Just World Beliefs, Expert Psychological Testimony, and Verdicts: A Mediational Model

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This study assessed the role of expert testimony and just world beliefs (JWB) in decisions made in a sexually violent predator (SVP) trial. Three participant samples (student, juror, and community; total N = 534) completed items measuring JWB and watched a 1-hour videotaped trial simulation that featured a psychologist offering different types of expert testimony in a SVP hearing. After the opening statements and at the end of the trial presentation, participants made commitment decisions and rated their confidence in their decision. They also rated the expert testimony on influence, credibility, scientificness, and confidence. Results indicated that favorable attitudes toward the expert mediated the relationship between JWB and commitment decisions. This relationship did not differ depending on type of expert testimony (clinical vs. actuarial) proffered. The legal and policy implications of the findings are discussed.

Expert witnesses play a vital role in our legal system by using their advanced training and expertise to offer case-relevant knowledge and opinions (Campbell, 2010; Federal Rules of Evidence, Rule 702). Psychologists offering expert testimony serve an especially important function because they provide juries with specialized psychological information and judgment necessary for judicious

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decision-making—from whether a defendant is criminally responsible for their actions to whether a criminal is likely to be dangerous in the future (Blau, 2001; Tsushima & Anderson, 1996). As the information offered by an expert is usually beyond the knowledge base of the general public and the expert is typically assumed to have sufficient training to make more accurate judgments than lay witnesses (Moore, 1985), there is the potential for experts to exert undue influence on juror decisions.

As such, United States and international courts have adopted specific standards (e.g., Daubert v. Merrell Dow Pharmaceuticals, 1993; Frye v. United States, 1923; R. v. Mohan, 1994) that specify admissibility requirements for scientific evidence communicated through expert testimony. For example, the most recent and widely used admissibility criteria in the United States—the Daubert standard—offers a list of factors that judges should consider in determining the admissibility of expert testimony. These include, but are not limited to, whether the evidence is falsifiable, peer reviewed, generally accepted by the scientific community, and has a known or potential error rate (Daubert v. Merrell Dow Pharmaceuticals, 1993; applied to nonscientific expert testimony admissibility in Kumho Tire Co. v. Carmichael, 1999). The Daubert standard, which is used by the United States’ federal system and the majority of U.S. states, is considered one of the most stringent and concrete (Krauss, Cassar, & Strother, 2009). Despite these guidelines for evaluating whether scientific expert testimony should be admitted, research in the U.S. has shown that judges do not always understand these criteria (e.g., Gatowski et al., 2001; Groscup, 2004), and some studies have found that scientific evidence is admitted by judges at similar rates regardless of its quality (e.g., Dahir et al., 2005; Kovera & McAuliff, 2000). This raises concern for trials both inside and outside the United States where poor quality expert testimony may be admitted despite the presence of codified admissibility standards.

Many cases depend on expert testimony, but social scientists have yet to explore the full impact that expert psychological witnesses have on jury decision-making. As such, further examination of the correlates and effects of jurors’ perceptions of expert testimony is needed. In this study, we aim to assess how jurors perceive expert testimony and to examine how individual differences in jurors’ worldview might influence their decisions in cases that depend heavily on this testimony.

Preparing Witnesses and Choosing Jurors

Some important juror characteristics have received attention as correlates of juror decisions. These include gender (Cutler, Moran, & Narby, 1992; Fulero & Penrod, 1990), socio-economic status (Hastie, Penrod, & Pennington, 1983; Visher, 1987), and legal authoritarianism (i.e., attitudes toward a defendant’s civil liberties; Narby, Cutler, & Moran, 1993). However, demographic variables have largely been found to be unreliable in predicting juror behavior (Baldwin &
McConville, 1980; Lieberman & Sales, 2007), and personality differences—while more predictive than demographic variables (e.g., Moran, Culter, & De Lisa, 1994)—have not been adequately researched in many types of cases. Because these individual difference variables may influence jury decisions, more research is needed to identify which variables may prejudice a jury toward or against defendants in different settings.

The practice of having expert psychological witnesses testify in various types of trials is growing: these experts offer judges and juries their professional opinions regarding evidence of the reliability of eyewitness testimony to the likelihood that a convicted murderer will be dangerous in the future (Cutler & Kovera, 2011, for a recent review of the use of expert psychological testimony across a variety of legal contexts). Because so many trials depend heavily on expert testimony, further research is also needed to understand how individual differences in juror attitudes affect how they respond to expert witnesses, and how much their perceptions of expert witnesses influence the decisions they make.

**Just World Beliefs and Attitudes toward Victims and Defendants**

One individual difference variable that has the potential to inform jury decision-making involving expert testimony is a juror’s level of just world beliefs (JWB). These beliefs encompass the extent to which an individual believes that the world is fair and people get what they deserve (Lerner, 1965, 1980; Lerner & Simmons, 1966). A strong motivation to preserve the belief that the world has a predictable order prompts people to think that those who have succeeded deserve that success while those who suffer did something to warrant that suffering. Such justification can lead to blaming victims of crime, poverty, or other hardships (Furnham & Gunter, 1984; Furnham & Procter, 1989; Jones & Aronson, 1973). The same drive to justify the world around us also leads those with high levels of JWB to respond positively to those who have achieved high status and to perceive high status persons as more competent than those with low status (Oldmeadow & Fiske, 2007). In this way, JWB is often considered a form of system justification (Jost, Banaji, & Nosek, 2004) because the motivation to believe the world is just facilitates cognitions and behaviors that justify the status quo (such as derogating poor people or glorifying successful people).

