Journal of Interpersonal Violence

The Relationship between Belief in a Just World and Antisocial Behaviour through Anticipated Guilt, Victim Deservedness, and Punishment Frame

SCHOLARONE™
Manuscripts

Running Head: Belief in a Just World and Antisocial Behaviour

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

The Relationship between Belief in a Just World and Antisocial Behaviour through

Anticipated Guilt, Victim Deservedness, and Punishment Frame

Running Head: Belief in a Just World and Antisocial Behaviour

Abstract

According to the just-world hypothesis, people need to believe that they deserve what they get and get what they deserve. This belief in a just world (BJW), however, seems to be related to antisocial behaviour. However, the mechanisms that underlie this relationship have not been fully explored. This study aimed to investigate the relationships between BJW for others (BJW-Other; the belief that people, other than themselves, get what they deserve) and BJW for the self (BJW-Self; the belief that people feel they get what they deserve) with intentions to commit everyday crimes, victim deservedness, and anticipated guilt. A cross-sectional study was conducted with a sample of 364 undergraduate students (79.1% female, 18.7% male, 2.2% diverse) aged between 19 and 54 ($M = 19.87$; $SD = 3.02$) (Study 1). It was replicated in a further study that also measured perceptions of everyday crime as just punishment of its victims (e.g., for their privilege or complacency) in a sample of 302 (57.6% female, 41.4% male, 1% diverse) non-university students aged between 20 and 99 ($M = 41.76$; $SD = 13.12$) (Study 2). In both studies, results indicated that the negative relationship between BJW-Self and intentions to commit everyday crimes was mediated by increased anticipated guilt. The more the participants in both samples endorsed BJW-Self the more they felt anticipated guilt, and in turn, the less they intended to offend. The results suggest that BJW-Self may play a role in fostering anticipated guilt and in turn deterring them from committing everyday crimes.

Keywords: Belief in a just world, Antisocial behaviour, Guilt, Deservedness, Punishment

Running Head: Belief in a Just World and Antisocial Behaviour

The Relationship between Belief in a Just World and Antisocial Behaviour through

Anticipated Guilt, Victim Deservedness, and Punishment Frame

The Belief in a Just World (BJW) concept, first coined by Lerner (1965), states

plainly that people get what they deserve. Studies have shown that believing in a just world is

a robust predictor of antisocial behaviour (e.g., Bartholomaeus & Strelan, 2016; Donat et al.,

2014; Dzuka & Dalbert, 2007; Otto & Dalbert, 2005; Sutton & Winnard, 2007; Wenzel et al.,

2017). However, there is still a scarce amount of research explaining why this relationship

occurs. Therefore, the present study intends to add further contribution considering the

underlying elements of the relationship between BJW and antisocial behaviour.

BJW enables people to approach their lives with a feeling of stability and provides a

psychological buffer against harsh, unfair realities (Dalbert, 1998). It is argued to stem from

an implicit 'personal contract' developed when toddlers learn to forego immediate enjoyment

and follow moral laws and conventions in exchange for longer-term rewards (Lerner, 1980).

Belief in this personal contract gives individuals' lives a sense of predictability and allows

them to plan their futures with optimism. Despite this, the real world provides lots of

evidence that the world is not always a just place. Many people suffer hardships that they do

not necessarily deserve, as seen in cases of poverty and illness. Thus, BJW can lead to strong

believers in a just world adopting several defence mechanisms such as victim blaming or

derogation to protect themselves against this evidence and to maintain their belief (Furnham,

2003; Van den Bos & Maas, 2009). BJW was therefore described as a 'fundamental delusion'

by Lerner (1980): fundamental as it appears critical for individual functioning, but a delusion

in the sense that it is motivated and erroneous.

 Research has shown that BJW should be distinguished into two dimensions, self and other.

The Belief in a Just World for Others (BJW-Others) is the belief that people, other than

themselves, get what they deserve. In contrast, Belief in a Just World for Self (BJW-Self) is

the belief that people feel they get what they deserve. The two dimensions correlate to each

other positively, however their roles seem separate (see Dalbert, 1999; Lipkus et al., 1996).

BJW-Others is related to more negative tendencies than BJW-Self. These negative tendencies

include prejudice, discrimination, and the desire for inequality. Having a strong BJW-Others

has been found to be a unique predictor of harsher attitudes to individuals facing misfortune

for example, the poor (Sutton & Douglas, 2005) and refugees (Khera et al., 2014).

