The More You Know: How Adolescent Defendants' Age, Gender, and Psychosocial Maturity Influence Mock Jurors' Perceptions

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THE MORE YOU KNOW: HOW ADOLESCENT DEFENDANTS’ AGE, GENDER, AND
PSYCHOSOCIAL MATURITY INFLUENCE MOCK JURORS’ PERCEPTIONS

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Thank you, Mom & Dad, for your constant support and frozen food deliveries.
THE MORE YOU KNOW: HOW ADOLESCENT DEFENDANTS’ AGE, GENDER, AND PSYCHOSOCIAL MATURITY INFLUENCE MOCK JURORS’ PERCEPTIONS

By

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THESIS

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Abstract

Adolescents are considered less responsible than adults for criminal behavior due to their developmental immaturity (Cauffman & Steinberg, 2000). When adolescents are transferred from juvenile court to adult court, however, they may be judged by jury members who do not recognize adolescents’ diminished maturity nor understand how maturity influences culpability. The present study therefore sought to examine how information about adolescent defendants’ age, gender, and psychosocial maturity influences mock jurors’ perceptions of responsibility, guilt, and appropriate sentencing severity. A pilot study (N = 113 undergraduates) first determined the most appropriate vignette for the final study: an adolescent charged with hit-and-run for injuring a pedestrian while driving without a license. In the full study, Amazon Mechanical Turk participants (N = 351) were assigned to one of 24 conditions in a 3 (Age) x 2 (Gender) x 4 (Maturity) design where the defendant was depicted as: 13, 15, or 17 years old; male or female; and less, equally, or more mature than same-aged peers (or no maturity information provided). Main and interaction effects were examined through MANCOVA analyses. Results indicated no main effects of defendant age or gender on mock jurors’ perceptions; however, the defendants’ maturity did influence perceptions of responsibility and guilt. Exploratory interaction effects between age and maturity were significant in predicting perceptions of guilt, and interaction effects between age and gender were significant in predicting perceptions of responsibility. These results indicate that providing information about adolescent defendants’ maturity may be essential in ensuring developmentally appropriate legal proceedings.
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Introduction

By age 16, most adolescents have the ability to engage in decision-making similar to that of an adult in situations where they are provided with relevant information, and without social pressure or time constraints (Steinberg & Cauffman, 1996; Steinberg et al., 2009). However, adolescents are also still developmentally immature; they demonstrate increased impulsivity and diminished regard for future consequences when making stressful and time-sensitive decisions, and are influenced by social factors that do not similarly affect adults’ decisions (Moffitt, 1993; Fried & Reppucci, 2001; Cauffman & Steinberg, 1995; Gardner & Steinberg, 2005; Chein et al., 2011). Yet, adolescents often make decisions in highly emotive situations, while subjected to peer pressure, and without ample time to contemplate future consequences (Steinberg et al., 2009; Romer, 2010); this is the context adolescents find themselves in when faced with the decision to engage in risky or delinquent behaviors.

Due to their developmental immaturity, adolescents are considered less criminally responsible for these delinquent behaviors than adults (Cauffman & Steinberg, 2000). The U.S. Supreme Court has recognized adolescents’ diminished criminal culpability by limiting the severity with which young offenders may be treated within the justice system (Steinberg, 2013). For example, juveniles cannot be sentenced to death (Roper v. Simmons, 2005) or mandatory life without parole (Miller v. Alabama, 2012; Graham v. Florida 2010). However, this developmental immaturity which has afforded adolescents protections in the criminal justice system may not be immediately obvious to legal actors, including defense attorneys, prosecutors, judges, and members of a jury. Jurors in particular may not understand the influence of maturity on defendant culpability or be able to accurately discern the maturity of specific individuals, which could negatively affect verdicts and sentencing decisions in criminal court cases involving
adolescents. Additionally, it is unclear how gender interacts with both age and maturity to influence juror judgements, which is particularly timely considering that female juvenile incarceration has increased over 30% between 1998 and 2007 (Getting the Facts Straight about Girls in the Juvenile Justice System, 2009). The present study therefore seeks to examine how information about adolescent defendants’ age, gender, and psychosocial maturity influences mock juror perceptions of culpability, guilt, and appropriate sentencing severity.

**Juvenile Transfer**

The majority of cases involving adolescent defendants are processed in a separate juvenile court system, which is designed to capitalize on adolescents’ potential for rehabilitation rather than simply punishing young people who have committed a crime (Juvenile Justice System Structure and Process, 2014). However, all 50 states and the District of Columbia have mechanisms allowing transfer from juvenile court to criminal (adult) court for juveniles deemed particularly mature, or crimes deemed particularly serious; the mechanisms for determining individual maturity and crime severity, however, vary widely. For example, 18 states do not have an explicit lower age limit—meaning a child of any age could be transferred from juvenile court to criminal court. Iowa has the youngest specified age of eligibility for transfer to criminal court, at 10 years old (Juveniles Tried as Adults, 2018). The oldest specified minimum age for transfer to criminal court is 15 years old, meaning that 16- and 17-year-old adolescents are eligible for transfer to criminal court in all 50 states.

There are two pathways by which this transfer from juvenile to criminal court can occur: juvenile court petitions (used in 47 states) and criminal court petitions (used in 48 states; Juveniles Tried as Adults, 2018). Juvenile court petitions occur when cases start in juvenile court and subsequently move up to criminal court. The most common juvenile court petition is a
discretionary waiver (46 states); this waiver occurs when a juvenile court waives their jurisdiction over a case at the discretion of the juvenile court judge or at the request of the prosecutor. The second most common juvenile court petition is a mandatory waiver (13 states); this waiver occurs when aspects of the crime or the individual warrant automatic transfer from juvenile court to criminal court. Finally, presumptive waivers involve the preference for a case to be waived to criminal court (12 states), whereby the juvenile must consequently argue for their case remain in juvenile court.

As opposed to juvenile court petitions, which start in juvenile court, criminal court petitions occur when minors initially face charges in criminal court without ever passing through the juvenile system. Statutory exclusions (28 states) involve specific legislation indicating a qualifying age, offense, and/or other conditions which automatically prevent a person under the age of 18 from going to juvenile court (Juveniles Tried as Adults, 2018). “Once an adult always an adult” provisions (35 states) require that once a juvenile is tried in criminal court, all future charges against them must automatically be tried in criminal court as well, regardless of the crime. Finally, prosecutor discretion, or “direct file” (14 states), allows prosecutors to make the executive decision to file a case in criminal court rather than juvenile court.

Unlike juvenile court, which does not allow a jury trial in most states, criminal court does provide juveniles the opportunity for a jury trial (McKeiver v. Pennsylvania, 1971). Although jurors tend to attribute less responsibility to younger adolescent defendants (Ghetti & Redlich, 2001), age is merely a biological construct, with little bearing on culpability; psychosocial maturity is a developmental construct more relevant to one’s culpability (Cauffman & Steinberg, 2000). However, it is unclear whether adult jury members are capable of accurately judging individual adolescent maturity.
Psychological Research

Age

Perceived Responsibility. Most research finds mock jurors view younger adolescents as less responsible for criminal behavior than older adolescents. Specifically, mock jurors view an 11-year-old as less responsible and deserving of punishment for murder than a 14-year-old, and view a 14-year-old as less responsible and deserving of punishment than a 17-year-old (Bradley et al., 2012; Ghetti & Redlich, 2001). Additionally, mock jurors attribute less blame to an 11-year-old compared to a 16-year-old for both nonviolent (vandalism) and violent (murder) crimes (McPhetres & Hughes, 2016)—although juvenile transfer to criminal court and subsequent jury trial for minor crimes, such as vandalism, is unlikely. One study found that although mock jurors attributed less responsibility to a 12-year-old than a 15-year-old and 20-year-old for armed robbery, there were no differences in responsibility attributed between the 15-year-old and 20-year-old (Scott et al., 2006).

These results indicate that less responsibility tends to be attributed to younger adolescents as compared to older adolescents across a variety of crimes; however, once an adolescent is old enough to be considered an adult by a mock juror, the mitigating effect of age on responsibility ratings may disappear. Three of the four aforementioned studies (Bradley et al., 2012; Ghetti & Redlich, 2001; McPhetres & Hughes, 2016) are also limited in that they use 11-year-olds as a comparison group; however, this age would likely be too young to warrant transfer to criminal court in most states, reducing the ecological validity of these studies.

Determination of Guilt. Although mock jurors tend to view younger adolescents as less responsible than older adolescents, these attributions do not always translate to actual verdicts of guilty versus not guilty. Some research indicates younger adolescents (11 years old) are not only
seen as less blameworthy, but are also less likely to be found guilty for nonviolent (vandalism) and violent (murder) crimes compared to older adolescents (16 years old; McPhetres & Hughes, 2016). These findings, however, lack ecological validity due to the fact that a juvenile would not be transferred to criminal court and face a jury trial for minor crimes such as vandalism.

Contrarily, Warling and Peterson-Badali (2003) found no difference in guilty verdicts assigned by mock jurors for second degree murder between 13-, 17-, and 25-year-olds. Other studies have similarly suggested no differences in guilty verdicts assigned by mock jurors between adolescents (14 years old) and adults (24 years old) charged with aggravated robbery or second-degree burglary (Walker & Woody, 2011). Research is therefore mixed regarding whether or not the age of an adolescent influences whether they are found guilty or not guilty by mock jurors.

**Sentencing.** Existing literature is mixed regarding the influence of juvenile age on sentencing severity. Some research suggests juveniles are more likely to receive a lighter sentence compared to adults (Walker & Woody, 2011). Additionally, mock jurors think that judges should take the defendant’s age into account during sentencing more so for an 11-year-old than a 14-year old, and more so for a 14-year-old than a 17-year-old (Bradley et al., 2012). Indeed, mock jurors assign increasing sentencing severity to 13-, 17-, and 25-year-old defendants charged with second degree murder (Warling and Peterson-Badali, 2003). However, in actual juvenile dispositions, older juveniles are more likely to receive probation than younger juveniles, while younger juveniles are more likely to be incarcerated (Cauffman et al., 2007).

Other research suggests that age does not play a role in the sentencing severity of juveniles, but rather the type of crime is more influential on sentencing severity; crimes against persons (i.e., firing a gun and killing someone) are associated with more severe sentences for
juveniles than crimes against property (i.e., arson; Ghetti & Redlich, 2001). Indeed, having committed more prior offenses and displaying violence during the committing offense were factors associated with a greater likelihood of being sentenced to incarceration over probation in actual juvenile dispositions (Cauffman et al., 2007). While age may be influential in determining juvenile sentences, details of the crime and the adolescents’ history may be stronger predictors.

Taken together, the research is mixed regarding whether there is an influence of juvenile age on jurors’ perceptions, verdicts, and sentencing decisions; research that does find an influence of juvenile age on these perceptions is further mixed regarding if young age is a mitigating or aggravating influence. Therefore, age may differentially influence these three crucial, but distinct, aspects of the criminal justice process.

**Gender**

**Determination of Guilt.** Boys tend to be treated more harshly than girls in the juvenile justice system, such that male juveniles are more likely than female juveniles to have their cases referred for formal processing rather than diversion and be referred to criminal court versus juvenile court, among samples of adjudicated youth (Leiber & Peck, 2015; Tam et al., 2016). In regards to guilty verdicts, research suggests boys are more likely than girls to be found guilty in juvenile adjudications (Spivak et al., 2014).