Rubin and Peplau (1973, 1975) suggest that the extent to which people believe in a just world differs on an individual level. Their original and revised scales, along with other scales designed to measure JWB (e.g., The Global Belief in a Just World Scale; Lipkus, 1991), are commonly used as moderating and mediating individual differences variables. Higher levels of JWB are associated with political conservatism, traditional attitudes toward women (Wagstaff & Quirk, 1983), authoritarianism (Connors & Heaven, 1987), religiosity, and the Protestant work ethic (Ghorpade, Lackritz, & Singh, 2006).
As it applies to the legal system, the majority of research on JWB has focused on the phenomenon of victim blaming among those with higher levels of JWB (e.g., Jones & Aronson, 1973; Shuller, Smith, & Olson, 1994). Individual levels of JWB have often been assessed in conjunction with sexual assault and rape cases, where jurors high in JWB may perceive the victim as having encouraged the defendant or as playing a role in the assault. Kleinke and Meyer (1990), for example, found that men high in JWB consider a rape victim as more responsible for the crime than did men low in JWB. This suggests that, for crimes in which the victim may be perceived as having some sort of control, individuals who want to maintain the belief that the world is just will not favor victims in these legal decisions.

However, more complex findings emerge when mock jurors are given the opportunity to punish guilty defendants in criminal and civil trials. In a simulation of a civil rape trial, for example, female mock jurors higher in JWB awarded more monetary damages to a rape victim whose perpetrator had already been found guilty in a criminal trial (Foley & Pigott, 2000). In death penalty cases, mock jurors high in JWB have also been found to consider statutory mitigators (i.e., reasons for why a convicted murderer should not be sentenced to death) less than those low in JWB (Butler & Moran, 2007). This indicates that when a defendant has already been found guilty, those high in JWB are more likely to attempt to “restore justice” by punishing the guilty party more harshly. Furthermore, if a defendant has an identifiable stigmatizing characteristic, those high in JWB may be even harsher in punishing them than other defendants in the same situation. For example, in a study of an aggravated murder case, Freeman (2006) found that those higher in JWB were more punitive in their sentencing and guilt decisions in general, but that they were especially punitive when the defendant had lower socio-economic status (SES). This suggests that when defendants have socially devalued qualities and identities—such as being poor, being a convict, or having a racial identity that is negatively stereotyped—jurors with high levels of JWB will be particularly punitive because they believe these individuals do not function optimally in society and deserve to be punished. This attempt on the part of high-JWB individuals to restore justice by acting punitively toward socially devalued defendants serves to justify the status quo by legally sanctioning those who have failed to adhere to it (Blasi & Jost, 2006; Kay, Jost, & Young, 2005).

Overall, studies on JWB in legal decisions indicate that people who are highly motivated to preserve their belief that the world is just will blame victims if they cannot help them. On the other hand, those high in JWB will act punitively toward defendants if guilt is very likely, the defendant has low status, or they feel like they can restore justice by punishing the wrong doer. Interestingly, both victim blaming and punitiveness toward a defendant can co-exist. For example, Wyer, Bodenhasen, and Gorman (1985) found that participants presented with information that violated a just world ideal believed that a sexual offender should
be punished more severely but also held the victim more responsible for her assault. Although much research exists on how JWB influence attitudes toward victims and criminal defendants, less is known about how those beliefs may affect decisions in trials that depend heavily on expert witnesses.

**Just World Beliefs and Perceptions of Expert Witnesses**

Several studies and theoretical considerations would suggest that those with high levels of JWB would respond positively to expert witnesses. First, because those with high levels of JWB are motivated to see the world as a place where people get what they deserve and view those who have achieved high status as more competent (Oldmeadow & Fiske, 2007), we might expect high-JWB individuals to consider expert witnesses to be more competent based on their title alone. Moreover, levels of JWB have been found to predict higher trust in authority figures and lower suspicion of deception (Zuckerman & Gerbasi, 1977). Most expert witnesses have credentials and advanced degrees that are earned through years of education and training (Tsushima & Anderson, 1996). Thus, an individual with high levels of JWB is likely to perceive an expert witness as deserving of their position of influence, and will then likely place greater weight on the expert’s opinions than would those with low levels of JWB.

In addition, an individual’s belief in a just world correlates with individual levels of authoritarianism (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Altemeyer, 1996), which is the extent to which a person endorses an authoritative leadership structure. JWB correlates particularly strongly with the component of authoritarianism measuring deference to authority (Connors & Heaven, 1987). Those high in JWB have been found to endorse authoritative decisions more strongly than those low in JWB—even when those decisions are biased (Hagedoorn, Baun, & van de Vliert, 2002). However, authoritarianism has many components—including aggression and conventionalism (Kessler & Cohrs, 2008)—that make it a less-than-ideal predictor of legal decision-making. In this study, we measure JWB rather than authoritarianism because we expect JWB to predict a juror’s decision-making process both through deference to authority (expert favorability) and through a desire to maintain the view that the world is just by acting punitively against a litigant (described earlier).

Although theory suggests that JWB may be a strong predictor of how people respond to expert testimony, it has not been studied widely. In fact, the only known study examining the relationship between JWB and perceptions of expert testimony focused solely on battered women’s syndrome testimony (Schuller et al., 1994)—an important but limited portion of a psychologist’s role as an expert (Blau, 2001). As such, it is important to examine how jurors respond to experts who offer more than just syndrome-based testimony. A particularly useful type of trial to investigate the role that perceptions of expert testimony play in jury
decision-making involves the civil commitment of sexually violent predators (SVP) after their sentence has been served.

