Belief in a just world, justice judgments, and their functions for prisoners

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Abstract

This study focuses on the relationship between the experience of justice, belief in a just world (BJW), and the feelings of adult male prisoners, taking into account aspects of their personal background and criminal career. Our sample comprised 100 male prisoners from a German detention center. Regression analysis provided evidence for the assimilation function of the BJW. Specifically, high believers interpreted events in their life as being more just; e.g., they evaluated the legal proceedings leading to their conviction, their interpersonal treatment by their prison guards, and decisions on prison affairs as more just. Moreover, high believers reported better well-being and were less likely to express anger in the form of outburst behavior. Finally, a sense of being treated justly by prison guards was particularly important in explaining well-being. This pattern of results persisted when controlling for social desirability and for criminal and personal background. We discuss the role of BJW and especially interpersonal justice as a resource for adaptive social behavior and subjective well-being.

Key words: just world belief, prisoners, justice judgments, well-being, anger, coping
Belief in a just world, justice judgments, and their functions for prisoners

The present study examines prisoners' justice evaluations of their treatment during imprisonment, particularly of prison guards' behavior toward them and of decisions on prison affairs. The experience of being treated in a fair and respectful manner contributes to the sense of being a valued member of a group, who deserves just treatment. As a consequence, it not only strengthens self-esteem and well-being, but also promotes the feeling of social inclusion (Lind & Tyler, 1988), which seems to be an important precondition for law-abiding behavior (Emler & Reicher, 2005). The sense of belonging to a group reinforces the personal obligation to behave in accordance with the group's rules. Being treated justly during imprisonment may signal belongingness to society and thus strengthen prisoners' intrinsic motivation to obey the law in the future (Haller, Machura, & Bierhoff, 1995; Tyler, 1984). In this spirit, it is crucial to learn about factors shaping justice experiences and thus the sense of belonging. In the present study, we compared three justice judgments, investigating their implications from a just world perspective. We expected belief in a personal just world to be an essential condition for positive domain-specific justice judgments.

The Belief in a Just World

Lerner (1965) developed the just world hypothesis, which states that people are motivated to believe that the world is basically a just place where people get what they deserve and deserve what they get. The belief in a just world (BJW) is thought to serve different adaptive functions; consequently, people try to protect this belief when they are confronted with injustice. Several experimental and correlational studies have provided evidence to support these assumptions, both when individuals suffer unfairness (Bulman & Wortman, 1977; Comer & Laird, 1975), and when they observe unfairness done to others (for a review, see Furnham & Procter, 1989; Lerner & Miller, 1978). Despite its adaptive significance, past research has focused on the antisocial properties of BJW, with studies
confirming a positive relationship between BJW and derogation of the victims of disadvantage or misfortune.

In the last decade, however, more studies have investigated the positive as well as the negative social consequences of BJW, and the focus of investigation has been extended to cover the consequences of BJW for the believers themselves. Overall, research has identified at least three functions of the BJW (Dalbert, 2001): (a) It is indicative of a personal contract and the obligation to behave fairly, (b) it endows individuals with the confidence that they will be treated fairly by others and will not fall victim to an unforeseeable disaster, and (c) it provides a conceptual framework which helps individuals to interpret the events of their personal life in a meaningful way. We assume that investigation of the last function of the BJW, in particular, can provide insights into prisoners' feelings in general and their anger-coping styles in particular. Note that we do not expect a high BJW to prevent crimes being committed in the first place. Instead, we assume prisoners with a strong belief in a just world to feel treated more justly, to report better well-being during imprisonment, and to be better able to cope with feelings of anger than prisoners with a weak belief in a just world.

BJW and Domain-Specific Justice Judgments

Because BJW serves important adaptive purposes, individuals are motivated to defend it in the face of threat (e.g., Dalbert, 2001; Lerner & Miller, 1978). Being confronted with injustice, either observed or experienced, threatens the belief that justice prevails in the world, prompting high BJW individuals to attempt to restore justice either literally or figuratively. When they experience unfairness they do not believe can be resolved in reality, they try to assimilate this experience to their BJW. This can be done by justifying the experienced unfairness as being at least partly self-inflicted (Bulman & Wortman, 1977; Comer & Laird, 1975; Lupfer, Doan, & Houston, 1998), by playing down the unfairness (Dalbert, 1996; Lipkus & Siegler, 1993), and by avoiding self-focused rumination (Dalbert, 1997). As a
consequence, a positive relationship has been observed between BJW and justice judgments in various domains of life (e.g., Dalbert & Stoeber, 2006; Hafer & Correy, 1999).