**Sentencing.** Research regarding the influence of gender on sentencing and disposition outcomes is mixed. Some research finds boys are more often assigned to correctional facilities, while girls are more likely to be sentenced to probation or sent to group homes (Cauffman et al., 2007; Tam et al., 2016). However, other studies find that girls and boys are equally likely to be sentenced to incarceration over probation, and that gender does not play a role in the post-
adjudication decision to incarcerate (Spivak et al., 2014; Espinosa et al., 2008). The relationship between gender and juvenile sentencing decisions is therefore unclear.

Findings regarding how gender influences juveniles’ treatment in the justice system is mixed, with present research suggesting gender may influence determinations of guilt, but not sentencing. The influence of juvenile gender on responsibility and culpability judgements, however, remains to be experimentally explored.

**Psychosocial Maturity**

Psychosocial maturity reflects capacities for responsibility, perspective, and temperance, which are more relevant than age in considering culpability (Cauffman & Steinberg, 2000). Responsibility refers to self-reliance, identity, and independence; perspective encompasses one’s ability to consider situations from different viewpoints and within a broader context; and temperance indicates the ability to limit impulsivity and evaluate situations before acting (Cauffman & Steinberg, 2000). Adolescents’ still-developing responsibility, perspective, and temperance increases their susceptibility to engaging in delinquent behaviors, particularly in situations where emotions are high, they feel pressure from their friends, and they do not have sufficient time to consider the consequences of their actions (Steinberg et al., 2009). Despite the important implications of developmental maturity on adolescent behavior, research regarding the impact of adolescent maturity on juveniles’ responsibility attributions, guilty verdicts, and sentencing decisions is limited.

**Perceived Responsibility.** Research suggests mock jurors may attribute less responsibility to juveniles with diminished maturity. McPhetres and Hughes (2016) provided mock jurors with a vignette of a juvenile who was charged with either attempted murder or property damage, along with mock case notes from a clinician regarding the juvenile’s maturity
or immaturity. Results indicated mock jurors attributed less blame to juveniles depicted as immature compared to juveniles depicted as mature; however, this study did not examine a control condition to determine how jurors who do not receive any maturity information perceive juveniles. This association between maturity and blameworthiness also only held true when the juvenile was depicted as a narcotics user, and not when the juvenile was depicted as an abuse victim, suggesting defendants’ personal history and attributes may influence the manner in which maturity affects jurors’ judgements of blame. Mock jurors also tend to attribute less responsibility to juveniles when they are provided with specific information regarding the adolescent’s maturity level (i.e., a diminished capacity to control impulses, consider future consequences, or appreciate risks) compared to when they are not provided with any information regarding maturity (Hughes & McPhetres, 2016). Specifically, maturity information regarding adolescents’ diminished capacity to appreciate the risks associated with their actions is associated with significantly lower mock juror ratings of responsibility (Hughes & McPhetres, 2016). However, these studies are limited because a juvenile would likely not be transferred to criminal court and have determinations about them made by a jury for minor crimes such as property damage and vandalism. Additionally, Hughes and McPhetres (2016) did not ask participants to determine a sentencing outcome for the juvenile; although sentencing decisions are typically made by a judge rather than a jury, a sentencing decision is the meaningful outcome resulting from the accumulation of jurors’ attitudes towards an adolescent defendant.

Importantly, in the absence of maturity information, mock jurors do not seem to recognize differences in juvenile maturity. Scott and colleagues (2006) found that although mock jurors did not rate 12-year-old and 15-year-old juveniles as differing in maturity, they viewed the older adolescent as more criminally responsible than the 12-year-old. These results could suggest
that mock jurors attribute arbitrary maturity ratings to juveniles when they are not provided with specific information regarding the individual’s maturity. Research, therefore, suggests that adolescent maturity information can influence mock jurors’ ratings of defendant responsibility; however, these perceptions may also be influenced by individual circumstances (i.e., defendant history or details of the crime) and the specific type of maturity information provided.

**Determination of Guilt.** Due to a dearth of research, the relationship between adolescent maturity and guilty verdicts remains unclear. In the only known study to examine this relationship, McPhetres and Hughes (2016) found mock jurors are less likely to find an immature juvenile guilty compared to a mature juvenile. However, identical to the relationship between maturity and responsibility ratings, immaturity only influenced guilty verdicts when the juvenile was also depicted as a narcotics user, and not when the juvenile was depicted as an abuse victim. Rather, crime severity was the strongest predictor of juvenile guilty verdicts in this study. Again, this study did not include a control condition in which mock jurors did not receive any information regarding adolescent maturity, so it is unclear how jurors would have rated defendant guilt without any maturity information. These results may indicate juvenile maturity can influence mock juror determinations of guilt under certain circumstances; however, aspects of the case and the juvenile’s history may be more significant in making these determinations.

**Sentencing.** Research regarding the influence of maturity on juvenile sentencing and disposition outcomes is mixed. In mock juror research, longer sentences were recommended for juveniles perceived to be more mature; however, crime severity—for example, aggravated assault versus second-degree burglary—may be more influential than maturity in sentencing decisions (Walker & Woody, 2011). Contrary to mock juror research, Cauffman and colleagues (2007) found that, in actual juvenile dispositions, diminished adolescent maturity was not
associated with differences in dispositional outcomes for younger or older juveniles. The researchers hypothesized the lack of relationship between juvenile maturity and dispositional outcomes in this study may have been due to the fact that some judges view maturity as a mitigating factor, making juveniles less responsible for their actions, while other judges view immaturity as an aggravating factor, making juveniles more likely to reoffend. However, this study lacked experimental manipulation, limiting the ability to address a causal relationship.

**The Present Study**

Studies examining maturity and juror decision-making are relatively rare; of the few existing studies on this topic, many are limited in terms of ecological validity (i.e., by including ages not old enough or crimes not severe enough to warrant juvenile justice transfer to criminal court). Jury trials for adolescent defendants are typically only guaranteed after transfer to criminal court; such a transfer typically happens for older juveniles accused of more serious crimes. Existing research is also limited in terms of methodology (i.e., not including experimental manipulation or control conditions), or the scope of issues addressed (i.e., not addressing sentencing decisions). The current study will address these limitations by: a) selecting vignettes with ages old enough and crimes serious enough to warrant juvenile transfer, b) utilizing an experimental design with random assignment to conditions, c) including a control condition in which no information regarding adolescent maturity is included, and d) addressing final sentencing decisions. Adolescent defendants will be depicted as either 13, 15 or 17 years old and charged with a more serious crime (i.e., hit-and-run) in order to better reflect the ages and crimes for which adolescents are most commonly transferred to criminal court. Results will

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1 Walker and Woody (2011) also found small effects suggesting jurors may attribute greater maturity to juveniles who commit more serious crimes.
add to the juror decision-making literature by being the first known study to examine interactions among adolescent defendants age, gender, and psychosocial maturity in an experimental design.

The present study aims to a) obtain independent effects of defendant age, gender, and psychosocial maturity on mock juror perceptions of juvenile culpability, b) identify how defendant age, gender, and psychosocial maturity influence mock juror determinations of guilt and appropriate sentencing severity, c) determine whether associations between these factors vary for males and females, and d) explore interaction effects among all variables. The following hypotheses will be addressed:

1. There will be a main effect of age, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity will increase as the age of the defendant increases.

2. There will be a main effect of gender, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity will be higher for male defendants than female defendants.

3. There will be a main effect of maturity, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity will increase as the maturity of the defendant increases.

Additionally, the current study will explore all two- and three-way interactions between age, gender, and maturity in predicting mock juror ratings of responsibility, guilt, and appropriate sentencing severity.

A pilot study was first conducted to determine the most appropriate crime for use in the final study vignette, to ensure the crime was serious enough to warrant transfer to adult court, while also not being too serious to mask the effects of interest.
Pilot Study

Methods

Participants

Jury eligibility requirements vary between states; in order to be representative of jury-eligible populations throughout the U.S., the present study included only the juror eligibility criteria which are consistent across all states (Juror Qualifications, n.d.); that is, participants must have been at least 18 years old and a U.S. citizen. Participants \((N = 218)\) were recruited from The University of Texas at El Paso SONA online participant pool; a total of \(N = 193\) were considered to meet eligibility for the study. An electronic informed consent form was provided to participants prior to the start of the study, outlining the procedures of the study, what they would be asked to do, and the approximate length of participation. Participants received \(0.5\) participation credits for completion of the study. Participants were asked to click a button to indicate whether or not they consent to participate; by clicking “Yes, I wish to participate”, participants provided electronic consent for participation.

To ensure confidence that participants paid attention and remembered the information in their assigned condition, participant data was only included for the final analysis if they correctly answered all three manipulation check questions, which asked them to recall the defendant’s gender, age, and maturity at the very end of the study.\(^2\) This exclusion criteria led to an analytic sample of \(N = 113\). Demographics for the sample before and after the exclusion criteria were applied are reported in Table 1; there were no significant differences between the full sample and the analytic sample in regards to age \((t = -.595, p = .553)\), gender (male as referent; \(t = -.420, p = .675\)), or race/ethnicity (White as referent; \(t = -.272, p = .785\)). Participants in the analytic sample

---

\(^2\) Participants in the control maturity condition, as defined in the between-subjects design, only needed to answer the gender and age manipulation check questions correctly.
were between 18 and 50 years old ($M = 21.68$, $SD = 4.49$), primarily female (75.2%), and predominately Hispanic or Latino (86.7%).

**Table 1**

*Pilot Study Participant Demographics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N = 113^a$</th>
<th>$N = 193^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age $M (SD)$</td>
<td>21.68 (4.49)</td>
<td>21.39 (3.86)</td>
</tr>
<tr>
<td>Sex $N (%)$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28 (24.8)</td>
<td>51 (26.4)</td>
</tr>
<tr>
<td>Female</td>
<td>85 (75.2)</td>
<td>138 (71.5)</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Race/Ethnicity $N (%)$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>3 (2.7)</td>
<td>8 (4.1)</td>
</tr>
<tr>
<td>Asian</td>
<td>1 (.9)</td>
<td>1 (.5)</td>
</tr>
<tr>
<td>White</td>
<td>8 (7.1)</td>
<td>15 (7.8)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>98 (86.7)</td>
<td>160 (82.9)</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (2.7)</td>
<td>5 (2.6)</td>
</tr>
</tbody>
</table>

$^a$Sample when participants answered all 3 manipulation checks correctly. $^b$Sample when manipulation checks were not included.

**Within-Subjects Design**

A within-subjects design was then used to determine what crime would be most appropriate for use in the final study vignettes. Participants first read a set of jury instructions, which described what factors the law requires they consider when making judgements about the
defendant; instructions varied slightly between the within-subjects conditions (see Appendix A1 for full instructions). An online text readability consensus calculator determined the jury instructions to be at a fourteenth-grade reading level, appropriate for 21- to 22-year-olds (Automatic Readability Checker).

Every participant was then asked to read two criminal court vignettes and imagine they were a juror making judgments about a defendant who hit a pedestrian with a car when driving without a license, resulting in injury to the victim. Each participant read two vignettes: one in which the victim died (i.e., manslaughter), and one in which the victim was severely injured (i.e., hit-and-run). These two crimes were chosen because both manslaughter and hit-and-run charges when driving without a license would be serious enough to warrant juvenile transfer to adult court; however, these crimes lacked aspects that could negatively bias mock jurors’ perceptions, such as premeditation or violence. The order of the vignettes was counterbalanced so that half the participants read the death condition vignette first and half the participants read the injury condition vignette first.