Additional findings concerning BJW-Others and the negative treatment of others

reveals that individuals who tend to score higher in BJW-Others consider the circumstances

people find themselves in as fair and that their treatment by others is just. This motivates

these individuals to go in pursuit of status and power as it enables them to distribute rewards

and punishments and legitimise the positive and negative consequences people face (Strelan

& Van Prooijen, 2014). As well a pursuing of power, those with a strong BJW-Others are

more inclined to engage in corrupt behaviours when in power. This is because they perceive

these behaviours as not being corrupt even when adjusting for the perceived likelihood of

punishment. Therefore, intentions to take part in behaviours such as bribery and nepotism

might be more likely (Bai et al., 2014).

Over the years, research has mounted to suggest a positive relationship between BJW-

Others and antisocial behaviour as well as harsh social attitudes. One study by Sutton &

Winnard (2007) showed that, in a sample of vulnerable participants aged 16-25, BJW-Others

positively predicted not only harsh attitudes to others (see also Bègue & Bastounis, 2003;

Sutton & Douglas, 2005), but intentions to participate in delinquent behaviours. This finding

suggested that harsh attitudes to others may be accompanied by the willingness to commit

crimes against them. Moreover, after experiencing transgression those with high BJW-Others

tend to be less likely to forgive people (Lucas et al., 2014) and more likely to respond

Running Head: Belief in a Just World and Antisocial Behaviour

antisocially (Bartholomaeus & Strelan, 2016), BJW-Others has also been linked to dishonest

behaviours (Wenzel et al., 2017).

The research on BJW-Self/Others and its outcomes regarding antisocial behaviours is

strong and extensive because similar results have been replicated in different settings such as

prisons and schools (Donat et al., 2014; Dzuka & Dalbert, 2007; Otto & Dalbert, 2005).

These findings also appear to be consistent across cultures (e.g., Correia & Dalbert, 2008;

Donat et al., 2014; Stupnianek & Navickas, 2019) in both adults and children. Thus, we know

that antisocial behaviours should be related to BJW. Despite this, we still do not fully

understand the mechanisms that can explain why these beliefs result in these behaviours and

therefore, more research must be done focusing on the factors that mediate these intentions to

engage in antisocial behaviours.

One potential explanation for BJW's relationship with antisocial behaviours is victim

blaming and derogation. Victim blaming is one of the most well-known processes involving

BJW and is thought to be a mechanism used by individuals with this belief to correct injustice

(DeJudicibus & McCabe, 2001). A series of studies showed a relationship between BJW and

victim blaming with several different kinds of victims, for example, poor people, cancer

patients, and people with disabilities (Montada, 1998). After these studies Montada (1998)

described victim blaming and derogation as a 'personal resource' that helps people with

strong just world beliefs cope with hardships experienced by others. Seeing someone

potentially innocent victimised creates a conflict with one's beliefs, thus blaming and

derogating the victim as deserving of these consequences restores faith in a just world.

This behaviour of victim blaming is mostly prevalent in those with strong BJW-

Others and is negatively related to BJW-Self. Hayes et al. (2013) examined the relationship

between rape myth acceptance and BJW-Others and Self. Rape myth acceptance is believing

in false information about sexual assault incidents and can affect how the victims are treated. Their findings showed a significant positive relationship between BJW-Others and rape myth acceptance as well as a significant negative relationship between BJW-Self and rape myth acceptance. These results meant that as BJW-Others increased so did blaming rape victims and that as BJW-Self increased blaming rape victims decreased. In addition, BJW- Others has been strongly linked to harsh attitudes towards blaming the poor and victims of bullying (Fox et al., 2010; Sutton & Douglas, 2005).

Victim blaming and derogation contributes to antisocial behaviour because it can make perpetrators feel justified in acting antisocially and reinforce their behaviour by making them less concerned with the social costs of their actions (Gracia, 2014). For example, stealing from an individual who is extremely drunk can be justified by the perpetrator by blaming the victim for being so intoxicated and as a result vulnerable to being mugged. On the contrary, an individual who perceives a victim as undeserving and not to blame for their ill-treatment is less likely to behave in an antisocial way towards them as they would be more concerned with the social costs of their behaviour as this treatment would be unfair.