Specifically, Otto and Dalbert (2005) found a positive association between BJW and young male delinquents' evaluation of the legal proceedings leading to their conviction as just. The present study was designed to test this relationship for adult male prisoners. Because most of these prisoners had been convicted some time ago, other more current justice evaluations may since have become paramount. We therefore investigated prisoners' justice evaluations of their treatment during the period of imprisonment, focusing on their judgments of prison guards' behavior toward them and the justice of decisions relating to prison matters. We expected the prisoners' belief in a personal just world to be positively associated with these specific justice judgments.

**BJW and Subjective Well-Being**

BJW is seen as a buffer helping people to cope with aversive experiences, not least because of its assimilation function. Previous studies outside the prison walls have shown BJW to support and sustain mental health (e.g., Dzuka & Dalbert, 2002), and studies with school students (Dalbert & Stoeber, 2006) have demonstrated that this adaptive association is mediated by domain-specific justice beliefs. In the present study, we investigate whether these observations can be generalized to adult male prisoners. We expected prisoners with a strong belief in a just world to show less negative affect and more positive affect than weak believers, and predicted that this association would be mediated by specific justice judgments. More specifically, we expected the sense of being treated justly during imprisonment to be more important in explaining well-being than the impression that the legal proceedings leading to one's conviction were just.

**BJW and Anger**

Finally, the experience of injustice is typically accompanied by feelings of anger (e.g., Smith & Ellsworth, 1985). Individuals high in BJW are more likely to assimilate injustice to
Just world belief and prisoners 6

their BJW by means of the coping mechanisms outlined above. Accordingly, as experimental evidence has shown (Dalbert, 2002), individuals high in BJW experience less anger in potentially anger-evoking situations. Moreover, they are less likely to express their anger in overt verbal (e.g., insults, sarcasm) or physical behavior (e.g., slamming doors, throwing objects; Spielberger, 1988). Otto and Dalbert (2005) extended the observation of a negative relationship between BJW and the "anger-out" style of anger expression to a sample of young male offenders. In the present study, we investigated whether this observation can be generalized to adult male offenders. We predicted adult prisoners high in BJW to be less likely to show their anger in the form of outburst behavior. In other words, we expected BJW to be a resource that would help prisoners to avoid antisocial behavior.

Aims of the Present Study

In sum, the present study was designed to test possible associations between the belief in a just world, justice judgments, well-being, and anger-expression style in a sample of adult male prisoners. Relative to weak just world believers, we expected strong just world believers to evaluate (1a) their legal proceedings, (1b) their interpersonal treatment by their prison guards, and (1c) decisions on prison affairs as more just; to experience (2a) more positive and (2b) less negative affect; and (3) to be less likely to express their anger in outburst behavior (anger-out). We further hypothesized (4) the relationship between BJW and affect to be mediated by prison-specific justice judgments, and finally (5) the expected associations to hold when controlling for social desirability, personal and family background, and aspects of the criminal career.

Method

Sample

All participants (N = 100) were male prisoners from a German detention center in Saxony-Anhalt. Their age ranged from 23 to 64 years (M = 35.1; SD = 8.1), and the sentences they had received ranged from 6 months to life, coded as 240 months (M = 49.2; SD = 46.7).
In terms of their educational background, 5 participants had graduated from high-level secondary school ("Gymnasium"), 32 from mid-level secondary school ("Realschule"), 52 from low-level secondary school ("Hauptschule"), 5 from special school ("Sonderschule"), and 6 had not graduated from school at all. Seventy-six participants had completed vocational training. The number of previous convictions ranged from 0 to 26 ($M = 7.9; SD = 5.8$). Twenty participants were serving their first prison sentence. Age at first conviction ranged from 14 to 62 years ($M = 20.4; SD = 8.1$).