**Between-Subjects Design**

Additionally, participants were randomly assigned to one of 24 conditions in a 3 (Age) x 2 (Gender) x 4 (PSM) between-subjects experimental design. In condition 1, age was manipulated such that defendants were depicted as either aged 13-, 15-, or 17-years-old, in order to represent the most common ages at which juveniles are legally and practically able to be transferred to criminal court.\(^3\) In condition 2, defendant gender was manipulated such that the defendant was depicted as either male (John) or female (Sally). The pilot study vignettes (format

\(^3\) Of note, the youngest age at which adolescents in the U.S. are eligible for transfer to criminal court varies by state, ranging from 10- to 15- years old (Juveniles Tried as Adults, 2018).
adapted from Bradley et al., 2012 and Hughes & McPhetres, 2016) included both within-subjects and between-subjects manipulations, and read:

John [Sally] is a 13-year-old [15-year-old, 17-year-old] male [female] who lives with his [her] mother, father, and sister, is of average intelligence, and gets average grades in school. One day when no one was home, John [Sally] took his [her] mother’s car, even though he [she] did not have a driver’s license, to meet up with friends nearby. While driving, John [Sally] answered a text message from his [her] friend, causing him [her] to swerve and hit a person biking on the side of the road. The person fell to the ground and did not get up. John [Sally] did not call for help, and drove away. The victim died [is in critical condition] at the hospital due to injuries from the hit. Due to the seriousness of the crime, John [Sally] is being tried as an adult in criminal court with felony vehicular manslaughter [hit-and-run] charges.

In condition 3, maturity was manipulated such that the defendant was depicted as having one of four maturity levels (adapted from Hughes & McPhetres, 2016): less mature, equally mature, more mature, or a control condition. Participants in the control condition only read the criminal court vignette, without receiving any additional information regarding the defendant’s maturity. Participants in the less mature, equally mature, and more mature conditions were provided with specific information regarding the juvenile’s maturity via the following paragraph:

The child psychologist who evaluated John [Sally] gave testimony as an expert witness at the trial about John’s [Sally’s] developmental maturity. The psychologist reported that he [she] was less [equally, more] mature compared to other youth of his [her] age. Specifically, the psychologist stated that compared to
other youth his [her] age, John [Sally] had less [equal, greater] ability to control his [her] impulses and think before making decisions, consider the future consequences of his [her] behavior, and think about the risks associated with his [her] actions.

An online text readability consensus calculator determined the pilot study vignettes to be at a tenth-grade reading level, appropriate for 14- to 15-year-olds (Automatic Readability Checker). See Appendix B for the vignettes originally proposed for use in this study.4

After reading the vignette, participants were asked to make judgements regarding the defendant’s culpability, a determination of guilt, and appropriate sentencing severity. Following their judgements regarding the case vignette, participants answered a variety of questions regarding their endorsement of adolescent stereotypes, general attitudes towards juvenile culpability, juror bias, and demographics.

**Measures**

**Primary Variables.** The primary outcome variables of interest include perceived culpability, determination of guilt, and sentencing severity. Participants were asked all questions twice, once after reading the first vignette (i.e., death condition or injury condition) and again after reading the second victim outcome condition vignette (i.e., whichever condition they did not see the first time).

**Perceived Responsibility.** Mock juror perceptions of criminal responsibility were first assessed with two questions (adapted from Hughes & McPhetres, 2016): “How responsible is John [Sally] for killing the victim?”, and “How much blame does John [Sally] deserve?”. Both

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4 The originally proposed vignettes were changed for use in the pilot study for the following reasons: a) the originally proposed vignette was at a twelfth-grade reading level, appropriate for 17- to 18-year-olds, so the current vignette used simpler language that was easier to understand, and b) the crime in the originally proposed vignette could be construed as self-defense, which may have influenced participant responses.
questions were rated on a Likert-type scale from 1 (not at all) to 7 (extremely/very much). A total perceived culpability score was obtained using the average score from these two questions, with higher scores indicating the participant perceived the defendant to be more responsible for the crime. Hughes and McPhetres (2016) found this measure had good reliability (α = .89), which the current study replicated for both the death condition (α = .88) and the injury condition (α = .89) vignette responses. Perceptions of criminal responsibility were also assessed with the following (adapted from Bradley et al., 2012): “Please rate on a scale from 0% to 100% how responsible John [Sally] is for his [her] actions,” followed by a sliding percentage scale.

**Determination of Guilt.** Perceived guilt of the defendant was first assessed using a question adapted from Hughes and McPhetres (2016): “How likely is it that you would find John [Sally] guilty of vehicular manslaughter [hit-and-run]?”. Responses were rated on a Likert-type scale from 1 (not at all) to 7 (extremely likely), with higher scores indicating a greater likelihood the participant would find the defendant guilty. Participants were also asked “What verdict would you give to John [Sally]?”, with dichotomous response options of either Guilty (1) or Not Guilty (0).

**Sentencing.** Six questions measured how the participant believed the defendant should be treated during their sentencing proceedings. Four statements (adapted from Bradley et al., 2012) read: “John [Sally] is capable of being rehabilitated” (reverse-coded), “John [Sally] is likely to commit future violent crimes”, “John [Sally] should be punished for what he [she] did”, and “The judge should take John’s [Sally’s] age into account when sentencing him [her]” (reverse-coded). Two statements were created for the current study: “The judge should take John’s [Sally’s] maturity into account when sentencing him [her]” (reverse-coded), and “John [Sally] is dangerous”. All six statements were rated on a Likert-type scale from 1 (strongly disagree) to 5.
(strongly agree), and an average score was obtained. Higher average scores indicated participant’s thought the defendant was deserving of more severe treatment during sentencing proceedings.

Reliability for the death condition and injury condition vignette responses was $\alpha = .41$ and $\alpha = .573$, respectively. Therefore, an exploratory factor analysis (EFA) was conducted to determine underlying factors within the sentencing scale. The question regarding the defendant’s capability to be rehabilitated exhibited a low communality in both the death and injury conditions (.381 and .299, respectively) and the question regarding if the defendant should be punished exhibited a low communality in the injury condition (.232); therefore, both questions were omitted. The EFA was conducted again containing the remaining four variables, and revealed a 2-factor structure for both the death and injury conditions. Two subscales were created: The Sentencing Consideration subscale combined the two questions asking if the judge should take the defendant’s age and maturity into consideration during sentencing, and the Future Dangerousness subscale combined the two questions asking if the defendant was dangerous and likely to commit crimes in the future. Reliability improved acceptably in the Sentencing Consideration subscale for both the death condition ($\alpha = .515$) and injury condition ($\alpha = .726$) vignette responses. Reliability also improved acceptably in the Future Dangerousness subscale for both the death condition ($\alpha = .690$) and injury condition ($\alpha = .685$) vignette responses. As such, the Sentencing Consideration and Future Dangerousness subscales will be used for all subsequent analyses, with higher scores indicating greater punitiveness in sentencing and greater perceived future dangerousness, respectively.

Finally, appropriate sentencing outcome was assessed by asking participants to select how severely they believe the defendant should be sentenced (adapted from Campbell &
Schmidt, 2000): “Please choose from the following list which sanction is the most severe outcome appropriate for John [Sally]: no punishment (1), paying a fine/restitution (2), community service (3), treatment or education order (i.e. treatment or education for substance abuse, mental illness, behavioral problems; 4), probation/house arrest (5), detention in a juvenile facility (6), or detention in an adult facility (7)”. Higher scores indicated the participant perceived a more punitive sentence as the most appropriate outcome.

Covariates. Control variables for the between-subjects analyses included endorsement of adolescent stereotypes, general attitudes towards juvenile culpability, and juror bias. However, as there is not enough power to run the between-subjects analyses in the pilot study, these control variables were not utilized and therefore will not be discussed further.

Demographics. Participants answered additional demographic questions regarding their political values, education, socioeconomic status (SES), their children (if any), their knowledge of/experience with adolescents, and justice system contact. Again, these variables were not utilized for analysis in the pilot study and therefore will not be discussed further.

Understanding Checks. Understanding check questions were utilized to ensure participants’ comprehension of the vignettes and assess potential changes to the final study vignettes. Specifically, participants were asked the following questions: “How much did you believe/trust the psychologist who evaluated the developmental maturity of the defendants?” (5-point Likert scale from Not at All to Extremely Much); “How clear were the jury instructions that were provided to you at the start of the study?” (7-point Likert scale from Extremely Unclear to Extremely Clear); “What gender did you think the victim was?” (Male, Female, or I did not think about the gender of the victim); and “Have you taken an adolescent development class at the undergraduate college level or higher?” (Yes or No).
Results and Discussion

Descriptive Statistics

Each of the three dependent variables of interest were measured multiple different ways: guilt was measured dichotomously and continuously; responsibility was measured on a 1–7-point scale and as a percentage from 0%–100%; and sentencing was measured on 1–5 Likert subscales of Sentencing Consideration and Future Dangerousness, and by selecting the most appropriate outcome out of 7 choices. Descriptive statistics were calculated to determine the means, standard deviations, and ranges of for mock jurors’ perceptions of responsibility, guilt, and appropriate sentencing severity for each of the six measures (see Table 2). These results indicated that participants viewed the defendants as very guilty and responsible, and thought the defendant deserved a severe sentence.

Table 2

Pilot Study Dependent Variables Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Death Condition</th>
<th>Injury Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Guilt (dichotomous)</td>
<td>.91</td>
<td>.29</td>
</tr>
<tr>
<td>Guilt (continuous)</td>
<td>5.93</td>
<td>1.30</td>
</tr>
<tr>
<td>Responsibility (scale)</td>
<td>6.06</td>
<td>1.16</td>
</tr>
<tr>
<td>Responsibility (percentage)</td>
<td>86.58</td>
<td>20.45</td>
</tr>
<tr>
<td>Sentencing Consideration</td>
<td>1.91</td>
<td>.929</td>
</tr>
<tr>
<td>Future Dangerousness</td>
<td>2.31</td>
<td>.904</td>
</tr>
<tr>
<td>Sentencing Outcome</td>
<td>5.54</td>
<td>1.21</td>
</tr>
</tbody>
</table>

\(^a\)0 = Not Guilty and 1 = Guilty.
Descriptive analyses of the understanding checks revealed that the majority of the participants thought the jury instructions at the start of the study were moderately to extremely clear (77.8%). To further simplify these instructions, the jury instructions in the final study were modified slightly to make them shorter and easier to understand (see modifications in Appendix A2). These modifications took the reading level of the jury instructions form a fourteenth-grade reading level, appropriate for 21- to 22-year-olds, to a thirteenth-grade reading level, appropriate for 18- to 19-year-olds (Automatic Readability Checker). Additionally, only 38.8% of the participants trusted the expert witness very much or extremely much; therefore, the expert witness vignette was modified to include the education and experience of the psychologist conducting the evaluation (see final study between-subjects design for modifications). Finally, the gender of the victim was not considered by over half of participants (53.1%), and the majority of participants had not taken an adolescent development class at the undergraduate college level or higher (63.7%).

**Within-Subjects Analyses**

Paired-samples t-tests were conducted to determine whether there were significant differences in mock juror ratings of defendant guilt, responsibility, and appropriate sentencing severity depending on whether the victim died or was severely injured. The severity of the victim’s injuries was significantly associated with mock juror perceptions of appropriate sentencing outcome $t = 5.059, p < .001$, such that mock jurors were more likely to perceive harsher sentencing outcomes as appropriate when the victim died ($M = 5.540$) as compared to when the victim was severely injured ($M = 4.965$). The death/injury condition was not significantly associated with any of the remaining outcomes.
Due to the highly skewed distribution towards finding the defendant guilty, responsible, and deserving of harsh punishment in the pilot study (between -1.012 and -1.652 for all continuous measures except the Sentencing Consideration and Future Dangerousness subscales; see Appendix C for full skewness statistics for all variables), the injury condition vignette was chosen for use in the final study based on results that indicated defendants were viewed slightly less harshly compared to those in the death condition vignette. To further mitigate this skewed distribution, potentially mitigating details were added to the vignette to explain the defendant’s behavior (i.e., the defendant was driving because they needed to help a friend) and the consequences of a guilty verdict (i.e., registering as a felon).