**Sexually Violent Predator Civil Commitment Trials**

In the United States as of 2008, 20 states, the District of Columbia, and the federal government have enacted sexually violent predator/person (SVP) laws (National Center for the Prosecution of Child Abuse, 2008), and the U.S. Supreme Court has upheld the constitutionality of such laws against a variety of challenges (*Kansas v. Hendricks*, 1997; *United States v. Comstock*, 2010). Similar SVP laws exist in other countries, most notably Australia (Mercado & Ogloff, 2007), though our discussion will focus primarily on the U.S. laws and legal structure. A majority of SVP jurisdictions allow for either party to request a jury trial, and scholars suggest jury trials (as opposed to bench trials) are common (LaFond, 2005). By necessity, these SVP commitment trials require an evaluation of the respondent’s future dangerousness by a mental health professional (National Center for the Prosecution of Child Abuse, 2008). In most jurisdictions, in order to be considered a SVP, the respondent (the name for the “defendant” in a civil trial) must be found to (1) suffer from some sort of mental disorder or abnormality, (2) have diminished volitional capacity because of their mental disorder, and (3) be likely to commit another act of sexual violence (Miller, Amenta, & Conroy, 2005). If a jury decides that a respondent in an SVP trial is indeed a SVP, that person is committed to a mental health facility for an indeterminate amount of time, despite already having served their sentence for their sexual offense (for an overview of SVP civil commitment trials, Miller et al., 2005 and Janus & Prentky, 2008).

In SVP trials, testimony from a psychologist on a respondent’s risk of future dangerousness is often the only evidence a jury hears (Guy & Edens, 2003; Miller et al., 2005). For this reason, it is essential that experts accurately and clearly communicate to jurors the respondent’s potential for recidivism. Several assessment instruments exist to help psychological experts determine risk, two of the most common being the Static 99 (Hanson & Thornton, 1999) and the Minnesota Sex Offender Screening Tool-Revised (MnSost-R; Epperson, Kaul, Huot, Goldman, & Alexander, 2003). While these and other actuarial risk assessment measures may contain error, research suggests that they are significantly more accurate than predictions based on clinical experience (i.e., experts relying exclusively on their own experiences working with similar types of people). A recent meta-analysis comparing actuarial and clinical risk predictions for sexual offenders found that in over 118 studies, actuarial measures predicted recidivism better than clinical assessment, with effect sizes ($d$) between 0.67 and 0.97 (Hanson & Morton-Bourgon, 2009). However, jurors seem to respond more favorably to expert witnesses who base their testimony on clinical assessment, even though evidence suggests it is less accurate (e.g., Krauss, McCabe, & Lieberman, 2011; Lieberman, Krauss, Kyger, & Lehoux, 2007; McCabe, Krauss, & Lieberman, 2010). This indicates that jurors
are often unable to appropriately evaluate the validity of actuarial in comparison to clinical expert testimony and may rely on less-relevant factors—such as how persuasive or credible the witness seems—in making their decisions. In fact, in previous research in two of the present participant samples (Krauss et al., 2011 for venire jurors; McCabe et al., 2010 for community sample jurors, but not for the college student jurors), jurors favored clinical expert testimony over actuarial expert testimony.1

SVP trials provide an ideal court setting for examining JWB and attitudes toward expert witnesses. There are many reasons for this: SVP trials depend heavily on expert testimony (Guy & Edens, 2003); the testimony can be based on either actuarial or clinical assessment strategies (McCabe et al., 2010); and these civil—as opposed to criminal—trials in which jurors are not determining guilt but rather whether a respondent should be civilly committed allow us to investigate whether the motivation to restore justice remains after a respondent has served his or her criminal sentence. The fact that the respondent has already been found “guilty” of a sex crime is likely to encourage high-JWB individuals to decide to commit the respondent; but the post-sentence nature of SVP trials allows us to examine any biases or tendencies even after the criminal system has legally punished them for their crime. Further, because the respondent is not on trial for his actions with a specific “victim,” the effects of a juror’s JWB on their legal decision-making are unlikely to be confounded with effects deriving from victim blaming (Kleinke & Meyer, 1990; van den Bos & Maas, 2009), allowing us to draw more clear conclusions regarding the role of JWB in legal settings.

The Present Study

In the present study, we examine whether jurors’ levels of JWB predict their decision of whether or not to commit a respondent. We first examine how high levels of JWB might predict an initial pro-commitment decision before hearing evidence in the trial (i.e., punitiveness). We then explore whether high-JWB individuals will view the expert testimony more favorably, which may subsequently predict a final pro-commitment decision, even when controlling for initial commitment decision. Finally, we explore these relationships for different types of testimony—both scientific (actuarial-based) and intuitive (clinical-based)—to see whether the type of testimony offered influences how mock jurors perceive and utilize that testimony. Based on the available research, our hypotheses are as follows

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1Data from the juror sample has been presented previously by Krauss et al. (2011) and data from the community and college student sample by McCabe et al. (2010). These studies have focused on the effect that actuarial versus clinical expert testimony has on juror decision-making. The variables in the current study (i.e., JWB and its relationship with favorability toward the expert and eventual sentencing decisions), however, have not been examined in previous studies using these data sets.
**H1.** We expect those with higher levels of JWB to have a more pro-commitment initial decision. In other words, they will be more in favor of committing the SVP respondent even before they hear evidence in the trial. We base this hypothesis on research demonstrating that high-JWB individuals are more punitive in legal settings where defendants/respondents are already found to be “guilty” (Butler & Moran, 2007; Foley & Pigott, 2000; Wyer et al., 1985) and on research demonstrating that an SVP respondent has a stigmatized identity as a sexual offender (Freeman, 2006; Kay et al., 2005).

**H2.** We also predict that those with higher levels of JWB will respond more favorably to the expert testimony favoring commitment. We expect this because high-JWB individuals have been found to respond more favorably to authority (Hagedoorn et al., 2002) and because experts’ qualifications imply to high-JWB individuals that they have the expertise to make accurate predictions (Oldmeadow & Fiske, 2007).

**H3.** When controlling final commitment decision for initial decision, we predict that those with high JWB will more often decide to commit the respondent, and this relationship will be mediated by the favorability of the expert testimony. Exploring the relationships between JWB, expert favorability, and final commitment decision while controlling for initial decision will tell us more about the unique effects of the expert testimony above and beyond initial commitment decision.