**Procedure**

About a month before the survey was conducted, the prisoners' representatives were informed about the study and given a short description of its purpose and content. Prisoners interested in participating were invited to put their names down on lists distributed by the representatives. All prisoners were reassured that their participation would be confidential, and that the prison authorities would not have access to their individual data. Participants completed the questionnaire described below during an interview with one of the authors.

**Research Instruments**

Unless otherwise specified, all items were rated on 6-point Likert-type scales, where 1 indicated "strongly disagree" and 6 indicated "strongly agree," and scale means were used as variables. When more than one item was missing, the whole variable was defined as missing.

*Belief in a Just World.* Following suggestions originating from earlier research (Furnham & Procter, 1989; Lerner & Miller, 1978), recent studies have shown that it is necessary to distinguish the belief in a personal just world from the belief in a general just world (Dalbert, 1999; Lipkus, Dalbert, & Siegler, 1996). The personal BJW has proved to be a better predictor of domain-specific justice judgments and well-being. The *personal BJW*, which was measured using Dalbert's (1999) Personal Belief in a Just World Scale (7 items; $\alpha = .72$; e.g., "I believe that I usually get what I deserve"), was therefore taken as an indicator of the prisoners' BJW.
Justice judgements. The justice of legal proceedings was assessed using the scale developed by Otto and Dalbert (2005; see Appendix; 5 items; $\alpha = .85$; e.g., "I am sure that the judge tried to do justice to all parties during my trial"). Interpersonal justice was assessed by seven items (see Appendix; $\alpha = .90$; e.g., "The prison guards treat me unjustly," reverse coded). Justice of prison affairs was assessed by four items (see Appendix; $\alpha = .76$; e.g., "When it comes to the imposition of disciplinary measures, the prison management proceeds fairly").

Mood state and anger-expression style. Mood state was assessed using scales developed by Dalbert (1992). The positive mood scale consists of six adjectives tapping positive mood experienced over the previous two weeks ($\alpha = .85$), while the negative mood scale taps sadness, hopelessness, and tiredness experienced over the previous two weeks (10 items; $\alpha = .87$). All items were rated on 6-point Likert-type scales, where 1 indicated "not at all" and 6 indicated "always." Anger expression was measured using one subscale of the German version of the State-Trait Anger Expression Inventory (Spielberger, 1988; German version: Schwenkmezger, Hodapp, & Spielberger, 1992): the eight-item anger-out subscale ($\alpha = .89$; e.g., "I lose my composure"). Items were rated on 4-point Likert-type scales, where 1 indicated "almost never" and 4 indicated "nearly always."

Background and Control Variables. Eight items from the Impression Management Scale of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994; German version: Musch, Brockhaus, & Bröder, 2002; $\alpha = .65$; e.g., "I never swear") were used to assess the tendency to answer questionnaires in a socially desirable manner (social desirability); two items were not administered as they did not apply to prisoners. Data on the participants' personal, family, and criminal backgrounds were collected by means of self-report measures. Three variables described participants' personal background: age, education, and vocational training. Education was assessed in terms of the type of school attended,
where 0 = "no school certificate or special school" (Sonderschule), 1 = "low-level school" (Hauptschule), 2 = "mid-level school" (Realschule), and 3 = "high-level school" (Gymnasium). Vocational training was assessed as 0 = "no vocational training" ($n = 24$) vs. 1 = "vocational training" ($n = 76$). Family background was described by two variables: partner and children. In the first case, 1 indicated "married or cohabiting" ($n = 44$) and 0 "no partner" ($n = 56$); in the second, 1 indicated "one or more children" ($n = 69$) and 0 "no children" ($n = 31$). Four aspects of the criminal career were assessed: (1) age at first conviction, and (2) number of prior detentions (0 = no prior detentions; 1 = one or more prior detentions), (3) length of prison sentence in months, and (4) number of previous convictions.

Results

In order to conservatively test our hypotheses, and to determine whether the BJW has effects over and above those attributable to other important characteristics of the personal background and criminal career, all variables were structured according to the theoretical model. Based on this model, the variables investigated can be assigned to three different levels. The first-level variables, describing personal background, family background, characteristics of the criminal career, desirable responding, and personal BJW, were treated as exogenous variables. The second level comprised justice of legal proceedings, interpersonal justice, and justice of prison affairs, which can be predicted by the variables on the first level only, including personal BJW. The third and final level comprised negative affect, positive affect, and anger-out, which can be predicted by all other variables. Our multiple regression analyses tested two main patterns of relationships. First, the potential impact of the BJW on the three justice evaluations, mood state, and anger-out was tested against the possible influences of all other exogenous variables. Second, the impact of justice evaluations on mood state and anger-out was tested against the possible influence of all exogenous variables including BJW. An alpha level of $p < .05$ (two-tailed) was used for all inferential statistics.