**Between-Subjects Analyses**

After selecting the injury vignette for use in the final study, preliminary analyses of the between-subjects main effects were also conducted using responses from the pilot study injury condition vignette. There was a main effect of age when predicting guilt (continuous), $F(2, 102) = 3.175, p = .046$ and sentencing consideration, $F(2, 102) = 4.350, p = .015$. These results revealed no gender effects in predicting responsibility, guilt, or sentencing severity. Finally, there were main effects of maturity when predicting responsibility (1–7 scale), $F(3, 102) = 6.087, p = .001$, responsibility (percentage), $F(3, 102) = 5.448, p = .002$, and guilt (continuous), $F(3, 102) = 3.408, p = .020$. These results indicate that although the gender of the defendant does not appear to influence mock juror perceptions of responsibility, guilt, or appropriate sentencing severity, the age of the defendant influences ratings of guilt and appropriate sentencing, and the maturity of the defendant influences ratings of responsibility and guilt.
Final Study

Methods

Participants

Participant eligibility requirements were identical to the pilot study: participants must have been at least 18 years old and a U.S. citizen. An a priori power analyses revealed that with \( \alpha = .05 \), a minimum \( N = 812 \) would produce significant power to detect main and interaction effects in the 3x2x4 multivariate analysis of covariance (MANCOVA). For equal distribution across 24 conditions (\( n = 35 \)) total \( N = 840 \) was required. Participants (\( N = 1,000 \)) were recruited from Amazon Mechanical Turk (MTurk) global crowdsourcing system; a total of \( N = 994 \) were considered to meet eligibility for the study. Research suggests MTurk provides reliable and valid data collection for social sciences (Buhrmester et al., 2011; Berinsky et al., 2012), especially when attention and validity checks are included (Strickland & Stoops, 2019). MTurk samples have also been suggested to have greater diversity and representativeness than college student samples (Buhrmester et al., 2011; Berinsky et al., 2012), and tend to pay greater attention to questions (Hauser & Schwarz, 2016).

An electronic informed consent form similar to the pilot study was provided to participants before beginning the study. In the final study, participants were additionally informed that they would receive $1.25 for their completion of the study, which was distributed to them through MTurk following their completion of the study. The average time it took MTurk workers to complete the study was 21 minutes and 11 seconds. This compensation rate (approximately $1.25 per 20 minutes, or $3.75 per hour) is above the estimated MTurk worker median of $1.38 per hour (Horton & Chilton, 2010) and was determined to be acceptable for this study because research suggests MTurk worker data quality is not affected by payment amount.
(Mason & Watts, 2009; Marge et al., 2010) even when paying workers $0.10 for 5- to 30-minute surveys (Buhrmester et al., 2011). Participants clicked “Yes, I wish to participate” to provide electronic consent for participation.

To promote participants’ remembrance of manipulations, the three manipulation check questions were moved to directly after the primary outcome questions were answered—before the covariate questions were asked—rather than at the very end of the assessment, as was done in the pilot study. Participants were again only included for the final analysis if they correctly answered all three manipulation check questions, resulting in an analytic sample of \( N = 351 \) (participants in the control maturity condition again only needed to answer the gender and age manipulation check questions correctly). Due to this significantly reduced sample size relative to the projected sample size, analyses were also conducted including participants who only passed 2 of the 3 manipulation check questions \( (N = 616) \) and with the total sample \( (N = 994) \); however, these results did not differ considerably from analyses with the fully reduced sample size, so the original exclusion criterion was upheld for all subsequent analyses. Demographics for the three samples are reported in Table 3; there were no significant differences between the analytic sample and the sample with 2 of the 3 manipulation check questions, or between the analytic sample and the full sample, in regards to age \( (t = .819, p = .415 \text{ and } t = .641, p = .522, \text{ respectively}) \), gender (male as referent; \( t = .314, p = .754 \text{ and } t = .572, p = .567, \text{ respectively}) \), or race/ethnicity (White as referent; \( t = .913, p = .362 \text{ and } t = 1.796, p = .073, \text{ respectively}) \). Participants in the final analytic sample were between 20 and 73 years old \( (M = 37.86, SD = 11.31) \), primarily male (63.2%), and predominately White (69.8%).
### Table 3

**Final Study Participant Demographics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N = 351&lt;sup&gt;a&lt;/sup&gt;</th>
<th>N = 616&lt;sup&gt;b&lt;/sup&gt;</th>
<th>N = 994&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age M (SD)&lt;sup&gt;d&lt;/sup&gt;</strong></td>
<td>37.86 (11.31)</td>
<td>37.23 (11.15)</td>
<td>37.40 (11.24)</td>
</tr>
<tr>
<td><strong>Sex N (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>222 (63.2)</td>
<td>381 (61.9)</td>
<td>651 (65.5)</td>
</tr>
<tr>
<td>Female</td>
<td>124 (35.3)</td>
<td>222 (36.0)</td>
<td>339 (34.1)</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>2 (.6)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity N (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American or Black</td>
<td>70 (19.9)</td>
<td>140 (22.7)</td>
<td>256 (25.8)</td>
</tr>
<tr>
<td>Asian</td>
<td>11 (3.1)</td>
<td>22 (3.6)</td>
<td>31 (3.1)</td>
</tr>
<tr>
<td>White</td>
<td>245 (69.8)</td>
<td>410 (66.6)</td>
<td>646 (65.0)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>15 (4.3)</td>
<td>24 (3.9)</td>
<td>38 (3.8)</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>2 (.6)</td>
<td>6 (1.0)</td>
<td>15 (1.5)</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>1 (.3)</td>
<td>1 (.2)</td>
<td>1 (.1)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (1.1)</td>
<td>4 (.6)</td>
<td>5 (.5)</td>
</tr>
</tbody>
</table>

<sup>a</sup> Sample when participants answered all 3 manipulation checks correctly.  
<sup>b</sup> Sample when participants answered 2 of the 3 manipulation checks correctly.  
<sup>c</sup> Sample when manipulation checks were not included.  
<sup>d</sup> Two, fourteen, and twenty-eight participants, respectively, reported ages greater than 1,900 or less than 1; these data points were coded as missing in calculations of age descriptive statistics.

### Between-Subjects Design

Participants first read the modified jury instructions (see Appendix A2), and were then asked to read a criminal court vignette and imagine they were a juror making judgments about the defendant. Participants were randomly assigned to one of 24 conditions in a 3 (Age) x 2
(Gender) x 4 (PSM) between-subjects experimental design identical to that of the pilot study.

Due to the bias in the pilot study towards finding the defendant very responsible, guilty, and deserving of harsh punishment, and the finding that this bias was reduced slightly in the injury condition vignette compared to the death condition vignette, the injury condition vignette was chosen for use in the final study, with slight modifications. The final vignette shown to participants in the final study read:

John [Sally] is a 13-year-old [15-year-old, 17-year-old] male [female] who lives with his [her] mother, father, and sister, gets average grades in school, and has never been in trouble with the police before. One day when no one was home, John [Sally] took his [her] mother’s car, even though he [she] did not have a driver’s license, to pick up a friend nearby who had been drinking alcohol and needed a ride home. The evidence suggests that while driving,

John [Sally] answered a text message from his [her] friend, causing him [her] to swerve and hit a person biking on the side of the road. The person fell to the ground and did not get up, and John [Sally] drove away. The victim is in critical condition at the hospital due to injuries from the hit. Due to the seriousness of the crime, John [Sally] is being tried as an adult in criminal court with felony vehicular hit-and-run charges. A guilty verdict for an adult in criminal court will result in John [Sally] being a registered felon for the rest of his [her] life, with a permanent criminal record.

The vignette shown to participants in one of the three maturity conditions was also altered slightly based on results from the pilot study. More details were added regarding the
expert witness (i.e., education and experience) in order to add credibility to the testimony. As such, the final vignette shown to participants in maturity conditions in the fully study read:

Dr. Smith is the child psychologist who evaluated John [Sally] and gave testimony as an expert witness at the trial about John’s [Sally’s] developmental maturity. Dr. Smith has a Master’s degree in child development and a PhD in developmental psychology, 15 years of experience as a licensed child psychologist, and has testified in court as an expert witness in dozens of cases involving children and adolescents. Dr. Smith reported that John [Sally] was less [equally, more] mature compared to other youth of his [her] age. Specifically, Dr. Smith stated that compared to other youth his [her] age, John [Sally] had less [equal, greater] ability to control his [her] impulses and think before making decisions, consider the future consequences of his [her] behavior, and think about the risks associated with his [her] actions.

Identical to the pilot study, an online text readability consensus calculator determined the final study vignettes to be at a tenth-grade reading level, appropriate for 14- to 15-year-olds (Automatic Readability Checker). After reading the vignette(s), participants answered the same questions as the pilot study, including: judgements regarding the defendant’s culpability, guilt, and appropriate sentencing severity, endorsement of adolescent stereotypes, general attitudes towards juvenile culpability, juror bias, and demographics.

**Measures**

**Primary Variables.** The primary outcome variables of perceived culpability, determination of guilt, and sentencing severity were identical to the variables used in the pilot study. Unlike the pilot study, participants in the final study only answered the primary outcome
variable question one time after reading the case vignette. In the final study, reliability for the perceived responsibility measure was good ($\alpha = .834$). Reliability for the full sentencing measure did not improve to acceptable levels in the final study ($\alpha = .475$), so another exploratory factor analysis (EFA) was conducted. The EFA again found that the question regarding whether the defendant should be punished exhibited a low communality (.374); therefore, this question was omitted. The EFA was conducted again containing the remaining five variables, and revealed a 2-factor structure. The Sentencing Consideration and Future Dangerousness subscales from the pilot study were again calculated; the Sentencing Consideration subscale now also included the question regarding the defendant’s capability of being rehabilitated. Reliability for Sentencing Consideration was still suboptimal ($\alpha = .687$), but reliability for Future Dangerousness was good ($\alpha = .807$). As such, only the Future Dangerousness subscale was used for all subsequent analyses, with higher scores indicating greater perceived future dangerousness.

Additionally, the appropriate sentencing outcome question was altered slightly from the pilot study. Specifically, the question and answer choices were modified as follows: “Please choose from the following list which sanction is the most severe outcome appropriate for John [Sally]: no punishment (1), paying a fine/restitution (money to the victim’s family; 2), delayed ability to obtain driver's license (3), community service (4), education order (i.e. education for behavioral problems or vehicle safety; 5), probation/house arrest (6), detention in a juvenile facility for less than 1 year (7), detention in an adult facility for less than 1 year (8), detention in an adult facility for 1-5 years (9), detention in an adult facility for more than 5 years (10)”. These changes were made to offer participants a wider range of more ecologically valid sentencing outcome possibilities; higher scores again indicated the participant perceived a more punitive sentence as the most appropriate outcome.
**Covariates.** Control variables included endorsement of adolescent stereotypes, general attitudes towards juvenile culpability, and juror bias.

**Endorsement of Adolescent Stereotypes.** The five myths of adolescent development identified by Offer and Schonert-Reichl (1992) were adapted into a scale for the purposes of this study. Participants were asked how much they agreed or disagreed with several myths of adolescent development, such as “Adolescence is a time of increased emotionality” and “Puberty is a negative event for adolescents”. Seven myths specific to culpability were also created by the research team, such as “Adolescents are impulsive” and “Adolescents are poor decision-makers” (see full measure in Appendix D). Responses were scored on a Likert scale from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*), and all responses were reverse-coded. An average score of the twelve items was obtained, such that higher scores indicated greater endorsement of adolescent stereotypes. Reliability for the final scale was good (α = .831).

