You have heard the evidence and the arguments of counsel for the State and for the defendant. It is your duty not only to consider all the evidence, but also to consider all the arguments, the contentions and positions urged by the State's attorney and the defendant's attorney in their speeches to you, and any other contention that arises from the evidence, and to weigh them in the light of your common sense, and to make your recommendation as to punishment.

This questionnaire is designed to learn about your attitude toward the death penalty. There are no right answers and there are no wrong answers. Some people are in favor of the death penalty and some are opposed to it. Neither position is the correct position. This questionnaire simply asks you two questions. The first asks your opinion about the topic and the second asks how you would conduct yourself if you were a juror. For each question read the statements completely and then check the one statement that best describes what your attitude would be if you were a juror in a death penalty case.

What is your attitude toward the death penalty? (check one of the following):

___ If the defendant was found guilty of a murder for which the state law allowed a death sentence, I would always vote to sentence the defendant to death even if the facts in the case did not show that the defendant deserved a death sentence.

___ I am in favor of the death penalty, but I would not necessarily vote for it in every case where the law allowed it. I would consider the facts of the particular case that pertain to the death penalty and then decide whether to sentence the defendant to death.

___ Although I have doubts about the death penalty, I would be able to find the defendant guilty and to vote for a death sentence where the law allowed it, if the facts of the case showed that the defendant was guilty and should be given a death sentence.

___ I have such strong doubts about the death penalty that I would be unable to find the defendant guilty and vote for a death sentence where the law allowed it, even if the facts of the case showed that the defendant was guilty and deserved a death sentence.

Given your position regarding the death penalty, which of the following statements best describes how you would conduct yourself as a jury on a capital murder case? (check one):

___ I have such strong sentiments about the death penalty that they would seriously affect me as a juror and would prevent or substantially impair my performance in accordance with my instructions and oath.

___ My sentiments about the death penalty are not so strong that they would seriously affect me as a juror and would prevent or substantially impair my performance in accordance with my instructions and oath.
Appendix H: Aggravating Circumstances

Please indicate the extent to which you agree that each of the following aggravators are present. Remember that aggravators are indicators that the defendant may be MORE deserving of extreme punishment.

The defendant had been previously convicted of a felony involving the use or threat of violence to the person. (Extra Aggs. Condition Only)

Strongly Disagree Neither Agree nor Disagree Strongly Agree

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</table>

The capital felony was committed for pecuniary gain (e.g., for money).

Strongly Disagree Neither Agree nor Disagree Strongly Agree

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The capital felony was especially heinous, atrocious, or cruel.

Strongly Disagree Neither Agree nor Disagree Strongly Agree

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</tbody>
</table>

The murder for which the defendant stands convicted was part of a course of conduct in which the defendant engaged and which included the commission by the defendant of other crimes of violence against another person or persons.

Strongly Disagree Neither Agree nor Disagree Strongly Agree

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<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Please indicate the extent to which you believe from the evidence that AT LEAST one or more of the above aggravating circumstances are present.

Strongly Disagree Neither Agree nor Disagree Strongly Agree

<p>| | | | | | |</p>
<table>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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</table>
Appendix I: Mitigating Circumstances

Please indicate the extent to which you agree that each of the following mitigators are present. Remember that mitigators are indicators that the defendant may be LESS deserving of extreme punishment.

The capital felony was committed while the defendant was under the influence of mental or emotional disturbance.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree

The defendant testified truthfully on behalf of the prosecution in another trial of a felony.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree

The defendant confessed to the crime and cooperated with authorities.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree

The defendant is a good candidate for successful psychological rehabilitation.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree

Any other circumstance arising from the evidence which the jury deems to have mitigating value.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree

Please indicate the extent to which you believe from the evidence that AT LEAST one or more of the above mitigating circumstances is present.

Strongly Disagree    Neither Agree nor Disagree    Strongly Agree
Appendix J: Weighing of Aggravators and Mitigators and Sentencing Verdicts

Please indicate the extent to which you believe that the mitigating circumstance or circumstances outweigh the aggravating circumstance or circumstances found in issue one:

<table>
<thead>
<tr>
<th>Mitigators absolutely DO NOT outweigh aggravators</th>
<th>Mitigators and aggravators are relatively equal</th>
<th>Mitigators absolutely DO outweigh aggravators</th>
</tr>
</thead>
</table>

1---------2---------3---------4---------5---------6---------7

Please recommend a sentence for this case and provide the reasoning behind your decision. Your verdict and reasons will be sent to the other jurors.

What sentence do you recommend in this case?

___ Death Penalty

___ Life Sentence without the Possibility of Parole

On a scale of 1 to 7, with 1 being “Very Certain in a ‘Death Penalty’ decision” and 7 being “Very Certain in a ‘Life Sentence Without the Possibility of Parole’ decision” how certain are you that your sentencing decision is appropriate?