We also explore whether the mediational model will be moderated by the type of testimony offered. High-JWB mock jurors who hear clinical (vs. actuarial) testimony may be especially likely to civilly commit sexual offenders because they may respond more favorably to the expert testimony supporting civil commitment. Previous research (e.g., Lieberman et al., 2007), including research utilizing these participant samples (Krauss et al., 2011; McCabe et al., 2010), has found that clinically based testimony is judged more favorably than actuarial-based testimony, and those who favor authoritative decisions (i.e., high-JWB individuals) may favor judgments from experts that are based on their own authority as opposed to actuarial instruments. Exploratory analyses will be conducted to examine the possibility of such moderated mediation.

### Method

**Participants**

Three participant samples, including a juror sample, representative community sample, and undergraduate sample, were used in the study. The demographic information for each sample is presented in Table 1. The juror sample was re-
Recruited from a Los Angeles District Court in Santa Ana, California. They were asked to participate in the study at the courthouse after being excused from jury service that day and were paid $25 as compensation. They were run in groups of 3–26.

The student sample consisted of jury-eligible undergraduate students from a group of southern California colleges and a Nevada university. The students received partial course credit for their participation and were run in groups of 3–15. No significant differences were found between the undergraduates from the different locations, so their responses were aggregated. One participant in the student sample was excluded from the analysis because they did not complete all the dependent measures.

Participants in the community sample, recruited by a marketing company to approximate a representative jury-eligible population, were paid between $40 and $100.

### Table 1. Descriptive Statistics and Means for Variables for Each Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Juror</th>
<th>Student</th>
<th>Community</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total N</td>
<td>156</td>
<td>137</td>
<td>241</td>
<td>534</td>
</tr>
<tr>
<td>Experimental condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical (n)</td>
<td>80</td>
<td>63</td>
<td>125</td>
<td>268</td>
</tr>
<tr>
<td>Actuarial (n)</td>
<td>76</td>
<td>74</td>
<td>116</td>
<td>266</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (%)</td>
<td>52.6</td>
<td>53.3</td>
<td>60.8</td>
<td>56.1</td>
</tr>
<tr>
<td>Male (%)</td>
<td>47.4</td>
<td>46.7</td>
<td>39.2</td>
<td>43.9</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian/White (%)</td>
<td>50.6</td>
<td>56.0</td>
<td>50.8</td>
<td>52.2</td>
</tr>
<tr>
<td>Asian (%)</td>
<td>20.5</td>
<td>12.4</td>
<td>1.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Hispanic/Latino/a (%)</td>
<td>19.2</td>
<td>11.7</td>
<td>21.2</td>
<td>18.1</td>
</tr>
<tr>
<td>Black/African Amer. (%)</td>
<td>4.5</td>
<td>9.5</td>
<td>17.4</td>
<td>11.5</td>
</tr>
<tr>
<td>Native American (%)</td>
<td>0</td>
<td>1.5</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Other (%)</td>
<td>5.1</td>
<td>8.8</td>
<td>8.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Age M(SD)</td>
<td>40.9(15.5)</td>
<td>20.9(5.3)</td>
<td>41.2(16.6)</td>
<td>35.6(16.5)</td>
</tr>
<tr>
<td>Range</td>
<td>20–88</td>
<td>18–70</td>
<td>18–85</td>
<td>18–88</td>
</tr>
<tr>
<td>JWB (1–7 scale) M(SD)</td>
<td>4.24(.70)</td>
<td>4.07(0.59)</td>
<td>4.23(0.58)</td>
<td>4.19(0.62)</td>
</tr>
<tr>
<td>Favorability toward Expert (1–9 scale) M(SD)</td>
<td>6.24(1.68)</td>
<td>6.00(1.71)</td>
<td>6.69(1.67)</td>
<td>6.38(1.70)</td>
</tr>
<tr>
<td>Decision Confidence (D-C; −9 to + 9 scale)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial D-C M(SD)</td>
<td>+1.66(6.58)</td>
<td>+2.65(6.38)</td>
<td>+4.09(6.21)</td>
<td>+3.00(6.44)</td>
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<td>Final D-C M(SD)</td>
<td>+4.97(5.76)</td>
<td>+4.29(6.24)</td>
<td>+6.12(4.78)</td>
<td>+5.31(5.53)</td>
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<tr>
<td>Residual M(SD)</td>
<td>+4.58(3.59)</td>
<td>+5.12(3.48)</td>
<td>+5.90(3.39)</td>
<td>+5.31(3.51)</td>
</tr>
</tbody>
</table>

Note: *Differs between juror and community samples (p < .05).
*Differs between juror and Student samples (p < .05).
*Differs from the community sample (p < .05).
$80. They participated in groups of 24–40 in a classroom on a college campus. Four participants from the community sample were removed from the analysis because they did not complete all the dependent measures.

Procedure

Because all participants were run in groups, participants were randomly assigned to expert testimony condition (clinical or actuarial) based on the experimental session they were scheduled for. All participants in a given session were in the same condition and the manipulation was embedded in the videotaped trial presentation they all saw.

After giving informed consent, all participants were introduced to the experiment as a study on how personality factors influence legal decision-making. Some minor differences between the samples exist in the introduction phase of the experiment due to the varying size of the participant groups: while students were introduced to the study by an experimenter, the community and juror samples listened to an identical script on an audio recording. Further, the community and juror samples received more explicit instructions to work alone in their decisions. In all three samples, participants completed the dependent measures by themselves. Before the trial presentation, all participants were given a packet with demographic questionnaires and other personality measures. All participants also completed verdict forms during and after the trial presentation.