**Juvenile Culpability.** The Juvenile Culpability Scale (JCS; Crosby et al., 1995) gauged how much criminal responsibility participants attribute to juveniles, regardless of individual circumstances such as defendant history or details of the crime. An adapted version of this scale, the Juvenile Culpability Scale-Adapted Form (JCS-A), was created by Warling (2001) to measure perceptions of juvenile culpability not specific to capital murder cases, and this adapted form was used in the current study. The JCS-A consisted of 6 statements such as “Juveniles do not have the maturity or life experience to appreciate fully all of the possible consequences of their actions”. Participants were asked to indicate how much they agree with each statement on a 7-point Likert scale ranging from 1 (*Strongly Agree*) to 7 (*Strongly Disagree*). Responses on the 6 items were averaged to obtain a composite score, with higher scores indicating that participants attribute less criminal responsibility to juvenile defendants due to their age and/or immaturity.
Common factor analysis revealed the 6 items yielded a one-factor solution for a single factor of attitudes towards juvenile culpability, accounting for 33.1% of variance in the JCS (Crosby et al., 1995), and the JCS-A has been found to be internally consistent ($\alpha = 0.79$; Warling & Peterson-Badali, 2003). Reliability of the adapted version in the current study was also found to be good, $\alpha = .799$.

**Juror Bias.** The Juror Bias Scale (Kassin & Wrightsman, 1983) measured the extent to which individuals are predisposed to favor the prosecution (guilty verdict) or the defense (not guilty verdict). This measure included 17 statements such as “Generally, the police make an arrest only when they are sure about who committed the crime” rated on a 5-point Likert-type scale from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*). Summary scores ranged from 17 to 85; higher scores indicated a general bias towards the prosecution and lower scores indicated a general bias towards the defense. Kassin and Wrightsman (1983) reported the Juror Bias Scale (JBS) as internally consistent (0.81) and test-retest reliable (0.67, $p < 0.001$), and Furnham and Alison (1994) found the JBS to have good reliability ($\alpha = 0.70$ to 0.75). However, reliability in the current study was low ($\alpha = .599$) and therefore was not included as a control in subsequent analyses.

**Demographics.** Participants answered additional demographic questions regarding their political values, education, socioeconomic status (SES), children (if any), knowledge of/experience with adolescents, and justice system contact.

**Political Values.** Political values were measured by asking participants “Which of the following most accurately describes your political values?” with answer choices on a 1–5 Likert scale from 1 (*Very Conservative*) to 5 (*Very Liberal*).
**Education.** Education was measured by asking participants “What is the highest level of education you have completed?”, with answer choices as follows: 1 (Less than high school), 2 (Some high school), 3 (High school diploma or equivalent degree), 4 (Some college), 5 (College degree or trade school certification), or 6 (Post-college degree).

**Socioeconomic Status.** The MacArthur Scale of Subjective Social Status was used to address self-perceived SES (Goodman et al., 2001). Participants rated themselves relative to other people in their communities and relative to other people in the United States, on a ladder from 1 (people who have the least money, least education, and the least respected jobs or no job: the lowest standing in the community) to 10 (people who have the most money, the most education and the most respected jobs; the highest standing in their community).

**Children.** Participants were asked “How many children do you have?” If participants indicate a number greater than 0 they were asked to identify the biological sex of each of their children as “Male”, “Female”, or “Prefer not to answer”, and “How old are your children?”.

**Experience with Adolescents.** Participants self-reported their experience with adolescents by answering the question: “On average, how much experience do you have interacting with adolescents (youth between the ages of 12 and 17) each week? This could be through your job, family members, members of your community, or other interactions with adolescents.” Responses were rated from 1 (I never interact with adolescents) to 8 (I interact with adolescents every day). Additionally, participants self-reported how knowledgeable they are about adolescent development, from 1 (Not knowledgeable at all) to 5 (Extremely knowledgeable).

**Justice System Contact.** Personal criminality was assessed with the following question: “Please circle the number on the ladder that best represents how you feel about yourself, compared to most people your age.” Responses ranged from 1 (You do less illegal things than
the average person) to 10 (You do more illegal things than the average person). Participants also answered whether themselves, their child or anyone else in their family had ever been arrested, and whether themselves, their child or anyone else in their family had ever been convicted of a crime. For both questions, participants could answer they had been arrested/convicted, their child had been arrested/convicted, someone else in their family had been arrested/convicted, or none of the above. Finally, participants were asked whether themselves or anyone in their household worked in law enforcement or in the legal system, which they could answer as yes (1) or no (0).

**Plan of Analysis**

Assumptions of the multivariate analysis of variance (MANCOVA) were first tested. Outliers were tested using Mahalanobis distance scores, linearity was assessed through visual inspection of dependent variable scatterplot matrices, and dependent variable multicollinearity was assessed by verifying no correlations were greater than 0.90. A 3x2x4 MANCOVA was then conducted to examine the main effects of age, gender, and maturity on mock juror perceptions of responsibility, guilt, and appropriate sentencing severity, and all potential 2-way and 3-way interaction effects among variables. Control variables included: participant demographics (i.e., gender, age, race/ethnicity, self-perceived social status, and political values), juvenile culpability and endorsement of adolescent stereotypes measures, self-reported experience interacting with adolescents, and number of children. Hypotheses for all main effects were generated prior to data collection. Some 2-way interaction effects were hypothesized prior to data collection, while other hypotheses were exploratory. The results of the 3-way interaction among the independent variables were exploratory.

Significant main and interaction effects were indicated by a $p < .05$; marginal main and interaction effects were indicated by a $p < .10$. Post hoc comparisons of all significant and
marginal effects were conducted using Fisher’s Least Significant Difference (LSD) testing to examine all potentially significant pairwise comparisons. Post hoc power analyses were also conducted using G*Power to examine whether conditions with entirely nonsignificant results were potentially due to a lack of statistical power resulting from the reduced sample size relative to what was necessary to detect main and interaction effects (according to an a priori power analysis).

Results

Assumptions Testing

To run the proposed multivariate analysis of covariance (MANCOVA) test, assumptions of continuous dependent variables, removal of outliers, linearity among dependent variables, multicollinearity among dependent variables, and missing data were tested. Due to dichotomous dependent variables violating the MANCOVA assumption of continuous dependent variables, the question asking participants to select whether the participant was guilty or not guilty was removed, leaving only the five dependent variables with continuous outcomes remaining for all subsequent analyses. Exploratory analyses with the dichotomous guilt variable are discussed after primary analyses.

Outliers. Outliers for these five measures were determined by calculating Mahalanobis distance scores (MD). MD scores greater than 20.52 ($df = 5$) were considered outliers and removed from all subsequent analyses; this cutoff resulted in the removal of 4 participants (MD = 45.31, 39.01, 21.21, and 20.91). The final dataset used for all subsequent analyses therefore included 347 participants.

Linearity. Linearity was assessed by creating a scatterplot matrix among all five dependent variable measures (see Appendix E1). Visual inspection of the scatterplot matrix
revealed no relationship between the Future Dangerousness subscale with any of the other
dependent variables, and as such is removed from all subsequent analyses. The scatterplot matrix
with Future Dangerousness omitted is also reported in Appendix E2. Exploratory analyses with
the Future Dangerousness subscale are discussed after primary analyses.

**Multicollinearity.** Multicollinearity among the four remaining dependent variables was
assessed by calculating Pearson correlations among ratings of responsibility, guilt, and
sentencing severity (see Table 4). No correlations exceeded the predetermined $r$ estimate of 0.90.
However, due to the high correlation between the two responsibility measures of the same
construct, these two measures are standardized and averaged into a single responsibility score.

**Table 4**

*Final Study Dependent Variable Correlations*

<table>
<thead>
<tr>
<th></th>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Guilt (continuous)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>Responsibility (scale)</td>
<td>.707***</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>Responsibility (percentage)</td>
<td>.670***</td>
<td>.808***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4</td>
<td>Sentencing Outcome</td>
<td>.166***</td>
<td>.231***</td>
<td>.236***</td>
<td>–</td>
</tr>
</tbody>
</table>

***p < .001.

**Missing Data.** Missing data were excluded from analysis via listwise deletion. Only
participants with complete data were included for analysis, resulting in an analytic sample of $N =
329$ for all MANCOVA analyses.

**Descriptive Statistics**

A total of three dependent variables were therefore included for analysis in the
MANCOVA: guilt (measured on a 1–7 Likert scale), responsibility (the standardized average of
the two responsibility measures), and appropriate sentencing outcome. Sample sizes, means, and standard errors/deviations for these three dependent variables as a function of the experimental conditions of age, gender, and psychosocial maturity (PSM) are presented in Table 5. As the exclusion criteria resulted in a low sample size for the equal maturity condition \((n = 45)\) relative to the other maturity conditions—including sample sizes of \(n = 0\) in the 15-year-old age condition—comparisons including equal maturity will not be considered in the MANCOVA and post hoc comparison analyses. Additionally, descriptive statistics for the two outcome variables of interest not included in the MANCOVA design—the dichotomous measure of guilty versus not guilty, and the Future Dangerousness subscale—are reported in Table 6.

Descriptive analyses were also conducted on the understanding checks. Analyses revealed that the majority of the participants thought the jury instructions at the start of the study were moderately to extremely clear (71.1%). Additionally, only 33.7% of the participants trusted the expert witness very much or extremely much; however, follow-up analyses revealed no differences in expert witness trust depending on what maturity condition the participant was in, \(F(2, 209) = .741, \ p = .478\). Finally, the majority of participants thought the gender of the victim was male (57.8%), and the majority of participants had not taken an adolescent development class at the undergraduate college level or higher (51.9%).
Table 5

Final Study Descriptive Statistics: MANCOVA Dependent Variables

<table>
<thead>
<tr>
<th>Gender Condition</th>
<th>Condition</th>
<th>13 years old</th>
<th>Age Condition</th>
<th>15 years old</th>
<th>17 years old</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>R</td>
<td>G</td>
<td>S</td>
<td>n</td>
<td>R</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>50</td>
<td>.332</td>
<td>5.880</td>
<td>7.225</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender Condition</th>
<th>Condition</th>
<th>13 years old</th>
<th>Age Condition</th>
<th>15 years old</th>
<th>17 years old</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>R</td>
<td>G</td>
<td>S</td>
<td>n</td>
<td>R</td>
</tr>
<tr>
<td>Female</td>
<td>No Info.</td>
<td>22</td>
<td>.011</td>
<td>5.594</td>
<td>6.796</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Equal PSM</td>
<td>3</td>
<td>-.145</td>
<td>5.622</td>
<td>9.492</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>Female</td>
<td>50</td>
<td>-.034</td>
<td>5.289</td>
<td>8.007</td>
<td>51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender Condition</th>
<th>Condition</th>
<th>13 years old</th>
<th>Age Condition</th>
<th>15 years old</th>
<th>17 years old</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>R</td>
<td>G</td>
<td>S</td>
<td>n</td>
<td>R</td>
</tr>
<tr>
<td>Total</td>
<td>No Info.</td>
<td>41</td>
<td>.141</td>
<td>5.670</td>
<td>6.800</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Low PSM</td>
<td>31</td>
<td>-.122</td>
<td>5.217</td>
<td>7.411</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Equal PSM</td>
<td>8</td>
<td>.060</td>
<td>6.019</td>
<td>8.139</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>High PSM</td>
<td>17</td>
<td>.517</td>
<td>5.432</td>
<td>8.114</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
<td>97</td>
<td>.149</td>
<td>5.584</td>
<td>7.616</td>
<td>99</td>
</tr>
</tbody>
</table>

Note: Standard errors/deviations are in parentheses. PSM = Psychosocial Maturity; R = Responsibility; G = Guilt; S = Sentencing.
Table 6

**Final Study Descriptive Statistics: Non-MANOVA Dependent Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt (dichotomous)</td>
<td>.91</td>
<td>.29</td>
<td>0–1</td>
</tr>
<tr>
<td>Future Dangerousness</td>
<td>2.80</td>
<td>1.12</td>
<td>1–5</td>
</tr>
</tbody>
</table>

\(^a\) 0 = Not Guilty and 1 = Guilty.