<table>
<thead>
<tr>
<th>Very Certain in a ‘Death Penalty’ Decision</th>
<th>Very Certain in a ‘Life Sentence Without the Possibility of Parole’ Decision</th>
</tr>
</thead>
</table>

1---------2---------3---------4---------5---------6---------7
Appendix K: Demographics

What is your first and last name?
_________________________________

What is your gender?
___ Male
___ Female
___ Other (please specify)
_________________________________

How old are you?
_________________________________

What zip code do you live in?
_________________________________

What is your racial/ethnic background?
___ African American
___ Asian
___ Hispanic
___ Native American
___ Caucasian
___ Other (please specify)
_________________________________
What is your political orientation?

___ Very Liberal
___ Moderately Liberal
___ Slightly Liberal
___ Middle of the road
___ Slightly Conservative
___ Moderately Conservative
___ Very Conservative

Have you ever served as a juror on a trial?

___ Yes
___ No

If so, how many times?

Civil Trial: 1---------2--------3--------4--------5--------6--------- More than 6 times

Criminal Trial: 1---------2--------3--------4--------5--------6--------- More than 6 times

Are you a United States citizen?

___ Yes
___ No
When did you or your ancestors immigrate to the United States?

___ 1<sup>st</sup> generation immigrant
___ 2<sup>nd</sup> generation immigrant
___ 3<sup>rd</sup> generation immigrant
___ 4<sup>th</sup> generation immigrant
___ 5<sup>th</sup> generation or older immigrant
___ Native American
___ Temporary immigrant

How important is it for you to maintain and pass on the history and traditions of your ancestors?

Not important to me at all  Extremely important to me

1---------2---------3---------4---------5---------6---------7

Are you a student?

___ Yes
___ No

If you are a student, what is your major?

________________________________

What is your religious background (If religious, please specify the denomination you belong to at the bottom)?

___ Catholic
___ Protestant
___ Jewish
___ Hindu
___ Buddhist
___ Muslim
___ Atheist
___ Agnostic
___ I believe in God or a higher power but do not have a particular affiliation
___ Other (please specify)

____________________________

If religious, please specify your denomination here:

____________________________

How closely do you follow the faith, traditions and teachings of your religion?

Not Very Closely             Very Closely         N/A

1------2-------3--------4------5-------6------7------8

Does your religion support or forbid the death penalty?

Strongly Forbids             No position on     Strongly Supports     Don’t
Know/N/A                     the Death Penalty

1------2-------3--------4------5-------6------7------8
Appendix L: Manipulation Checks

Do you remember the Nationality of the defendant?*

___ Canadian
___ Italian
___ Mexican
___ African
___ Caucasian

Do you remember the Immigration Status of the defendant?*

___ U.S. Born
___ Documented Immigrant
___ Undocumented Immigrant

*93% of participants in the final sample accurately completed both manipulation checks
Appendix M: Descriptives

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<tr>
<td>FI</td>
<td>1.0-7.0</td>
<td>4.91</td>
<td>1.29</td>
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<tr>
<td>Logic Problems*</td>
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<td>Aggravator</td>
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<td>Endorsement</td>
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<td>Sentencing Verdict*</td>
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*Transformed variables
## Appendix N: Correlations

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<td>6. Aggravator endorsement</td>
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<td>7. Mitigator endorsement</td>
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<td>-0.09†</td>
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<td>9. Verdict</td>
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*** p<.001, ** p<.01, * p<.05, † p<.10
Appendix O: NFC Moderating the Influence of Case Type on Aggravator Endorsement
Appendix P: NFC Moderating the Influence of Case Type on Weighing
Appendix Q: NFC Moderating the Influence of Case Type on Sentencing Verdicts

![Graph showing the influence of case type on sentencing verdicts. The graph plots NFC (normalized frequency count) against case facts, with high mitigators and high aggravators on the x-axis and sentencing verdict on the y-axis. Two lines are shown: one for low NFC and one for high NFC, illustrating the moderating effect of NFC on sentencing outcomes.](image-url)
Appendix R: FI Moderating the Influence of Defendant Type on Aggravator Endorsement
Appendix S: FI Moderating the Influence of Defendant Type on Sentencing Verdict

![Graph showing the moderating influence of defendant type on sentencing verdict. The graph plots defendant types (Caucasian American, Documented Mexican Immigrant, Undocumented Mexican Immigrant) against a measure of sentencing verdict, with lines indicating low and high FI conditions.](image-url)
## Appendix T: Hypothesis Table