Stimulus Materials and Measures

Trial simulation. The 1-hour videotaped trial presentation was based on the transcript of an actual Arizona SVP hearing. Although necessary abbreviations were made, the actors used the exact proceedings from the Arizona trial as a script in order to present the participants with as true-to-life a court experience as possible. For this same reason, the actors portraying the petitioner’s and respondent’s attorneys were actual lawyers with experience as both prosecutors and defense attorneys, and the expert psychologist presenting testimony was a licensed clinical psychologist familiar with offering similar types of testimony. The trial presentation consisted of the following six parts: initial jury instructions from the judge, opening statements from both sides, expert psychological testimony for the petitioner, cross-examination of the expert by the respondent’s attorney, closing statements, and final jury instructions from the judge. The videotape was paused after the opening statements as the participants made initial commitment decisions.

During the expert testimony, the type of testimony offered differed based on condition. All participants heard that the psychologist based his assessment on a 2–3 hour interview, and heard him conclude: “The law asks us to make
a determination as to whether a person is likely or not likely [to recidivate] and my opinion is that he is likely to.” In the clinical condition, however, this conclusion was based solely on the expert’s interview with the respondent; in the actuarial condition, the conclusion was based on two assessment instruments designed to predict the recidivism of sex offenders (Rapid Risk Assessment for Sex Offender Recidivism; Hanson, 1997; Sex Offender Risk Appraisal Guide; Quinsey, Harris, Rice, & Cormier, 1998). Like the rest of the trial presentation transcript, the script for the expert testimony came from an actual Arizona SVP trial. The transcript for the actuarial testimony came from the original case used in the trial presentation; the clinical testimony was based on a different Arizona SVP trial transcript that utilized clinical expert testimony. This clinical testimony differed from the actuarial testimony for only 350 words of the 1500 words used to describe the assessment instruments used in the actuarial testimony.

The clinical/actuarial manipulation also carried into the cross-examination by the respondent’s attorney. Again, most of the information and arguments presented in the cross-examination were consistent across conditions. For example, identical footage featured the respondent’s attorney questioning the validity of a determination of future dangerousness based on a short interview, and asking whether the respondent’s participation in a sex offender treatment program while in prison might make him less likely to recidivate. In addition, in the clinical condition, the participants heard the expert acknowledge that his opinion was not based on more than a short interview and that his clinical opinion might be flawed. In the actuarial condition, the expert admitted that there was some disagreement in the field about the utility of the assessment instruments and pointed out that the values are just estimates of predicted recidivism. These counter arguments were based on the counter arguments used in other actual SVP trials that utilized the different types of expert testimony. Full transcripts for both types of testimony and cross-examination can be found in Krauss et al. (2011).

Commitment decisions. Each participant made two commitment decisions during the experimental session. They made an initial decision (Time 1) after hearing the opening statements from each side and a final decision (Time 2) after hearing the expert testimony, cross-examination of the expert, closing statements, and final jury instructions from the judge. Each commitment decision consisted of two items: the first asked whether “the respondent was a sexually violent person, and therefore should be committed,” with responses yes (coded +1) or no (coded −1). The second item asked participants to rate their confidence in their decision, with responses ranging from 1 (not very confident) to 9 (extremely confident). Responses to these two items were multiplied to form a composite variable ranging from –9 (extremely confident the respondent should not be committed) to +9 (extremely confident the respondent should be committed). The resulting variable, which we refer to as decision-confidence, reflects a participant’s commitment
decision and their confidence in that decision. Initial (Time 1) decision-confidence reflects the mock juror’s decision before hearing evidence in the trial, so higher scores on initial decision-confidence represent a stronger pro-commitment initial decision. Final (Time 2) decision-confidence reflects their final decision after hearing all the evidence in the trial, and higher scores similarly represent a more pro-commitment decision. We also created a residualized decision-confidence variable that controlled final decision-confidence for initial decision-confidence. High scores on residual decision-confidence reflect a stronger pro-commitment decision when controlling for initial (pre-evidentiary) decision-confidence. We used a continuous dependent variable of decision-confidence as opposed to the more ecologically valid dichotomous verdict (commit vs. do not commit) not only to capture more variability in responses, but also in order to create the residualized variable that controls for initial decision-confidence. This more sensitive continuous measure of juror decision-making is commonly used in mock juror research (e.g. Crocker & Kovera, 2010; Kassin & Wrightsman, 1988; Leippe, Eisenstadt, Rauch, & Seib, 2004; see Diamond, 1997 for a discussion of the decision-confidence variable’s use).

**Favorability toward the expert.** Along with their final commitment decision, participants also answered four items regarding their attitudes toward the expert testimony. Anchored at 1 (not at all), 5 (moderately), and 9 (highly), the items asked whether they found the expert testimony influential, scientific, confident, and credible. These four items measure somewhat different aspects of the expert witness and his testimony. However, when combined, the scale was highly reliable (α = .92), so we averaged the items to create an expert favorability scale.

**Just world beliefs.** Either before or after the trial presentation, participants were given the Just World Scale Revised (Rubin & Peplau, 1975), a 20-item scale designed to measure the extent to which an individual believes that the world is essentially just and that people get what they deserve. Sample items include the following: “By and large, people deserve what they get” and “It is often impossible for a person to receive a fair trial in the United States” (reverse-coded). Items were measured on a scale ranging from 1 (strongly disagree) to 7 (strongly agree) and were averaged to create our JWB scale (α = .60). No differences between those who completed the scale before or after the trial presentation were found.

**Results**

**Sample Differences**

Table 1 provides means, standard deviations, and tests of pairwise differences between the means of the three different samples on JWB, expert favorability, initial decision-confidence, final decision-confidence, and residual
decision-confidence. Tests of demographic differences among the samples indicated that they varied in terms of their ethnic composition, \(\chi^2(10) = 59.55, p < .001\), and average age, \(F(2, 520) = 102.64, p < .001\) (note that not all participants reported all demographic information). As shown in Table 1, the student sample had proportionally more White and younger participants.