**Multivariate Analysis of Covariance (MANCOVA)**

**Covariates.** As demonstrated by the full MANCOVA in Table 7, the majority of covariates were significant predictors of at least one dependent variable. Specifically, mock jurors’ perceived responsibility of the defendant was significantly predicted by the participant’s age, \(F(1, 298) = 4.593, p = .033\), self-perceived social status, \(F(1, 298) = 6.095, p = .014\), general perceptions of juvenile culpability, \(F(1, 298) = 4.772, p = .030\), endorsement of adolescent stereotypes, \(F(1, 298) = 31.657, p \leq .001\), and number of children, \(F(1, 298) = 5.756, p = .017\). Mock jurors’ perceptions of adolescent defendant guilt were significantly predicted by self-perceived social status, \(F(1, 298) = 5.068, p = .025\), general perceptions of juvenile culpability, \(F(1, 298) = 5.966, p = .015\), and endorsement of adolescent stereotypes, \(F(1, 298) = 12.345, p = .001\), and marginally predicted by the participant’s race/ethnicity, \(F(1, 298) = 3.149, p = .077\). Finally, mock jurors’ perceptions of appropriate sentencing outcome for the adolescent defendant were significantly predicted by general perceptions of juvenile culpability, \(F(1, 298) = 4.368, p = .037\), endorsement of adolescent stereotypes, \(F(1, 298) = 4.928, p = .027\), and experience with adolescents \(F(1, 298) = 11.657, p = .001\). The participant’s gender and political values were the only covariates not significantly associated with any of the outcome variables of interest.
### Table 7

**MANCOVA Tests of Between-Subjects Effects**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responsibility&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Guilt&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Sentencing&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$ ratio</td>
<td>$p$</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td><strong>Covariates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender&lt;sup&gt;d&lt;/sup&gt;</td>
<td>.309</td>
<td>.579</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td><strong>4.593</strong></td>
<td><strong>.033</strong></td>
<td><strong>.015</strong></td>
</tr>
<tr>
<td>Race/Ethnicity&lt;sup&gt;e&lt;/sup&gt;</td>
<td>1.604</td>
<td>.206</td>
<td>.005</td>
</tr>
<tr>
<td>Self-Perceived Social Status</td>
<td><strong>6.095</strong></td>
<td><strong>.014</strong></td>
<td><strong>.020</strong></td>
</tr>
<tr>
<td>Political Values</td>
<td>.023</td>
<td>.868</td>
<td>.000</td>
</tr>
<tr>
<td>Juvenile Culpability</td>
<td><strong>4.772</strong></td>
<td><strong>.030</strong></td>
<td><strong>.016</strong></td>
</tr>
<tr>
<td>Endorsement of Adolescent Stereotypes</td>
<td><strong>31.657</strong></td>
<td>$\leq .001$</td>
<td>.096</td>
</tr>
<tr>
<td>Experience with Adolescents</td>
<td>.557</td>
<td>.456</td>
<td>.002</td>
</tr>
<tr>
<td>Number of Children</td>
<td><strong>5.756</strong></td>
<td><strong>.017</strong></td>
<td><strong>.019</strong></td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.780</td>
<td>.170</td>
<td>.012</td>
</tr>
<tr>
<td>Gender</td>
<td>.199</td>
<td>.656</td>
<td>.001</td>
</tr>
<tr>
<td>PSM</td>
<td><strong>2.762</strong></td>
<td><strong>.042</strong></td>
<td><strong>.027</strong></td>
</tr>
<tr>
<td>Age * Gender</td>
<td><strong>4.692</strong></td>
<td><strong>.010</strong></td>
<td><strong>.031</strong></td>
</tr>
<tr>
<td>Age * PSM</td>
<td>1.723</td>
<td>.129</td>
<td>.028</td>
</tr>
<tr>
<td>Gender * PSM</td>
<td>.345</td>
<td>.793</td>
<td>.003</td>
</tr>
<tr>
<td>Age * Gender * PSM</td>
<td>.485</td>
<td>.787</td>
<td>.008</td>
</tr>
</tbody>
</table>

*Note.* PSM = Psychosocial maturity. Significant and marginally significant values are in bold.

<sup>a</sup>$R^2 = .233$, Adjusted $R^2 = .156$.  
<sup>b</sup>$R^2 = .178$, Adjusted $R^2 = .095$.  
<sup>c</sup>$R^2 = .137$, Adjusted $R^2 = .050$.  
<sup>d</sup>0 = Female, 1 = Male.  
<sup>e</sup>0 = Nonwhite, 1 = White.
**Hypothesis 1: Main Effect of Age.** I hypothesized a main effect of age, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity would increase as the age of the defendant increased. This hypothesis was not supported. Age was not a significant predictor of responsibility, \( F(2, 298) = 1.780, p = .170 \), guilt, \( F(2, 298) = .656, p = .520 \), or sentencing outcome, \( F(2, 298) = .673, p = .511 \). In other words: The age of the defendant alone did not influence mock jurors’ perceptions of responsibility, guilt, or appropriate sentencing outcome. The effect sizes were small (\( f = .110, .063 \) and \( .063 \), respectively); post hoc power analyses revealed the power to detect effect sizes of these magnitudes was 41.1%, 16.1%, and 16.1%, suggesting the study may have been underpowered to detect some significant effect sizes.

**Hypothesis 2: Main Effect of Gender.** I hypothesized a main effect of gender, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity would be higher for male defendants than female defendants. This hypothesis was not supported. Gender was not a significant predictor of responsibility, \( F(1, 298) = .199, p = .656 \), guilt, \( F(1, 298) = 2.432, p = .120 \), or sentencing outcome, \( F(1, 298) = 2.227, p = .137 \). In other words: Adolescent defendant gender did not influence mock jurors’ perceptions of culpability or appropriate sentencing outcome. The effect sizes were very small (\( f = .032, .090 \) and \( .084 \), respectively); post hoc power analyses revealed the power to detect these small effects was 8.8%, 36.8%, and 32.9%, suggesting the study may have been underpowered to detect significant effect sizes.

**Hypothesis 3: Main Effect of Maturity.** I hypothesized a main effect of maturity, such that mock juror ratings of responsibility, guilt, and appropriate sentencing severity would increase as the maturity of the defendant increased. This hypothesis was partially supported. Specifically, defendant maturity significantly predicted mock jurors’ perceptions of
responsibility, $F(3, 298) = 2.762, p = .042$, and guilt, $F(3, 298) = 3.732, p = .012$. Defendant maturity was not, however, predictive of sentencing outcome, $F(3, 298) = 1.565, p = .198$.

Post hoc comparisons revealed that, as hypothesized, mock jurors viewed the defendant with low maturity as significantly less responsible ($M = -.190$) than the defendant with high maturity ($M = .186, p = .013$) or where no maturity information was given ($M = .098, p = .019$), as depicted in Figure 1.

![Figure 1: Perceptions of Responsibility as a Function of Defendant Maturity](image)

In determinations of guilt, however, when mock jurors were not provided with maturity information regarding a defendant, they viewed the defendant as more guilty ($M = 5.728$) than when they were informed that the defendant had low ($M = 5.225, p = .002$) or high maturity ($M = 5.316, p = .032$), as depicted in Figure 2. These findings were contrary to the hypothesized linear effect of maturity on determinations of guilt. Hypothesis 3 was therefore supported for one of the
dependent variables of interest (i.e., responsibility), but not the remaining two (i.e., guilt and appropriate sentencing severity).

![Figure 2: Perceptions of Guilt as a Function of Defendant Maturity](image)

**Exploratory Analyses**

The current study also explored all two- and three-way interactions between age, gender, and maturity, in predicting mock juror ratings of responsibility, guilt, and appropriate sentencing severity. Further, two outcome measures of interest—the dichotomous measure of guilty versus not guilty, and the Future Dangerousness subscale—were omitted from the MANCOVA analysis due to these measures violating the assumptions of continuous dependent variables and linearity among dependent variables, respectively. Exploratory analyses were therefore conducted with these dependent variables of interest. Both exploratory analyses included the same covariates as the primary MANCOVA design: participant demographics (i.e., gender, age, race/ethnicity, self-perceived social status, and political values), juvenile culpability and endorsement of adolescent
stereotypes measures, self-reported experience interacting with adolescents, and number of children.

2-Way Interactions.

Age x Maturity. The interaction between age and maturity was not a significant predictor of responsibility, $F(5, 298) = 1.723, p = .129$, or sentence outcome, $F(5, 298) = 1.296, p = .265$. The interaction between age and maturity was, however, a trending predictor of perceived guilt, $F(5, 298) = 2.016, p = .076$.

Post hoc simple effect interaction analyses revealed the maturity of the defendant only had a trending effect on perceptions of guilt when the defendant was 15 years old, $F(2, 298) = 7.509, p = .001$, not when the defendant was 13 years old, $F(3, 298) = 1.374, p = .251$ or 17 years old, $F(3, 298) = .461, p = .710$. As depicted in Figure 3, these results suggest that mock jurors viewed 15-year-old adolescent defendants in particular most guilty when no maturity information was given ($M = 5.967$) as compared to when they were described as less mature ($M = 5.135, p = .002$) or more mature ($M = 4.865, p = .001$). On the other hand, perceptions of guilt did not significantly differ when a 13-year-old or 17-year-old defendant was described as being less mature ($M = 5.217$ and 5.324, respectively), more mature ($M = 5.432$ and 5.432, respectively), or when no maturity information was given ($M = 5.67$ and 5.547, respectively).
Figure 3: Perceptions of Guilt as a Function of Defendant Age and Maturity

**Gender x Maturity.** The interaction between gender and maturity was not a significant predictor of responsibility, $F(3, 298) = .345, p = .793$, guilt, $F(3, 298) = .979, p = .403$, or sentencing outcome, $F(3, 298) = .227, p = .842$. In other words: the effect of defendant gender on perceptions of responsibility, guilt, and sentencing severity was not influenced by information about the defendant’s maturity. The effect sizes were small ($f = .055, .100, \text{and} .055$, respectively); post hoc power analyses revealed the power to detect these effects was 11.4%, 29.8%, and 11.4%, suggesting the study was likely underpowered to detect significant effects.

**Age x Gender.** The interaction between age and gender was not significant in predicting guilt, $F(2, 298) = 1.639, p = .196$, or sentencing outcome, $F(2, 298) = 1.464, p = .233$. There was, however, a significant interaction between age and gender in predicting perceived responsibility, $F(2, 298) = 4.692, p = .010$.