-- insert Table 1 about here --
First, the correlations between the different variables were analyzed. The means, standard deviations, and correlations of the background and control variables with personal BJW, the three justice evaluations, positive and negative mood state, and anger-out are presented in Table 1. Only 10 of the 70 correlations were significant, indicating that the justice, mood, and anger-out variables considered were, on the whole, independent of the background and control variables. It is especially worth mentioning that all variables except anger-out were independent of social desirability. Means, standard deviations, and intercorrelations for personal BJW, justice judgments, mood state, and anger-out are presented in Table 2. All correlations were in the expected direction, and most were significant. Relative to those low in personal BJW, participants high in personal BJW evaluated the legal proceedings leading to their conviction, their interpersonal treatment by prison guards, and the justice of prison affairs to be more just, had experienced more positive and less negative mood over the previous two weeks, and reported less anger-out coping. Notably, none of the mood and anger-out variables correlated significantly with justice of legal proceedings, whereas all but one correlated significantly with interpersonal justice and justice of prison affairs.

To test the hypothesis that personal BJW is an important predictor of the outcome variables, over and above the other exogenous variables, hierarchical multiple regression analyses were conducted to identify the unique predictors ($p < .05$) of the justice judgments and the three outcome variables. In three separately multiple regression analyses, each of the three justice judgments was regressed on all exogenous variables including BJW (entered stepwise). The three remaining outcome variables were regressed on the background and control variables, personal BJW, and the three justice judgments entered together stepwise. This procedure makes it possible to determine which variables explain variance independently.
of one another. Only those variables in Tables 1 and 2 that showed a significant correlation with the dependent variables were included in the respective multiple regression.

As shown in Tables 1 and 2, perceived justice of legal proceedings correlated significantly with three variables. These variables were allowed to compete for entry in the regression equation. Results showed that all three variables, together accounting for 22% of the variance, significantly predicted perceived justice of legal proceedings. Participants who were better educated ($\beta = .22$), who had no partner ($\beta = -.20$), and who endorsed the personal BJW ($\beta = .30$) evaluated the legal proceedings as being more just. Because interpersonal justice only correlated significantly with BJW ($\beta = .31$), no further regression analysis was required. Justice of prison affairs was regressed on four variables: children, age at first conviction, number of previous convictions, and personal BJW. Three of these predictors, the exception being the number of previous convictions ($p > .20$), proved to be significant and explained a total of 14% of the variance. Participants with no children ($\beta = -.20$), who were older at their first conviction ($\beta = .22$), and who endorsed the personal BJW ($\beta = .18; p = .057$) evaluated decisions on prison affairs to be more just.

Positive mood was regressed on number of previous convictions, personal BJW, and interpersonal justice. Number of previous convictions and interpersonal justice proved to be significant, explaining 14% of the variance; BJW was not significant ($p = .18$). The more the prisoners evaluated their guards' behavior towards them as just ($\beta = .32$) and the more previous convictions they had ($\beta = .23$), the more often they had experienced positive mood over the previous two weeks. Negative mood was regressed on BJW, interpersonal justice, and justice of prison affairs. BJW and interpersonal justice proved to be significant, explaining 24% of the variance; justice of prison affairs was not significant ($p > .70$). The stronger the prisoners' personal BJW ($\beta = -.25$) and the more they evaluated their guards' behavior towards them as just ($\beta = -.35$), the less often they had experienced negative mood.
over the previous two weeks. Finally, anger-out was regressed on social desirability, vocational training, number of previous convictions, BJW, interpersonal justice, and justice of prison affairs. BJW and social desirability proved to be significant, explaining 28% of the variance; vocational training and interpersonal justice ($p > .10$), justice of prison affairs ($p = .07$), and number of previous convictions ($p = .08$) were not significant. The stronger the prisoners' BJW ($\beta = -.42$) and tendency to answer in a desirable manner ($\beta = -.32$), the less anger-out they reported.