In the context of just world beliefs, we follow Sutton and Winnard (2007) in proposing that those with a strong BJW-Others may blame victims and believe them to be deserving of negative consequences and thus become willing to behave antisocially towards them. In contrast, those with a strong BJW-Self are more concerned with their own behaviour and fulfilling their personal contract so do not tend to victim blame nor engage in antisocial behaviours as this would mean negative consequences for themselves.

As well as victim blaming, however, another potential explanation for these links between BJW-Others/Self and antisocial behaviour is that antisocial behaviour is affected by increases or decreases in guilt. Guilt is an unpleasant feeling individuals experience when our

Running Head: Belief in a Just World and Antisocial Behaviour

moral standards are violated. Anticipated guilt is how much a person expects to experience

guilt after wrongdoing and has been related negatively to rule-breaking and antisocial

behaviour in adolescents and college students (Krettenauer & Eichler, 2006; Olthof, 2012;

Quiles et al., 2002). This is because guilt is an emotional state that arises due to an

individual's moral standards. It motivates people to do good things and avoid doing bad

things as not to create a conflict with one's moral compass which may lead to negative

consequences. Still more research is needed to enlighten the meaning of feeling guilt in the

relationship between BJW and antisocial behaviour.

Study 1

Based on the aforementioned literature, the aim of the current study was to identify the

mechanisms that could explain the link between BJW-Others and Self with antisocial

behaviour. This was done using a cross-sectional correlation design examining the

relationship between BJW-Others and Self with intentions to commit everyday crime, victim

deservedness, and anticipated guilt. The hypotheses were as follows: H1. Adjusting for BJW-

Self, BJW-Others will be related to (a) increased intentions to commit, (b) higher victim

deservedness, (c) reduced anticipated guilt. H2. Adjusting for BJW-Others, BJW-Self will be

related to (a) reduced intentions to commit and (b) higher anticipated guilt. H3. Higher

intentions to offend will be associated (a) with higher victim deservedness and lower

anticipated guilt, (b) also after adjusting for BJW-Self and BJW-Others. H4. BJW-Others will

be positively related to intentions to commit everyday crimes through increased victim

deservedness and decreased anticipated guilt (a) and BJW-Self will be negatively related to

intentions to commit everyday crimes through a decrease in victim deservedness and an

increase in anticipated guilt (b).

Method

Running Head: Belief in a Just World and Antisocial Behaviour

Participants

The sample consisted of 364 (79.1% female, 18.7% male, 2.2% diverse) University of Kent Psychology Undergraduate students, who took part in exchange for course credit, and were aged between 19 and 54 (M = 19.87; SD = 3.02).

Measures

Intentions to commit everyday crimes was measured using an adaptation of the Everyday Crime Scale (Karstedt & Farrall, 2006) made up of four items (e.g., "During an insurance claim, add items which had not been lost, damaged or stolen, or increased the value of any items claimed" ($α$ = .73)). Participants were asked "Would you consider performing each of these behaviours in the future?" They indicated their intention on a seven-point scale in all cases (1=would never consider, 7 = would consider).

Participants were asked to complete the same scale (Karstedt & Farrall, 2006) to measure victim deservedness ($α$ = .82), but this time they were asked "To what extent would you say these people deserve to suffer these negative effect". They answered on a seven-point scale in all cases (1 =would never deserve, 7 =would deserve). Following this, the same was done to measure anticipated guilt. Participants were presented the same items as previous but instead asked, "How guilty would you feel if you engaged in each of these behaviours?" ($α$ = .79). They answered on a seven-point scale for all cases (1 =not at all guilty, 7 =very much guilty).

The predictor variables were then measured using Belief in a Just World for Self and Other scales (Lipkus et al., 1996). The first scale measured Belief in a Just World for Others ($α$ = .87) and contained eight items (e.g., "I feel that people treat each other fairly in life"). Participants were asked "How well do you think the following statements apply to people other than yourself". The following scale measured Belief in a Just World for Self and

Running Head: Belief in a Just World and Antisocial Behaviour

contained eight items (e.g., "I feel that I get what I deserve" ($\alpha = .86$)). Participants were

asked "How well do you think the following statements apply to you?". They answered on a

seven-point scale for all cases (1 = Strongly disagree, 7 =strongly agree).

Finally, participants were asked for their age, gender.