In addition, the samples varied in terms of their average levels of JWB, \(F(2, 524) = 3.98, p = .02\), and favorability toward the expert, \(F(2, 524) = 7.60, p < .01\). They also varied on initial decision-confidence \((F[2, 526] = 7.06, p = .01)\), final decision-confidence \((F[2, 525] = 5.33, p < .01)\), and residual decision-confidence \((F[2, 524] = 7.06, p < .01)\). Despite the differences in baseline JWB levels between samples, there is no theoretical reason to suggest that the relationships among our variables of interest should differ across the samples. For example, we expect that higher levels of JWB will lead to higher levels of expert favorability and likelihood of committing the respondent for all three participant samples—not just for the jurors or the community members. Indeed, assessment of the mediational model for each sample demonstrated that there were no significant differences among the samples. All paths within the separate models for the separate samples demonstrated the same direction of effects. Thus, we collapsed the three samples and used this aggregate sample \((N = 534)\) for the analyses.

**Correlational Analyses**

We first ran zero-order correlations between the four variables of interest: JWB, initial decision-confidence, favorability toward the expert, and final decision-confidence. All correlations were significant and positive. JWB correlated significantly with initial decision-confidence \((r = .11, p = .02)\) and favorability toward the expert \((r = .13, p < .01)\), such that those higher in JWB had stronger pro-commitment initial decision-confidence and rated the expert more favorably. JWB also correlated significantly with final decision-confidence \((r = .13, p < .01)\), such that those with higher levels of JWB were more likely to decide to commit the respondent. Initial decision-confidence and favorability toward expert correlated significantly with each other \((r = .13, p < .01)\), and they also correlated significantly with final decision-confidence \((r = .64, p < .01)\); expert favorability: \(r = .40, p < .001\). Those with stronger pro-commitment initial decision-confidence and those who rated the expert more favorably were more likely to commit.

**Mediational Analysis**

The correlation analyses indicate that, as predicted in Hypothesis 2, JWB is positively associated with expert favorability. These higher levels of expert favorability are associated with a higher likelihood of deciding to commit the respondent.
However, because JWB also predicts initial decision-confidence (Hypothesis 1), and initial decision-confidence correlates with final decision-confidence, we assess whether expert favorability mediates the relationship between JWB and final decision-confidence when initial decision-confidence is controlled in the final decision. By using the residual measure of decision-confidence, we can more accurately understand the role that expert testimony plays above and beyond any influence of initial decision-confidence.

Correlational analyses between the residual decision-confidence variable, JWB, and expert favorability indicate that JWB is positively correlated with residual decision-confidence ($\beta = .11, p = .02$). Furthermore, expert favorability is positively correlated with residual decision-confidence, indicating that perceptions of the expert testimony influenced final decision-confidence over and above any pro-commitment initial decision-confidence. In order to test whether expert favorability mediates this relationship, we used hierarchical linear regression (Baron & Kenny, 1986). In Step 1, we entered JWB as the sole predictor of residual decision-confidence, revealing the same relationship we saw in the zero-order correlation analysis ($\beta = .11, p = .02$). In Step 2, we entered favorability toward expert (the mediator). In this step, JWB no longer predicted residual decision-confidence ($\beta = .06, p = .18$), but favorability toward expert was a significant predictor ($\beta = .39, p < .001$). Together with the significant positive relationship reported earlier between JWB and favorability toward expert, these findings indicate that the relationship between JWB and commitment decision is mediated by attitudes toward the petitioner’s expert. A Sobel test confirmed that this mediated relationship is significant (Sobel $Z = 2.86, p = .004$). The model is presented graphically in Figure 1.

**Clinical and Actuarial Testimony**

We next conducted exploratory analyses to assess whether the mediational model differed based on the type of testimony heard (clinical vs. actuarial). We
first ran the same mediational analysis for participants in the clinical and actuarial conditions separately in order to see whether the same relationships that were significant in the whole sample were the same for the two different conditions. The Sobel tests were significant for each (Clinical: $Z = 2.04$, $p = .04$; Actuarial: $Z = 2.33$, $p = .02$), indicating that the relationship between JWB and residual decision-confidence was similarly mediated by expert favorability for both types of testimony. As these results demonstrated full mediation, the remaining analyses that we performed assessed the full mediation model, removing the nonsignificant direct path from JWB to residual decision-confidence.

We used multiple-group structural equation analysis in AMOS 17.0 to test whether the full mediational model had similar predictive utility for both those who heard clinical testimony and those who heard actuarial testimony. Separately, the models both fit the data well (Clinical: $\chi^2(1) = 1.65, p = .20$, CFI = 0.99, RMSEA = 0.05; Actuarial: $\chi^2(1) = 0.34, p = .56$, CFI = 0.99, RMSEA < 0.01). In addition, a multiple-group difference test of the unconstrained models and models in which the structural weights, intercepts, means, covariances, and residuals between the two groups were constrained to be equal demonstrated a nonsignificant chi-square value, $\chi^2_{\text{diff}}(8) = 8.76$, $p = .36$. This indicates that there was not a significant difference between the model for the two types of testimony. In addition, we used the Akaike Information Criterion (AIC) to further guide model selection. The AIC combines data fitting assessments with model complexity penalizations. The AIC for the unconstrained model (33.99) was larger than that for the most constrained model (26.72), which also suggests that the model in which the two groups were most constrained to be equal represented the data best. Thus, the models for the groups who received the clinical and actuarial testimony appear to be similar.