**Discussion**

Three results of this study are worthy of particular note. (a) With two exceptions (the number of previous convictions predicted positive mood, and age at first conviction predicted perceived justice of prison affairs), none of the characteristics of the criminal career predicted justice judgments, mood, or the anger-coping style. The findings thus replicated observations for young male prisoners (Otto & Dalbert, 205). When it comes to understanding prisoners' feelings, the criminal career seems to play a lesser role than a general faith in personal justice or than current justice experiences, as expressed in justice judgements. Investigation of prison-distal justice constructs, such as the personal BJW, and prison-proximal constructs, such as prison-specific justice judgments reveals that the two seem to have different functions. The assimilation function of the personal BJW seems to promote the evaluation of specific events in one's life as just and to curb feelings of anger and outburst behavior. Prison-specific justice judgments seem to be important in explaining prisoners' mental adaptation to their situation.

(b) All three domain-specific justice judgments were predicted by BJW. As expected, the justice of legal proceedings did not correlate with mood or anger-out, but interpersonal justice and justice of prison affairs correlated in the expected direction. Moreover, interpersonal justice mediated the effect of BJW on positive mood and, to a certain extent, on negative mood. This pattern of results substantiates the notion that not only a general trust in
personal justice, as reflected by the personal BJW, but also domain-specific justice judgments are important. Furthermore, it demonstrates the importance of justice judgments regarding current events as compared to past events. Finally, it emphasizes the significance of interpersonal justice as compared to justice of prison affairs in explaining subjective well-being. In this study, the sense of being treated respectfully by prison guards uniquely predicted mood state, but not justice of prison affairs. Further replication of this differential effect pending, it can be speculated that interpersonal justice is a particularly effective way of signaling social inclusion. The day-to-day experience of respect and fairness in their interactions with guards gives prisoners a sense of self-esteem and social belonging. Interpersonal justice may be especially important because these experiences occur on a daily basis and because this form of justice is expressed in direct personal interactions.

(c) Finally, the findings confirmed the expected negative and direct effect of BJW on anger-out. An adaptive relationship between BJW and anger-out has already been observed for young male prison inmates (Otto & Dalbert, 2005). The present results validate this finding for adult male criminals; in particular, they replicate this association as a direct effect that is not mediated by current justice judgments. As expected, social desirability was significantly correlated with reports of anger-out coping, but the direct effect of BJW persisted nevertheless. Justice motive theory (Dalbert, 2001) states that high just world believers automatically process justice-related cues differently than low just world believers: the stronger an individual's belief in a just world, the more he or she assimilates experiences of injustice to the BJW. As a result, high just world believers experience less anger than low just world believers. In sum, justice judgments and feelings of anger can be seen as the result of the same psychological process: assimilation to the BJW.

At least two limitations of our study need to be mentioned. (a) The sample consisted of male prisoners from a single German detention center. Further studies are needed to test whether the pattern of results holds for prisoners at other detention centers in Germany and in
other countries with different forensic traditions. (b) Personal and criminal background was assessed via prisoners' self-reports. It might be argued that these self-reports lack validity, which may explain the minor role of criminal background in this study. Although this argument cannot be ruled out entirely, it is worth noting that a study with young male offenders that involved a thorough analysis of criminal records produced a similar pattern of results (Otto & Dalbert, 2005): BJW and justice judgments were associated with offenders' emotions and behavior; criminal background was not.

A justice judgment reflects the individual evaluation of a situation as more or less just. From this perspective, justice is not a fixed characteristic of a situation; in fact, justice judgments are always subjective (Mikula, 2005). In the present study, justice judgments were assessed in terms of prisoners' subjective evaluations of the legal proceedings leading to their conviction, their guards' behavior towards them, and decisions on prison affairs. The pattern of results unambiguously shows that interpersonal justice is of particular significance. Future studies should explore the causes of such justice evaluations in more depth. Insights into behavioral patterns that strengthen or diminish prisoners' impressions of interpersonal justice can be incorporated in the training of prison guards and used to improve the institutional climate. The present study focused on well-being as an outcome of justice judgments. Future studies should investigate further possible outcomes of interpersonal justice; e.g., willingness to obey the law and invest in civic life after release, or trust in societal institutions.