Procedure

This online study took on average 10-15 minutes to complete. Participants were

presented with an information sheet including the contact details of the researchers and text

explaining their confidentiality and right to withdraw. They then provided their informed

consent by ticking a box before the survey commenced.

Results

As seen in Table 1, BJW-Others and BJW-Self were not significantly correlated with

intentions to commit everyday crime at zero order. BJW-Others was positively correlated

with victim deservedness and BJW-Self was positively correlated with anticipated guilt. In

addition, higher intentions to offend was associated with higher victim deservedness and

lower anticipated guilt.

-Please insert Table 1 here-

A path analysis using the maximum likelihood estimation method was conducted to

test hypothesized relationships among study variables. In the path model BJW-Others and

BJW-Self were independent variables, victim deservedness and anticipated guilt were

mediators and intentions to commit everyday crime was dependent variable. In addition, as

male associated with victim deservedness and intentions to commit everyday crimes these

associations were added to the model.

-Please insert Figure 1 here-

Running Head: Belief in a Just World and Antisocial Behaviour

Model chi-square and fit statistics indicated that the proposed model had almost a good fit to the data, χ^2 (2) = 6. 423, p = .04, CFI = .98, RMSEA = .08, 90% CI [.01, .15]. Results indicated that (See Table 2) while BJW-Others tended to increase victim deservedness, BJW-Self tended to decrease victim deservedness and increase anticipated guilt. Additionally, victim deservedness positively predicted intentions to commit everyday crimes, whereas anticipated guilt negatively predicted it. Gender (male coded 1, female coded 2) negatively predicted victim deservedness.

-Please insert Table 2 here-

To improve the model (Byrne, 2010), non-significant paths were removed from the model. This final model fit to the data well, χ^2 (6) = 9.807, p = .133, CFI = .98, RMSEA = .04, 90% CI [.00, .09].

Indirect effects were investigated via 5000 bias-corrected bootstrapped samples. Results indicated that the hypothesized indirect effects of BJW-Others on intentions to commit everyday crime through increased victim deservedness (B = .08, SE = .03, p = .000, 95% CI [.04, .14]) and of BJW-Self through decreased victim deservedness (B = -.04, SE = .02, p = .027, 95% CI [-.09, -.01]) and increased anticipated guilt (B = -. 12, SE = .04, p = .002, 95% CI [-.20, -.05]) were significant.

Study 2

The aim of the second study was to realize a pre-registered replication with a sample of non-university students. In addition, as previous research (e.g., Begue & Bastounis, 2003) has shown that BJW might be related to punitive responses, in this study the role of punishment frame for the relationship of BJW and antisocial behaviour was examined as well. Specifically, participants were asked whether they perceived everyday crime as a type of punishment of its victims. The possibility that a punishment motive may link BJW-others

Running Head: Belief in a Just World and Antisocial Behaviour

to antisocial behaviour was first advanced speculatively by Sutton and Winnard (2007), who wrote that "~~that~~ a strong BJW-others may have caused some of our participants to want in some sense to punish society by offending against it", and is consistent with the known association between BJW-others and punitive attitudes generally (e.g., Bègue & Bastounis, 2003; Kaiser et al., 2004). For this aim, the following hypotheses were pre-registered (THE LINK IS BLINDED): H1. Adjusting for BJW-Self, BJW-Others will be related to (a) increased intentions to commit, (b) higher victim deservedness, (c) reduced anticipated guilt, (d) higher desire to punish. H2. Adjusting for BJW-Others, BJW-Self will be related to (a) reduced intentions to commit, (b) higher anticipated guilt, and (c) lower desire to punish. H3. Higher intentions to commit will be associated (a) with higher victim deservedness, lower anticipated guilt, and higher desire to punish, (b) also after adjusting for BJW-Self and BJW-Others. Finally, even though it was not pre-registered, the last hypothesis of the study 1 was tested for the study 2 as well. That is, H4. BJW-Others will be positively related to intentions to commit everyday crimes through increased victim deservedness and decreased anticipated guilt (a) and BJW-Self will be negatively related to intentions to commit everyday crimes through a decrease in victim deservedness and an increase in anticipated guilt (b).

Method

Participants

Initially 306 participants opened the online survey, however 2 participants did not finish the questionnaire and 2 others did not respond the BJW items. The sample consisted of remaining 302 (57.6% female, 41.4% male, 1% diverse) participants aged between 20 and 99 ($M = 41.76$; $SD = 13.12$).