**Discussion**

In this study, we sought to understand how expert psychological testimony and individual levels of JWB influence juror decision-making. Consistent with our first and second hypotheses, we found that those with higher levels of JWB had stronger pro-commitment initial decision-confidence (Hypothesis 1), and they found the expert to be more credible, scientific, influential, and confident than those with lower levels of JWB (Hypothesis 2). Consistent with our third hypothesis, the relationship between levels of JWB and commitment decision remained significant even when controlling final decision for initial verdict preference. Further, this relationship was mediated by expert favorability, indicating that the changes in decision between initial decision-confidence and final decision-confidence were accounted for by perceptions of the expert testimony. We sought to explore whether expert favorability was a stronger mediator when clinical (vs. actuarial) testimony was offered. However, the mediational model performed similarly for both types of testimony. This finding may be surprising given past research indicating that
clinical testimony is often rated more favorably than actuarial-based testimony and that those who hear a petitioner’s expert offer clinical testimony are more likely to agree with the expert’s conclusion and commit an SVP respondent (e.g., Lieberman et al., 2007). Interestingly, while this previous research suggests that the type of testimony might affect decisions, the current study demonstrates that the mediational mechanism underlying commitment decisions is actually the same for both types of testimony. In other words, clinical testimony may result in higher average favorability ratings of the expert, but the relationships between JWB, favorability toward the expert, and commitment decision remain the same, regardless of whether the testimony is actuarial or clinically based.

Just World Beliefs and Initial Decision-Confidence

This study highlights the predictive value of a juror’s JWB in SVP trials and other similar cases. The majority of previous research on JWB in the legal system has focused on how high-JWB individuals are more likely to derogate victims thought to have played a role in their victimization (especially rape and sexual assault; e.g., Jones & Aronson, 1973; van den Bos & Maas, 2009). However, studies exploring JWB’s role in verdicts and sentencing decisions have shown mixed results with crimes other than sexual assault: most find that high-JWB individuals are more punitive, though some show that they are less punitive, and most find that other factors in the case—likelihood of guilt, social class or group membership of the defendant, or type of crime—interact with JWB to predict verdict and sentence outcomes (e.g., Butler & Moran, 2007; Freeman, 2006). In this study, we expected that those with high levels of JWB would be more likely to initially decide that the respondent was an SVP and civilly commit him because the respondent had already been found “guilty” of a previous sex crime. Despite the respondent already having served his sentence, we expected those high in JWB to believe the defendant deserved to be committed even before hearing evidence because they believe that sexual offenders should not be set free in a just world. This initial tendency toward commitment for high-JWB individuals was supported by the significant correlation between JWB and initial decision-confidence.

This suggests that high-JWB individuals are more punitive, or more likely to decide to commit defendants/respondents. It is important to note, however, the limited circumstance of SVP civil commitment hearings. SVP respondents are stigmatized by their status as sexual offenders and have already been convicted of previous crimes, making it highly likely that the motivation to retain the belief that the world is just will involve committing the SVP respondent. If there were more ambiguity about whether a respondent/defendant committed a crime, or if there were a victim in the case that could be blamed, it is possible that victim-blaming effects might influence the decision. However, we believe that SVP trials serve as an important illustration of an alternative effect of JWB on juror decision-making.
precisely because victim blaming is not a possible outcome. By removing the possibility of victim blaming, we can more clearly see the effects of JWB on punitiveness toward defendants/respondents—not their victims. The initial bias toward committing the SVP respondent for high-JWB mock jurors demonstrated in this study suggests that for trials involving previous sexual offenders, those who have stigmatized identities, or those who have already been found guilty (e.g., in sexual offense cases or capital sentencing trials), JWB may be an important factor to consider when understanding what individual differences may prejudice jurors even before hearing evidence. Because being a criminal defendant is stigmatizing in itself, it is even reasonable to hypothesize that individual levels of JWB may influence how jurors respond to most defendants in court settings.

Just World Beliefs and Favorability toward Experts

Beyond the effect of JWB on initial commitment decisions, the effect of JWB on favorable attitudes toward expert testimony presents a new application of JWB theory to legal decisions. As predicted in Hypothesis 2, levels of JWB predicted ratings of the petitioner’s expert such that those with higher levels of JWB rated the expert more favorably. This suggests that the motivation to maintain the belief that the world is just encourages people to have a favorable view of people qualified enough to be considered “experts.” This was predicted based on research showing that high-JWB individuals are more likely to view biased but authoritative decisions favorably (Hagedoorn et al., 2002). However, it may be the case that high-JWB individuals rated the petitioner’s expert more favorably because the expert was agreeing with their own view that the respondent should be committed. This may be true given the previous finding that levels of JWB predict initial decision-confidence. To counteract this alternative explanation, the cross-examination in this study’s trial simulation was designed to provide an equally compelling counter argument to the expert witness’ testimony. Past research has demonstrated that effective cross-examination can lessen the persuasive power of a single expert to a similar extent as hearing testimony from a competing expert witness (Krauss & Sales, 2001). For this reason, this study utilized effective cross-examination instead of competing experts to counteract the biasing effect of the expert. This not only simplified the design of the study, but also reduced possible confounds that would arise from having two different experts (e.g., differential attractiveness or likeability).

Although our results are limited in generalizability to cases in which the expert’s conclusion favors commitment, we feel that these cases are vital to study because of their ecological validity and practical importance. At least in the United States, many SVP cases have only a single expert testifying for the petitioner, and almost all cases feature at least one expert who suggests that the respondent should be committed. Understanding how different types of people view the
pro-commitment expert testimony in typical cases (like the Arizona trial used in this study) is essential—especially when such cases dictate whether a person will be incapacitated for an indeterminate length of time. However, future studies should continue to explore whether high-JWB individuals’ more favorable rating of experts is similar for both petitioners’ and respondents’ expert testimony, and whether JWB would still predict attitudes toward experts if the experts reached the opposite conclusion—that the respondent was not an SVP.