Post hoc simple effect interaction analyses revealed the age of the defendant only had an effect on mock juror perceptions of responsibility when the defendant was a male $F(2, 298) = \ldots$
5.469, \( p = .005 \), not when the defendant was female \( F(2, 298) = .415, p = .661 \). As depicted in Figure 4, these results suggest that mock jurors view male adolescent defendants more responsible when they are 13 years old \( (M = .332) \) as compared to when they are 15 or 17 years old \( (p = .001 \) and \( .056 \), respectively). A 17-year-old male adolescent defendant was viewed as marginally more responsible \( (M = -.026) \) than a 15-year-old \( (M = -.346, p = .073) \). In other words: Among male defendants, mock jurors tended to judge a 13-year-old defendant as very responsible, a 17-year-old defendant as somewhat responsible, and a 15-year-old defendant as not very responsible. On the other hand, perceptions of responsibility did not significantly differ when a female adolescent defendant was 13 years old \( (M = -.034) \), 15 years old \( (M = .153) \), or 17 years old \( (M = .052) \).

![Figure 4: Perceptions of Responsibility as a Function of Defendant Age and Gender](image)

**3-Way Interaction.** The 3-way interaction between age, gender, and psychosocial maturity, was not significant in predicting responsibility, \( F(5, 298) = .485, p = .787 \), guilt, \( F(5, \)
298) = .722, \( p = .607 \), or sentencing outcome, \( F(5, 298) = .290, \ p = .918 \). The effect sizes were very small (\( f = .090, .110, \) and \( .071 \), respectively); post hoc power analyses revealed the power to detect these small effects was 19.6\%, 28.6\%, and 13.4\%, suggesting the study may have been underpowered to detect significant 3-way interaction effects.

**Logistic Regression.** To assess the impacts of adolescent defendant age, gender, and psychosocial maturity on mock jurors’ decision of guilty versus not guilty, a binary logistic regression was conducted. The logistic regression model was not statistically significant, \( \chi^2(19) = 16.722, \ p = .609 \), and none of the control or predictor variables were significantly associated with mock jurors’ decision to find the defendant guilty or not guilty. The lack of significant findings here may have been a result of the overwhelming majority of participants who found the participant guilty (90.8\%).

**ANCOVA.** To assess the impacts of adolescent defendant age, gender, and psychosocial maturity on mock jurors’ perceptions of future dangerousness of the defendant, a 3x2x4 ANCOVA was conducted. Although some control variables significantly predicted perceptions of future dangerousness, there were no significant or marginally significant main or interaction effects of age, gender, or maturity on mock juror perceptions of future dangerousness (Table 8).

**Table 8**

*ANCOVA Tests of Between-Subjects Effects*

<table>
<thead>
<tr>
<th>Variable</th>
<th>( F ) ratio</th>
<th>( p )</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender*</td>
<td>.548</td>
<td>.460</td>
<td>.002</td>
</tr>
<tr>
<td>Age</td>
<td>5.863</td>
<td>.016</td>
<td>.019</td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td>2.935</td>
<td>.088</td>
<td>.010</td>
</tr>
</tbody>
</table>

*a* Denotes a significant difference at \( p < .05 \)
<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Perceived Social Status</td>
<td>22.772</td>
<td>≤ .001</td>
<td>.071</td>
</tr>
<tr>
<td>Political Values</td>
<td>2.070</td>
<td>.151</td>
<td>.007</td>
</tr>
<tr>
<td>Juvenile Culpability</td>
<td>1.593</td>
<td>.208</td>
<td>.005</td>
</tr>
<tr>
<td>Endorsement of Adolescent Stereotypes</td>
<td>5.849</td>
<td>.016</td>
<td>.019</td>
</tr>
<tr>
<td>Experience with Adolescents</td>
<td>3.369</td>
<td>.067</td>
<td>.011</td>
</tr>
<tr>
<td>Number of Children</td>
<td>.681</td>
<td>.410</td>
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**Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>F</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.285</td>
<td>.008</td>
</tr>
<tr>
<td>Gender</td>
<td>.176</td>
<td>.675</td>
<td>.001</td>
</tr>
<tr>
<td>PSM</td>
<td>.592</td>
<td>.620</td>
<td>.006</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>.446</td>
<td>.640</td>
<td>.003</td>
</tr>
<tr>
<td>Age * PSM</td>
<td>1.456</td>
<td>.204</td>
<td>.024</td>
</tr>
<tr>
<td>Gender * PSM</td>
<td>.546</td>
<td>.651</td>
<td>.005</td>
</tr>
<tr>
<td>Age * Gender * PSM</td>
<td>.134</td>
<td>.984</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Note.* R² = .228, Adjusted R² = .150. PSM = Psychosocial maturity. Significant and marginally significant values are in bold.

a 0 = Female, 1 = Male. b 0 = Nonwhite, 1 = White.
**General Discussion**

Juveniles’ reduced maturity hinders their decision-making, including their criminal decision-making; thus, knowing what influences jurors’ perceptions and subsequent treatment of juvenile offenders is essential in maintaining fair and developmentally appropriate legal proceedings. The current study examined how information about adolescent defendants’ age, gender, and psychosocial maturity influenced mock jurors’ perceptions of culpability, guilt, and appropriate sentencing severity. The information presented to mock jurors about adolescent defendants in this study appeared to influence these three related, but distinct, aspects of criminal justice proceedings in different ways. First, mock jurors’ perceptions of responsibility and guilt were differentially impacted by information about adolescent defendants’ maturity. Second, mock jurors’ perceptions of appropriate sentencing severity were not influenced by information about the defendant’s age, gender, or maturity. Exploratory analyses further found that age influenced perceptions of responsibility in a direction somewhat consistent with juvenile penalty literature, but only for male defendants.

**Finding 1: Maturity Differentially Impacted Perceptions of Responsibility and Guilt**

Consistent with hypotheses, information regarding adolescent defendants’ maturity influenced perceptions of responsibility such that less mature adolescents were seen as less responsible for their crimes than more mature adolescents or adolescents for whom no maturity information was given. This finding suggests that mock jurors’ perceptions of responsibility appropriately aligned with developmental research which suggests adolescents are less culpable for criminal behavior due to their developmental immaturity (Cauffman & Steinberg, 2000). Similar to prior research by Hughes and McPhetres (2016), the current study found that for mock jurors to recognize adolescents’ reduced culpability they needed to be explicitly told that the defendant was developmentally immature. In fact, when no information was provided regarding
the adolescent’s maturity, mock jurors viewed the adolescent as equally responsible for criminal behavior as an adolescent who was described as very mature.

Contrary to hypotheses, however, there were no differences between less mature and more mature adolescent defendants in determinations of guilt; rather, not providing information about the defendant’s maturity was associated with the strongest perceptions of guilt. These findings may reflect a lack of trust in the expert witness, as only 33.7% of the participants in the current sample trusted the expert witness very much or extremely much. In other words, although participants may have trusted the expert witness testimony when it came to the defendant’s responsibility, the testimony may not have been compelling enough to influence determinations of the defendant’s guilt. The homogeneity in perceptions of guilt between less mature and more mature adolescents may have been due to this disconnect between perceptions of responsibility and determinations of guilt; the defendant did commit the offense, regardless of how responsible they were. Further, simply mentioning maturity in the case vignette may have prompted the participant to reflect on their personal perceptions of adolescent maturity more broadly—regardless of the testimony of the expert witness—that resulting in perceptions of guilt being strongest when no maturity information about the defendant was provided. These findings suggest that while describing an adolescent defendant as less mature does not always mitigate perceptions of guilt, not providing jurors with any information about an adolescent defendant’s maturity can only serve to hurt the defendant during guilt determinations.

Taken together, these results suggest that although mock jurors may recognize that less mature adolescents are less responsible for criminal behavior, this recognition of reduced culpability does not necessarily extend to willingness to find the defendant not guilty. Defense attorneys representing juvenile defendants in criminal court can only serve to benefit from expert
witness testimony to describe to jury members how adolescents are less responsible for their actions due to their developmental immaturity. Although recognizing that adolescents are less culpable for criminal behavior does not necessarily lead mock jurors to a not guilty verdict, not providing any information about adolescents’ maturity does lead to a higher likelihood of a guilty verdict. Beyond implications for defense attorneys, the current results also raise larger questions regarding juvenile transfer to adult court. In retrospect, the finding that determinations of guilt are not dependent on whether the adolescent was described as less or more mature may be appropriate, considering that the adolescent in the hypothesized vignette did indeed commit the offense and even admitted as such. In situations where the juvenile’s guilt is less clear—as is likely the case during a jury trial—information about the defendant such as maturity may be more influential on guilt determinations. The finding that determinations of guilt were not based in information regarding maturity, but rather the facts of the case, may even suggest that the criminal court system is operating effectively as designed. However, juvenile transfer to criminal court was intended to be reserved for adolescents who are uniquely mature and thus uniquely responsible (Juveniles Tried as Adults, 2018). Rather than adolescent maturity weighing heavily on jurors’ determination of guilty versus not guilty, it should weigh more heavily on the decision to transfer or not transfer. Even if the criminal court system is operating effectively in these cases, adolescents were not the intended recipients of criminal court proceedings and are therefore still at a disadvantage during these proceedings. Future research should, therefore, examine adolescent psychosocial maturity in the decision to transfer to adult court more directly.

**Finding 2: Sentencing Unaffected by Information about Defendants**

Contrary to hypotheses, determinations of appropriate sentencing outcomes were not influenced by information about adolescent defendant’s age, gender, or maturity. Prior research
has suggested sentencing decisions for adolescent defendants may not be predicted by age (Ghetti & Redlich, 2001), gender (Spivak et al., 2014; Espinosa et al., 2008), or maturity (Cauffman et al., 2007), but rather aspects of the crime committed, such as the severity of the crime. Indeed, the pilot study results indicated participants were more likely to sentence the defendant harshly when the victim died than when the victim was injured, suggesting that the severity of the crime did influence sentencing determinations. Therefore, the current study would support prior findings that factors outside of the defendant’s personal characteristics—such as whether or not the victim died—are more influential in determining perceptions of appropriate sentencing severity. The finding that mock jurors seem to disregard extralegal factors in sentencing determinations was particularly concerning given that the juvenile justice system was specifically designed to consider these kinds of extralegal factors in juvenile outcomes (Juvenile Justice System Structure and Process, 2014). Contradictory to the inherent purpose of juvenile court to consider extralegal factors, transferring adolescents to adult court may result in their unique circumstances being overlooked by jurors.

Although the current study did not find that extralegal information about adolescent defendants influenced sentencing decisions, it is worth noting that judges—not juries—are typically responsible for sentencing decisions. Despite sentencing guidelines which recommend or require certain sentences based on factors such as the severity of the offense or the offender’s criminal history, judges are typically allowed substantial subjectivity in their sentencing decision-making (Mitchell, 2017). Future research could benefit from examining perceptions of adolescent defendants and sentencing decisions among judges, rather than jurors or mock jurors, and how these decisions align or diverge from the sentencing guidelines. Research in this area
would provide more information regarding how adolescents are actually treated in the justice system, and what information is influential in judicial decision-making.

**Exploratory Finding: The Juvenile Penalty**

Beyond the two primary findings that originated from study hypotheses, the current study also yielded an interesting exploratory finding: male defendants’ age predicted mock jurors’ perceptions of responsibility, such that 13-year-olds were perceived as most responsible, and 15-year-olds were perceived as least responsible. Although this finding was not hypothesized, it is consistent with the “juvenile penalty” literature that suggests a younger adolescent whose case was transferred to criminal court is perceived more harshly than an older adolescent or young adult who committed the same crime but whose case originated in adult court (Kurlychek & Johnson, 2004; Kurlychek & Johnson, 2010). Kurlychek and Johnson (2004) proposed that this juvenile penalty may be incurred due to the perception that young adolescents transferred to adult court are more dangerous and more likely to persist in criminal behavior than young adult offenders. The effect of a juvenile penalty may have been particularly pronounced in the current study due to details of the vignette used—driving a car without a license—which is less normative for a 13-year-old than a 15- or 17-year-old. A 15-year-old adolescent, on the other hand, may be too old to feel the effects of the juvenile penalty, but young enough to be perceived as less culpable for criminal behavior, resulting in the least amount of responsibility being attributed to this age group.