Measures

As in the Study 1, intentions to commit everyday crimes was measured using an adaptation of the Everyday Crime Scale (Karstedt & Farrall, 2006; $\alpha = .76$) made up of four items. Participants were asked to complete an adapted version of the same scale for victim deservedness ($\alpha = .87$); anticipated guilt ($\alpha = .81$), and punishment frame ($\alpha = .89$).

To assess belief in a just world levels of participants, Belief in a Just World for Others Scale ($\alpha = .91$; Lipkus et al., 1996) and Belief in a Just World for Self Scale ($\alpha = .93$; Lipkus et al., 1996). All responses were taken on a 7-point Likert-scale.

Finally, participants were asked for their demographics such as age, gender, and economic level.

Procedure

The data for this study was collected through Prolific as part of a larger project. Participants were presented with an information sheet including the contact details of the researchers and text explaining their confidentiality and right to withdraw. They then provided their informed consent by ticking a box before the survey commenced.

Results

As seen in Table 3, BJW-Self was negatively associated with intentions to commit everyday crime and positively associated with anticipated guilt, unexpectedly it did not significantly associate with punishment frame. However, BJW-Others did not significantly relate to any research variables other than BJW-Self. In addition, higher intentions to commit was associated with higher victim deservedness and lower anticipated guilt.

-Please insert Table 3 here-

Another path analysis using the maximum likelihood estimation method was conducted to test hypothesized relationships among variables for study 2. In the path model

Running Head: Belief in a Just World and Antisocial Behaviour

BJW-Others and BJW-Self were independent variables, victim deservedness, anticipated guilt, and punishment frame were mediators and intentions to commit everyday crime was dependent variable. In addition, as being male was associated with victim deservedness, anticipated guilt, and intentions to commit everyday crime these associations were added to the model.

-Please insert Figure 2 here-

Model chi-square and fit statistics indicated that the proposed model had a poor fit to the data, χ^2 (4) = 43.55, p = <.001, CFI = .90, RMSEA = .18, 90% CI [.14, .23]. Results indicated that (See Table 4) while BJW-Others tended to increase punishment frame, BJW-Self tended to increase anticipated guilt. Additionally, victim deservedness positively predicted intentions to commit everyday crime, whereas BJW-Self and anticipated guilt negatively predicted it. And, female gender positively predicted anticipated guilt.

-Please insert Table 4 here-

To improve the model modification indices were examined. Modification indices indicated that adding an error covariance between victim deservedness and punishment frame would increase the model fit (expected $\chi^2_{difference}$ (1) = 35.432). As these two constructs are correlated, this modification seemed acceptable and was added to the model. The modified model had a good fit to the data, χ^2 (3) = 5.652, p = .130, CFI = .99, RMSEA = .05, 90% CI [.00, .12]. Modification indices indicated that adding an error covariance between anticipated guilt and punishment frame would further improve the model fit (expected $\chi^2_{difference}$ (1) = 4.073) which seemed reasonable. The modified model had fit well to the data, χ^2 (2) = 1.532, p = .465, CFI = 1.000, RMSEA = .000, 90% CI [.00, .11].

Finally, non-significant paths (See Table 4) were removed from the model (see Byrne, 2010). In this model, the path from BJW-Others to punishment frame (B = 0.14, SE = 0.09, p

= .103) and from BJW-Self to intentions to commit everyday crime (B = -0.06, SE = 0.05, p

= .239) became non-significant therefore, these paths were also deleted from the model. This

final model had a good fit to the data, χ^2 (12) = 17.215, p = .142, CFI = .99, RMSEA = .04,

90% CI [.00, .08].

Finally, indirect effects were investigated via 5000 bias-corrected bootstrapped

samples. Results indicated that the indirect effect of BJW-Self on intentions to commit

everyday crime controlling for BJW-Others indirect effect through anticipated guilt was

statistically significant (B = -.09, SE = .03, p = .010, 95% CI [.33, .49]).