Conclusion

The pattern of results is in line with the notion that BJW is a personal resource that helps adult prisoners to reduce anger arousal and anger expression in the form of outburst behavior and that strengthens feelings of social inclusion. The stronger the adult prisoners' BJW, the more they evaluated the legal proceedings leading to their conviction, their guards' behavior towards them, and decisions on prison affairs to be just. Thus, as in other domains of life (see Dalbert & Stoeber, 2006), BJW seems to affect the evaluation of social experiences.
as just, and these justice judgments, especially interpersonal justice, are positively associated with mood state. Future studies should continue to investigate interpersonal justice during imprisonment as one possible route toward successful rehabilitation and reintegration after release.
Appendix

Table A1

Items of the Three Justice Judgment Scales


1. My prison sentence is too long.

2. Others convicted for a similar offence are given lighter punishments or no punishment at all.

3. The sentence was just.

4. I am sure that I was treated fairly during my trial.

5. I am sure that the judge tried to do justice to all parties during my trial.

Interpersonal Justice

1. The prison guards treat me correctly.

2. *The prison guards are unfriendly toward me.

3. The prison guards are fair to.

4. *The prison guards treat me unjustly.

5. The prison guards respect me.

6. *The prison guards have it in for me especially.

7. *The prison guards try to make my life difficult.

Justice of Prison Affairs

1. When disciplinary measures are imposed, they are usually just.

2. The prison guards’ decisions on my requests and applications are just.

3. Before disciplinary measures are pronounced, the prisoners involved are usually given the chance to state their case.

4. When it comes to the imposition of disciplinary measures, the prison management proceeds fairly.

* reverse-coded items
References


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theory and research. In S. Gilliland, D. Steiner, D. Skarlicki, & K. van den Bos (Eds.), *What motivates fairness in organizations* (pp. 197-209). Greenwich, CN: Information Age Publishing.


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Table 1

Descriptive Statistics and Correlations of Background and Control Factors with Personal BJW, Justice Judgments, Mood, and Anger-Out ($N = 100$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>Personal BJW</th>
<th>Justice of legal proceedings</th>
<th>Interpersonal justice</th>
<th>Justice of prison affairs</th>
<th>Positive mood</th>
<th>Negative mood</th>
<th>Anger-out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Factor</strong></td>
<td></td>
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</tr>
<tr>
<td>Social desirability</td>
<td>3.48</td>
<td>1.05</td>
<td>-.02</td>
<td>-.12</td>
<td>-.05</td>
<td>.08</td>
<td>-.15</td>
<td>.18</td>
<td>-.31**</td>
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<tr>
<td><strong>Personal background</strong></td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>35.10</td>
<td>8.10</td>
<td>.04</td>
<td>-.04</td>
<td>.16</td>
<td>.16</td>
<td>-.05</td>
<td>-.15</td>
<td>-.08</td>
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<tr>
<td>Education $^a$</td>
<td>1.31</td>
<td>.73</td>
<td>.19</td>
<td>.28**</td>
<td>.14</td>
<td>.00</td>
<td>.13</td>
<td>-.16</td>
<td>-.04</td>
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<tr>
<td>Vocational training</td>
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<td>.06</td>
<td>.04</td>
<td>-.15</td>
<td>-.22*</td>
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<td><strong>Family background</strong></td>
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<tr>
<td>Partner</td>
<td>-.01</td>
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<td>-.22*</td>
<td>-.08</td>
<td>-.01</td>
<td>-.08</td>
<td>.12</td>
<td>-.01</td>
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<tr>
<td>Children</td>
<td>-.13</td>
<td>-.18</td>
<td>.03</td>
<td>-.24*</td>
<td>-.03</td>
<td>-.01</td>
<td>.00</td>
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<td></td>
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<tr>
<td><strong>Criminal Career</strong></td>
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<tr>
<td>Age at first conviction</td>
<td>20.39</td>
<td>8.06</td>
<td>.08</td>
<td>.10</td>
<td>.16</td>
<td>.24*</td>
<td>-.08</td>
<td>-.08</td>
<td>-.18</td>
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<tr>
<td>Prior detentions</td>
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<td>.03</td>
<td>-.09</td>
<td>.09</td>
<td>-.04</td>
<td>.12</td>
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<tr>
<td>Length of sentence</td>
<td>49.17</td>
<td>46.65</td>
<td>-.06</td>
<td>-.05</td>
<td>.06</td>
<td>.01</td>
<td>-.08</td>
<td>-.14</td>
<td>-.02</td>
</tr>
<tr>
<td>Number of previous convictions</td>
<td>7.86</td>
<td>5.80</td>
<td>-.10</td>
<td>-.18</td>
<td>-.09</td>
<td>-.23*</td>
<td>.20*</td>
<td>-.08</td>
<td>.23*</td>
</tr>
</tbody>
</table>