Notably, this juvenile penalty effect was only significant for male adolescent defendants; female defendants were perceived as equally responsible regardless of age. Kurlychek and Johnson (2010) did not find a significant difference between males and females in respect to the juvenile penalty; however, the authors also recognized that their sample of 96% male juvenile
offenders may have inhibited the ability to examine any gender effects present in the population. Although the current study utilized a hypothetical vignette among mock jurors, the experimental design allowed for an investigation of these gender effects on the juvenile penalty that might otherwise be difficult among samples of primarily male juveniles. Future research should, however, examine this interaction more precisely to fully understand the influence of gender on the juvenile penalty.

**Strengths and Limitations**

The current study had several key strengths, which were achieved by addressing some of the limitations present in prior literature on maturity and juror decision-making. First, the current study provided greater ecological validity than previous studies, as the crime included in the current study vignette utilized a crime that was serious enough and ages that were old enough to actually warrant adolescent transfer to adult court. Second, the experimental design utilized in this study helped to assure that any individual differences between participants which could potentially influence their perceptions of adolescent defendants’ responsibility, guilt, or sentencing were evenly distributed between conditions. The experimental design further allowed for manipulation of the defendant’s level of psychosocial maturity—a manipulation that would be impossible to achieve in assessing actual juvenile outcomes. Third, the current study included a control condition where no information regarding adolescent maturity was provided to the mock juror, which allowed for comparisons between conditions of maturity information versus no maturity information. Adolescent defendants’ maturity may not be mentioned at all during criminal court proceedings, and the inclusion of a control condition allowed for this effect to be empirically examined. Finally, the current study addressed final sentencing decisions beyond perceptions of responsibility and guilt. Although sentencing decisions are rarely determined by
jurors, the final sentence a defendant receives results from the accumulation of perceptions and decisions of jury members.

However, the current study was also not without limitations. Most importantly, due to a significant portion of the sample failing manipulation checks, the sample size was reduced below what was needed to achieve significant power to detect all main and interaction effects. As such, some significant interaction effects may exist that were unable to be detected in this data. Particularly, conditions in which the defendant was described as equally mature were unable to be used in analyses due to a significantly reduced sample size, and interactions involving this condition were not examined. Adolescents who are described as equally mature could be uniquely affected in perceptions of responsibility, guilt, and sentencing in ways that contribute significantly to the current literature. Subsequent research will work at collecting additional data using the manipulations presented in this study, so as to have sufficient power to detect all effects of interest. An additional limitation of the reduced sample size was that the results obtained in this study are subject to change when the full sample is collected and analyzed; however, analyses with the full study sample that failed some or all of the manipulation checks yielded remarkably similar results as the analyses from the reduced sample reported here, suggesting that the results should remain similar even when a larger sample is obtained.

The high rate of manipulation check failure among MTurk participants (which was even higher than college student participants) could be due to two possible explanations. The first explanation for this manipulation check failure takes into consideration the remarkably similar results between the reduced sample and the full sample in analyses. Although MTurk mock jurors were unable to recall specific details about the defendant’s age, gender, or maturity, this information still may have influenced their later decisions on a subconscious level. In real life
jury trials, jurors are not provided with a quiz regarding the information they received throughout the course of the trial; however, this information certainly influences jurors’ decisions, nonetheless. As such, the argument could be made that utilizing the full sample—regardless of manipulation checks—is more ecologically valid in juror decision-making research. The second explanation for the manipulation check failure takes into consideration the vignette used in this study. The “equal maturity” condition (which had the highest rate of manipulation check failure and was therefore unable to be examined in post hoc analyses) may not stand out enough to participants due to the wording of the vignette in the current study. “Equal maturity” may be considered “average”, and participants may not be paying particular attention to information that was explicitly described as “average”. Rather, participants may be more likely to encode information described as “greater than” or “less than”, which would be supported by a higher rate of participants passing the manipulation checks for the “more mature” and “less mature” conditions. Data collected from college students for the full study—beyond that collected for the pilot study—will be able to provide more insights into potential differences between MTurk and college student samples in regards to both manipulation check rates and final results.
Conclusion

This study expanded juror decision-making literature by a) increasing applicability of research findings by using more legally relevant vignettes, b) differentiating between effects of age and maturity, and c) examining the influence of gender. Information about adolescent defendants’ maturity appears to have different effects at different stages of criminal justice proceedings. Results indicated that jurors are also able to appreciate the legal relevance of diminished maturity in younger adolescents when it was explicitly stated by an expert witness. Legal actors, such as attorneys, may need to discuss adolescents’ diminished maturity to a jury in criminal court to provide their client with the highest quality of defense. Indeed, failing to mention adolescents’ developmental immaturity at all during jury trials may put adolescent defendants at a significant disadvantage during legal proceedings. Younger adolescent defendants may be further subjected to a juvenile penalty where they are treated more harshly in criminal court due to their perceived dangerousness. Although defense attorneys for juvenile clients can provide information to juries regarding adolescents’ reduced maturity and culpability, this information may not always have the intended mitigating effects, pointing to broader issues with juvenile transfer to juvenile court overall. Juvenile court was created to provide adolescents with developmentally appropriate and legally fair procedures and outcomes; transferring adolescents to adult court is antithesis to this purpose, as adolescents who face a jury trial are less likely to have their unique circumstances taken into consideration.
References


McPhetres, J., & Hughes, J. (2016). Sentencing recommendations are insensitive to juvenile offender’s age and maturation. *Cogent Social Sciences, 2*(1), 1-6.  
https://doi.org/10.1080/23311886.2016.1194714


https://doi.org/10.1037/0033-295X.100.4.674

https://doi.org/10.1097/00004583-199211000-00001

https://doi.org/10.1002/dev.20442


https://doi.org/10.1002/bsl.727

https://doi.org/10.1177/1557085114531318
[https://doi.org/10.1038/nrn3509](https://doi.org/10.1038/nrn3509)

[https://doi.org/10.1007/BF01499023](https://doi.org/10.1007/BF01499023)

[https://doi.org/10.1037/a0014763](https://doi.org/10.1037/a0014763)


https://doi.org/10.1002/bsl.517
Appendix A: Jury Instructions

Appendix A1: Pilot Study Jury Instructions

The defendant is charged with vehicular manslaughter [hit-and-run]. The defendant admits to the crime as charged, and the evidence is clear that the defendant committed the crime. However, the law requires that several factors be considered in making a determination of guilt. To find the defendant guilty of vehicular manslaughter [hit-and-run], the jury must decide if:

1. The defendant drove a vehicle;
2. While driving that vehicle, the defendant’s conduct caused the death or great bodily injury of another person;
3. The defendant acted in a reckless way that created a high risk of death or great bodily injury;
4. A reasonable person would have known that acting in that way would create such a risk.

You should consider the following factors, if applicable:

1. The circumstance of the crime.
2. Whether or not the offense was committed while the defendant was under the influence of extreme mental or emotional distress.
3. Whether or not the offense was committed under circumstances which the defendant reasonably believed to be a moral justification of his conduct.
4. Whether or not the defendant acted under extreme distress or under the control of another person.
5. Whether or not, at the time of the offense, the capacity of the defendant to appreciate the criminality of his conduct or to conform his conduct to the requirements of law was impaired as a result of mental disease or defect or the effects of intoxication.
6. The age of the defendant at the time of the crime.

7. Any other circumstance which mitigates the seriousness of the crime, even though it is
   not a legal excuse for the crime, and any sympathetic or other aspect of the defendant's
   character or record.

As a juror on this case, you will be asked to make several judgements regarding the defendant.

**Appendix A2: Final Study Jury Instructions**

The defendant is charged with vehicular hit-and-run. The defendant admits to driving a car
without a license. The law requires that several factors be considered before the defendant can be
found guilty. To find the defendant guilty of vehicular hit-and-run, the jury must decide if all
three following conditions are met:

1. While driving a vehicle, the defendant’s conduct caused the death or great bodily injury
   of another person;

2. The defendant acted in a reckless way that created a high risk of death or injury;

3. A reasonable person would have known that acting in that way would create a risk.

   When considering the defendant’s guilt, you should consider the following factors:

1. The circumstance of the crime.

2. Whether or not the offense was committed while the defendant was under the influence
   of extreme mental or emotional distress.

3. Whether or not, at the time of the offense, the defendant’s ability to understand the
   criminality of their behavior, or their ability to change their behavior to follow law, was
   impaired.

4. The age of the defendant at the time of the crime.
5. Any other circumstance which lessens the seriousness of the crime, even though it does not excuse the crime, and any sympathetic or other aspect of the defendant's character or record.

As a juror on this case, you will be asked to make several judgements regarding the defendant.
Appendix B: Originally Proposed Vignette

John [Sally] is a 13-year-old [15-year-old, 17-year-old] male [female] who lives with his [her] mother, father, and sister. He [she] does average in school, is of average intelligence, and has no history of criminal behavior. One day, John [Sally] had an argument with a neighbor of the same age, Taylor, who made several insulting comments about John [Sally], which resulted in a physical fight. Taylor punched John [Sally] several times, and John [Sally] stabbed Taylor with a pocketknife. Taylor died at the hospital from wounds sustained during the stabbing.

In the expert testimony, the psychologist who evaluated John [Sally] reported that he [she] was less [equally, more] developmentally mature as compared to other youth of his [her] age. Specifically, the psychologist stated that John [Sally] had a relatively poorer [equal, greater] capacity to control his [her] impulses and think before making decisions, consider the future consequences of his [her] behavior, and appreciate the risks associated with his [her] actions.
### Appendix C: Pilot Study Continuous Dependent Variable Skewness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Death Condition</th>
<th>Injury Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skewness</td>
<td>SD</td>
</tr>
<tr>
<td>Guilt (continuous)</td>
<td>-1.181***</td>
<td>.227</td>
</tr>
<tr>
<td>Responsibility (scale)</td>
<td>-1.413***</td>
<td>.227</td>
</tr>
<tr>
<td>Responsibility (percentage)</td>
<td>-1.626***</td>
<td>.228</td>
</tr>
<tr>
<td>Sentencing Consideration</td>
<td>1.123***</td>
<td>.227</td>
</tr>
<tr>
<td>Future Dangerousness</td>
<td>.213</td>
<td>.227</td>
</tr>
<tr>
<td>Sentencing Outcome</td>
<td>-1.540***</td>
<td>.227</td>
</tr>
</tbody>
</table>

**±1 – ±0.5 = moderately skewed. ***/>±1 = highly skewed.**
## Appendix D: Endorsement of Adolescent Stereotypes Measure

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal adolescent development is tumultuous (chaotic/stressful).</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescence is a time of increased emotionality.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Puberty is a negative event for adolescents.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescence is a time of increased risk for suicide.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescent thought is childlike.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are impulsive.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents act without thinking.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are highly influenced by their peers.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are poor decision-makers.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are as intelligent as adults.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are highly affected by consequences.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Adolescents are highly affected by rewards.</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
</tbody>
</table>
Appendix E: Dependent Variable Scatterplot Matrices

Appendix E1: Scatterplot Matrices with Future Dangerousness Subscale
Appendix E2: Scatterplot Matrices without Future Dangerousness Subscale
Vita

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