Discussion

These studies examined the mechanism linking the well-documented relationship

between BJW-Others/Self and antisocial behaviour across two studies. In Study 1, BJW-

Others could predict higher victim deservedness (H1b), but could not predict increased

intentions to commit (H1a) and reduced anticipated guilt (H1c) directly. On the other hand,

BJW-Self did not significantly predict reduced intentions to commit directly (H2a), but it was

associated with higher anticipated guilt and reduced victim deservedness (H2b). Higher

intentions to commit were predicted by higher victim deservedness and lower anticipated

guilt (H3). Finally, BJW-Others was associated with intentions to commit everyday crime

through increased victim deservedness and (4a) BJW-Self through decreased victim

deservedness and increased anticipated guilt (4b).

In Study 2, BJW-Others predicted higher punishment frame (H1d), but not increased

intentions to commit (H1a), higher victim deservedness (H1b), and reduced anticipated guilt

(H1c). BJW-Self predicted higher anticipated guilt (H2b) but not reduced intentions to

commit (H2a) and lower punishment frame (H2c). Higher intentions to commit were

predicted by higher victim deservedness, lower anticipated guilt, but not by higher desire to

Running Head: Belief in a Just World and Antisocial Behaviour

punish (H3). Finally, BJW-Self was associated with intentions to commit everyday crimes

through increased anticipated guilt (4b), however, the hypothesized indirect association

between BJW-Others and intentions to commit everyday crimes (4a) was not significant for

this sample.

In both studies the emerged pattern pointed out anticipated guilt might have a key role

for antisocial behaviour. BJW-Self was associated with increased anticipated guilt and the

relationship between BJW-Self and tendencies to offend everyday crimes was mediated by

anticipated guilt. This might support the personal contract function of BJW which is the idea

that people think that by adhering to society's moral standards they will, in return, receive

just outcomes (Lerner, 1980). The present studies suggest that the prospect of committing

crimes in violation of those moral standards can trigger feelings of guilt, and these feelings of

guilt deter the individual from offending.

In both studies, victim deservedness could predict intentions to offend. This is

consistent with the literature stating how perceived victim deservedness and blaming

contributes to increased antisocial behaviour because it allows people to become less

concerned over the social costs of their behaviour (Gracia, 2014). Even it did not mediate the

relationship between BJW and antisocial behaviour in the second study, in the first study it

mediated both BJW-Others and BJW-Self's relations with it. Those who believe that other

people get what they deserve are likely to blame victims for their own negative circumstance

to create justification for their subsequent antisocial behaviour towards them and to preserve

their just world beliefs.

Finally, consistent with Hayes et al. (2013), who found those who scored highly in

BJW-Self scales were less likely to blame victims of rape, the first study also showed that a

strong BJW-Self led to less perceived deservedness for victims of everyday crimes. An

interpretation of this finding is that because of the theoretical notion of the personal contract by Lerner (1980), those with a strong BJW-Self are more concerned over their own behaviour than others, thus do not tend to engage in victim blaming and instead might tend to engage in more pro-social behaviour rather than antisocial behaviour. This interpretation is supported by the finding that BJW-Self is positively correlated with prosocial behaviour (Bartholomaeus & Strelan, 2019).

On the other hand, in contrast to the results of the other studies that found a direct relationship between BJW-Other/Self and antisocial behaviour (e.g., Otto and Dalbert, 2005; Sutton & Winnard 2007), another pattern emerged in our studies: direct relations could not be observed (see also Reinhardt et al., 2023). This might be due to the sample. The sample of the first study consisted of used a sample of undergraduate students from the county of Kent in the UK. Whereas Although Sutton and Winnard (2007) used a sample containing people of a similar age, however, they were a sample of vulnerable young adults who were estranged from their families and had typically come from very challenged backgrounds. Even when we examined the same relationship among a more diverse sample of adults in Study 2, the effect was not detected. Future studies should consider the SES characteristics of the participants as well as their age and should seek to reach samples with a more balanced distribution in terms of SES. Note that for the current samples the information of a history of offending was not checked. Considering other studies using samples with different backgrounds such as young prisoners (e.g., Otto & Dalbert, 2005), the reason for nonsignificant direct relations could also be other factors as well. As being a victim of a crime can also have an impact on individuals' beliefs in a just world (e.g., Stupnianek & Schmitt, 2024), it is recommended that future studies take into account participants' criminal history and/or whether they have been the victim of a crime.