**Expert Testimony and Residual Decision-Confidence**

Consistent with predictions, the more favorably the participants rated the expert, the more likely they were to follow his expert opinion and decide to commit the respondent. This is logical given that the expert testimony was the only evidence heard during the trial (Guy & Edens, 2003; Miller et al., 2005). Yet while this relationship may not be theoretically surprising, it is important to demonstrate that this link is strong even when initial decision-confidence is controlled for in final decision-confidence. This link indicates that an individual’s perception of the expert testimony—irrespective of whether they agreed with its conclusion prior to hearing it—predicted their decisions.

**Favorability toward Expert as a Mediator between JWB and Residual Decision-Confidence**

The role of expert favorability as a mediator between JWB and final residual decision-confidence helps clarify how levels of JWB may influence decisions in cases depending heavily on expert testimony. By demonstrating that the variance in residual decision-confidence predicted by JWB was accounted for by ratings of the expert testimony, it becomes clear that beyond a juror’s initial decision-confidence, their JWB have the potential to influence their final commitment decisions primarily through their perceptions of expert testimony. This has important implications for trials depending heavily on expert testimony. It suggests that levels of JWB may influence verdicts not only by directly shaping attitudes toward the litigants in the case, but also by influencing how the expert testimony is perceived by the individual jurors. Levels of JWB may predict initial pro-commitment bias, but favorable perceptions of the expert testimony remain another important mechanism by which JWB predicts final commitment decisions.

**Limitations**

It is also important to note the limitations present within this study. A major limitation in this study involves the low reliability of the scale used to measure JWB (Rubin & Peplau, 1975). Although the reliability was low, it is not unusual for
scales measuring JWB. In a review of studies using this particular scale, Hellman, Muilenburg-Trevino, and Worley (2008) found that of the studies that reported reliabilities (only 47.2%), the average estimate was only 0.68. Reliabilities as low as 0.38 have been used in published literature. Because the JWB scale in our study significantly predicted both favorability toward the expert testimony and commitment decisions despite the relatively low agreement between items, it seems plausible that the effects found would be stronger if the scale were more reliable.

The use of a trial simulation is an additional limitation of this research. While the 1-hour videotaped trial presentation is more representative of an actual SVP trial than many other designs that employ vignettes or trial transcripts as stimulus materials, it is still shorter and less thorough than actual SVP trials. In addition, pausing the trial for participants to make initial commitment decisions after the opening statements may have produced anchoring effects in participants’ final decisions. We believe, however, that measuring initial decision-confidence was experimentally important in order to control for initial biases and measure the effects more conservatively. The study—like all mock jury studies—also may lack mundane realism as participants recognize that their judgments are used only for research and have no bearing on an actual case and SVP respondent. Observations from the researchers during the experimental sessions suggest that most participants paid active attention to the trial simulation. However, it is still possible that the mock jurors’ decision-making process differs from the decision-making process of jurors in a real SVP trial.

Finally, the participant samples used in the study were primarily from the Los Angeles area (with some undergraduates from Nevada as well), posing a possible threat to generalizability of the findings to more varied jurisdictions. The study had the advantage of including three different types of samples, and each sample was relatively heterogeneous, but regional differences may limit the ability to apply these findings to all jurisdictions.

**Conclusion**

Despite these limitations, this study suggests that JWB is an important predictor of jurors’ commitment decisions, and beyond stronger pro-commitment initial decision-confidence among high-JWB individuals, this effect functions through high-JWB individuals’ more favorable perceptions of expert testimony. These findings may have implications for attorneys and jury consultants. However, the more important conclusions to draw from this study apply to the experts testifying in such cases. In order to fulfill their professional obligation to present information as a non-partisan witness, expert witnesses must take care to present the most accurate and scientifically validated assessment as possible. This is because if jurors view the testimony favorably, they will likely agree with the expert’s conclusion.
Further, individual differences may motivate some jurors to more readily agree with an expert regardless of the quality of the testimony, so care should be taken by experts not to over-sell their conclusions and by attorneys to probe experts during cross-examination about the limitations of predictions of future dangerousness. This is especially important given the research that judges are often unable to effectively evaluate the quality of expert testimony in their role as gatekeepers to scientific evidence (Gatowski et al., 2001; Groscup, 2004). Judges also must take seriously their duty to evaluate expert testimony, however, because the recent adoption of the Daubert standard by many U.S. jurisdictions requires a basic understanding of scientific expert testimony. As our research suggests, their failure to effectively “gatekeep” biased expert testimony will likely have important implications because this less accurate expert testimony affects eventual jury decisions. Our legal system is imperfect, but by educating those who work in the courtroom about biases that can affect jury decision-making, social science can help point out ways to avoid such biases.

The study provides a first examination of the role of expert favorability as a mediator of the relationship between individuals’ JWB and their decisions in SVP trials. Although JWB has been examined in other types of legal decision-making (i.e., sexual assault cases), this study explores another application of just world theory to the legal system. Although the effects found in our study are small, they are nevertheless important and warrant further attention due to the large potential consequences that they may have on the lives of the respondents. Particularly important to explore is whether individuals with high or low levels of JWB respond to all expert witnesses as they did in this study, or if they feel differently depending on whether the expert is testifying on behalf of the prosecution/plaintiff or defendant/respondent. It would also be useful to look at the relationships between JWB, expert favorability, and decisions in other types of cases—both criminal and civil—and to explore ways to reduce the biases that may result from individual differences in JWB or tendencies to view experts favorably. By continuing to assess how JWB and expert favorability relate to decisions made in legal settings, we can gain insight into how individuals’ worldviews affect their legal decisions and responses to players in the legal system. With this insight, we can hopefully work to curb prejudice in the courtroom and work toward a more fair, and less biased justice system.

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