$^a$ Education $^a$ is measured on a 1-5 scale with 5 representing the highest level of education.
Note. Age and age at first conviction were measured in years. For type of school, 0 = no school certificate or special school, 1 = low-level school, 2 = mid-level school, and 3 = high-level school. For vocational training, 0 = no vocational training; 1 = vocational training. For partners, 0 = no partner; 1 = married or cohabitating. For children, 0 = no children; 1 = one or more children. For prior detentions, 0 = no prior detentions; 1 = one or more prior detentions. Length of sentence was measured in months. Anger-out scores ranged from 1 to 4; all other scale values ranged from 1 to 6, with a high value indicating strong endorsement of the construct.

\(^a\) Spearman correlations; * \(p < .05\); ** \(p < .01\).
Table 2

*Descriptive Statistics and Intercorrelations of BJW, Justice Judgments, Mood, and Anger-Out (N = 100)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Justice of legal proceedings</th>
<th>Interpersonal justice</th>
<th>Justice of prison affairs</th>
<th>Positive mood</th>
<th>Negative mood</th>
<th>Anger-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal BJW</td>
<td>3.97</td>
<td>0.92</td>
<td>.35***</td>
<td>.31**</td>
<td>.23*</td>
<td>.20⁺</td>
<td>-.36***</td>
<td>-.42***</td>
</tr>
<tr>
<td>Justice of legal proceedings</td>
<td>3.21</td>
<td>1.58</td>
<td>.20*</td>
<td>.21*</td>
<td>.18</td>
<td>-.14</td>
<td>-.17</td>
<td></td>
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<tr>
<td>Interpersonal justice</td>
<td>4.76</td>
<td>1.05</td>
<td></td>
<td>.43***</td>
<td>.30**</td>
<td></td>
<td>-.43***</td>
<td>-.24*</td>
</tr>
<tr>
<td>Justice of prison affairs</td>
<td>3.36</td>
<td>1.43</td>
<td></td>
<td>.08</td>
<td></td>
<td>-.23⁺</td>
<td>-.28**</td>
<td></td>
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<tr>
<td>Positive mood</td>
<td>3.39</td>
<td>1.12</td>
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<td>-.56***</td>
<td>-.12</td>
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<tr>
<td>Negative mood</td>
<td>2.99</td>
<td>1.17</td>
<td></td>
<td></td>
<td></td>
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<td>.22*</td>
<td></td>
</tr>
<tr>
<td>Anger-out</td>
<td>1.84</td>
<td>0.69</td>
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</tr>
</tbody>
</table>

*Note.* Anger-out scores ranged from 1 to 4; all other scale values ranged from 1 to 6, with a high value indicating strong endorsement of the construct.

⁺⁺⁺ \( p < .001; \) ** \( p < .01; \) * \( p < .05; \) .
Figure Caption

Figure 1. Path model for personal belief in a just world, justice judgments, mood state, and anger-out of adult male prisoners (the beta coefficients shown are significant at $p < .05$, and were estimated controlling for personal and family background, criminal career, and social desirability)
Just world belief and prisoners

- Justice of legal proceedings
  - Positive mood
    - Personal BJW
      - Negative mood
        - Anger-Out
  - Interpersonal justice
  - Justice of prison affairs
    - Negative mood
      - Anger-Out

Correlations:
- Positive mood with justice of legal proceedings: 0.30
- Interpersonal justice with justice of legal proceedings: 0.31
- Justice of prison affairs with justice of legal proceedings: 0.18
- Negative mood with anger-out: -0.25
- Positive mood with anger-out: -0.42