Further, both studies have a cross-sectional design. Experimental and longitudinal studies are needed to make causal inferences. For example, future research could examine the relationship between BJW and antisocial behaviour and in participants of a younger age group using a longitudinal design to measure whether the relationship develops or changes in severity over time. Being male has been found to be correlated with higher rates of antisocial/criminal behaviors (e.g., Moffitt, 2003), however, only 18.7% of the participants were male in the Study 1. Although we tried to overcome this limitation in the Study 2, we strongly recommend that future studies use evenly proportioned samples.

Although we tried to replicate the study using an older sample, the main limitation of the first study was that the items may have been more suitable to a more mature sample. For example, one of the four items asked about an insurance claim and as most participants were aged 18-20, they most likely would not have experienced the process of an insurance claim. In addition, although we collected data from ordinary people and university students, we did not evaluate the criminal history of the participants, also for simple crimes. Finally, both samples of this study consisted of people living in the UK, which is one of the WEIRD (Western, Educated, Industrial, Rich, and Democratic) countries. The relationship between BJW and outcomes related to antisocial behaviour has been tested in many different countries with people from many different cultures and similar results have been obtained (e.g., Correia & Dalbert, 2008; Donat et al., 2014). Nevertheless, testing the findings of this study with participants from different countries and testing whether being in an advantaged or disadvantaged position in a society would make a difference in the findings would contribute to the generalisability of the findings of this study.

To conclude, to better understand the relationship between BJW and antisocial behaviour, this study has expanded our knowledge of the literature on the meaning of some variables associated with antisocial behaviour in this relationship. The results underlie that

Running Head: Belief in a Just World and Antisocial Behaviour

BJW-Self's personal contract function seems to have a key role to foster anticipated guilt of

strong believers and in turn to deter them from committing everyday crimes.

Running Head: Belief in a Just World and Antisocial Behaviour

References

Bai, B. Y., Liu, X. X., & Kou, Y. (2014). Belief in a just world lowers perceived intention of

corruption: The mediating role of perceived punishment. *PloS one, 9*(5), e97075.

Bartholomaeus, J., & Strelan, P. (2016). Just world beliefs and forgiveness: The mediating

role of implicit theories of relationships. *Personality and Individual Differences, 96*,

106-110.

Bartholomaeus, J., & Strelan, P. (2019). The adaptive, approach-oriented correlates of belief

in a just world for the self: A review of the research. *Personality and Individual

Differences, 151*, 109485.

Begue, L., & Bastounis, M. (2003). Two spheres of belief in justice: Extensive support for

the bidimensional model of belief in a just world. *Journal of Personality, 71*(3), 435-

463.

Byrne, B. M. (2010). *Structural equation modelling with AMOS: Basic concepts,

applications, and programming* (Second). Taylor & Francis Group.

Correia, I., & Dalbert, C. (2008). School bullying: Belief in a personal just world of bullies,

victims, and defenders. *European Psychologist, 13*(4), 248-254.

Dalbert, C. (1998). Belief in a just world, well-being, and coping with an unjust fate. In

Responses to victimizations and belief in a just world (pp. 87-105). Springer, Boston,

MA.

Dalbert, C. (1999). The world is more just for me than generally: About the personal belief in

a just world scale's validity. *Social Justice Research, 12*(2), 79-98.

De Judicibus, M., & McCabe, M. P. (2001). Blaming the target of sexual harassment: Impact

of gender role, sexist attitudes, and work role. *Sex Roles, 44*(7), 401-417.

Running Head: Belief in a Just World and Antisocial Behaviour

Donat, M., Dalbert, C., & Kamble, S. V. (2014). Adolescents' cheating and delinquent

behavior from a justice–psychological perspective: The role of teacher justice.

European Journal of Psychology of Education, 29(4), 635-651.

Dzuka, J., & Dalbert, C. (2007). Aggression at school: Belief in a personal just world and

well-being of victims and aggressors. *Studia Psychologica, 49*(4), 313-320.

Fox, C. L., Elder, T., Gater, J., & Johnson, E. (2010). The association between adolescents'

beliefs in a just world and their attitudes to victims of bullying. *British Journal of

Educational Psychology, 80*(2), 183-198.

Furnham, A. (2003). Belief in a just world: Research progress over the past decade.

Personality and Individual Differences, 34(5), 795-817.

Gracia, E. (2014). Intimate partner violence against women and victim-blaming attitudes

among Europeans. *Bulletin of the World Health Organization, 92*, 380-381.