<table>
<thead>
<tr>
<th>Hypothesis/Research Question</th>
<th>Data Support</th>
<th>Significance Tests</th>
</tr>
</thead>
</table>
| **Hypothesis 1** | Partially supported, but with qualification | Aggs: $F(2, 352) = 5.13, p = .01, \eta^2_{\text{Partial}} = 0.03$  
Mits: $F(2, 352) = 1.37, p = .26, \eta^2_{\text{Partial}} = 0.01$ |
| **Research Question 1** | Yes, but with qualification | See Hypothesis 10 |
| **Hypothesis 2** | Partially supported, but with qualification | Aggs: $F(1, 352) = 4.15, p = .04, \eta^2_{\text{Partial}} = 0.01$  
Mits: $F(1, 352) = 0.26, p = .61, \eta^2_{\text{Partial}} = 0.001$ |
| **Hypothesis 3** | Partially supported, but with qualification | Aggs: $F(1, 352) = 4.63, p = .03, \eta^2_{\text{Partial}} = 0.01$  
Mits: $F(1, 352) = 6.90, p = .01, \eta^2_{\text{Partial}} = 0.02$  
See Appendix N |
| **Hypothesis 4** | Partially supported, but with qualification | Aggs: $F(1, 352) = 1.27, p = .26, \eta^2_{\text{Partial}} = 0.004$  
Mits: $F(1, 352) = 4.0, p = .05, \eta^2_{\text{Partial}} = 0.01$  
See Appendix N |
| **Hypothesis 5** | Partially supported | Aggs: $F(2, 352) = 0.93, p = .34, \eta^2_{\text{Partial}} = 0.003$  
Mits: $F(2, 352) = 0.10, p = .32, \eta^2_{\text{Partial}} = 0.003$ |
| **Hypothesis 6** | Not supported | Aggs: $F(2, 352) = 0.93, p = .40, \eta^2_{\text{Partial}} = 0.01$  
Mits: $F(2, 352) = 1.68, p = .19, \eta^2_{\text{Partial}} = 0.01$ |
| **Hypothesis 7** | Not supported | Aggs: $F(2, 352) = 0.31, p = .73, \eta^2_{\text{Partial}} = 0.002$  
Mits: $F(2, 352) = 0.37, p = .69, \eta^2_{\text{Partial}} = 0.002$ |
| **Hypothesis 8** | Not supported | Aggs: $F(2, 352) = 1.22, p = .30, \eta^2_{\text{Partial}} = 0.01$  
Mits: $F(2, 352) = 1.33, p = .27, \eta^2_{\text{Partial}} = 0.01$ |
| **Hypothesis 9** | Not supported | Aggs: $F(2, 352) = 2.98, p = .05, \eta^2_{\text{Partial}} = 0.02$  
Mits: $F(2, 352) = 0.88, p = .42, \eta^2_{\text{Partial}} = 0.01$ |
| **Hypothesis 10** | Partially supported | Aggs: $F(2, 352) = 0.74, p = .48, \eta^2_{\text{Partial}} = 0.004$  
Mits: $F(2, 352) = 0.83, p =$ |
<p>| <strong>Hypothesis 11</strong> | Not supported | Aggs: $F(2, 352) = 0.74, p =$ |</p>
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</table>

**Research Question 3**

Will jurors be more punitive to the documented Mexican immigrant than Caucasian American defendant in weighing?

Yes, but with qualification

See Hypothesis 38
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
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<th>ANOVA Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Main effect of case type on sentencing verdict</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.31, p = .58, \eta^2_{\text{Partial}} = 0.001$</td>
</tr>
<tr>
<td>31</td>
<td>NFC negatively related to death penalty</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.26, p = .61, \eta^2_{\text{Partial}} = 0.001$</td>
</tr>
<tr>
<td>32</td>
<td>FI positively related to death penalty</td>
<td>Not supported</td>
<td>$F(1, 352) = 1.11, p = .29, \eta^2_{\text{Partial}} = 0.003$</td>
</tr>
<tr>
<td>33</td>
<td>Rational processing state negatively related to death penalty</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.06, p = .81, \eta^2_{\text{Partial}} = 0.0$</td>
</tr>
<tr>
<td>34</td>
<td>Main effect of juror type on sentencing verdict</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.02, p = .89, \eta^2_{\text{Partial}} = 0.0$</td>
</tr>
<tr>
<td>35</td>
<td>Juror type by defendant type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(2, 352) = 1.19, p = .31, \eta^2_{\text{Partial}} = 0.01$</td>
</tr>
<tr>
<td>36</td>
<td>Defendant type by case type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(2, 352) = 1.74, p = .18, \eta^2_{\text{Partial}} = 0.01$</td>
</tr>
<tr>
<td>37</td>
<td>NFC by defendant type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(2, 352) = 0.13, p = .88, \eta^2_{\text{Partial}} = 0.001$</td>
</tr>
<tr>
<td>38</td>
<td>FI by defendant type interaction on sentencing verdict</td>
<td>Supported but with caveats</td>
<td>$F(2, 352) = 2.62, p = .07, \eta^2_{\text{Partial}} = 0.02$</td>
</tr>
<tr>
<td>39</td>
<td>Rational processing state by defendant type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(2, 352) = 1.09, p = .34, \eta^2_{\text{Partial}} = 0.01$</td>
</tr>
<tr>
<td>40</td>
<td>NFC by case type interaction on sentencing verdict</td>
<td>Supported but with caveats</td>
<td>$F(1, 352) = 4.19, p = .04, \eta^2_{\text{Partial}} = 0.01$</td>
</tr>
<tr>
<td>41</td>
<td>FI by case type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.0, p = .98, \eta^2_{\text{Partial}} = 0.0$</td>
</tr>
<tr>
<td>42</td>
<td>Rational processing state by case type interaction on sentencing verdict</td>
<td>Not supported</td>
<td>$F(1, 352) = 0.15, p = .70, \eta^2_{\text{Partial}} = 0.0$</td>
</tr>
</tbody>
</table>