Hayes, R. M., Lorenz, K., & Bell, K. A. (2013). Victim blaming others: Rape myth

acceptance and the just world belief. *Feminist Criminology, 8*(3), 202-220.

Karstedt, S., & Farrall, S. (2006). The moral economy of everyday crime: Markets,

consumers and citizens. *British Journal of Criminology, 46*(6), 1011-1036.

Khera, M. L., Harvey, A. J., & Callan, M. J. (2014). Beliefs in a just world, subjective well-

being and attitudes towards refugees among refugee workers. *Social Justice Research,

27*(4), 432- 443.

Krettenauer, T., & Eichler, D. (2006). Adolescents' self-attributed moral emotions following

a moral transgression: Relations with delinquency, confidence in moral judgment and

age. *British Journal of Developmental Psychology, 24*(3), 489-506.

Running Head: Belief in a Just World and Antisocial Behaviour

Lerner, M. J. (1965). Evaluation of performance as a function of performer's reward and

attractiveness. *Journal of Personality and Social Psychology, 1*(4), 355.

Lerner, M. J. (1980). The belief in a just world. In *The belief in a just world* (pp. 9-30).

Springer, Boston, MA.

Lipkus, I. M., Dalbert, C., & Siegler, I. C. (1996). The importance of distinguishing the belief

in a just world for self versus for others: Implications for psychological well-being.

Personality and Social Psychology Bulletin, 22(7), 666-677.

Lucas, T., Rudolph, C., Zhdanova, L., Barkho, E., & Weidner, N. (2014). Distributive justice

for others, collective angst, and support for exclusion of immigrants. *Political*

Psychology, 35(6), 775-793.

Moffitt, T. E. (2003). Life-course-persistent and adolescence-limited antisocial behavior: A

10-year research review and a research agenda. In B. B. Lahey, T. E. Moffitt, & A.

Caspi (Eds.), *Causes of conduct disorder and juvenile delinquency* (pp. 49–75). The

Guilford Press.

Montada, L. (1998). Belief in a just world: A hybrid of justice motive and self-interest?. In

Responses to victimizations and belief in a just world (pp. 217-246). Springer, Boston,

MA.

Olthof, T. (2012). Anticipated feelings of guilt and shame as predictors of early adolescents'

antisocial and prosocial interpersonal behaviour. *European Journal of Developmental*

Psychology, 9(3), 371-388.

Otto, K., & Dalbert, C. (2005). Belief in a just world and its functions for young prisoners.

Journal of Research in Personality, 39(6), 559-573.

Running Head: Belief in a Just World and Antisocial Behaviour

Paulsen, M. B., & Wells, C. T. (1998). Domain differences in the epistemological beliefs of college students. *Research in Higher Education, 39*(4), 365-384.

Quiles, Z. N., Kinnunen, T., & Bybee, J. (2002). Aspects of guilt and self-reported substance use in adolescence. *Journal of Drug Education, 32*(4), 343-362.

Reinhardt, N., Reinhard, M. A., & Schindler, S. (2023). Is peoples' belief in a just world associated with (dis) honesty in romantic relationships?. *Journal of Research in Personality*, 105, 104396.

Schindler, S., Wenzel, K., Dobiosch, S., & Reinhard, M. A. (2019). The role of belief in a just world for (dis) honest behavior. *Personality and Individual Differences, 142*, 72-78.

Strelan, P., & Van Prooijen, J. W. (2014). Rationalizers or realists? The effects of transgressors' just world beliefs within committed relationships. *Personality and Individual Differences, 63*, 41- 46.

Stupnianek, K., & Schmitt, M. (2024). Crime Victims' Belief in a Just World: Moderating Effects of Perceived Fair Treatment in the Criminal Justice Process. *Victims & Offenders, 19*(2), 256-279.

Stupnianek, K., & Navickas, V. (2019). Can beliefs in justice predict corrupt behavior?. *Journal of Social and Political Psychology, 7*(1), 246-259.

Sutton, R. M., & Douglas, K. M. (2005). Justice for all, or just for me? More evidence of the importance of the self-other distinction in just-world beliefs. *Personality and Individual Differences, 39*(3), 637-645.

Running Head: Belief in a Just World and Antisocial Behaviour

Sutton, R. M., & Winnard, E. J. (2007). Looking ahead through lenses of justice: The

relevance of just-world beliefs to intentions and confidence in the future. *British

Journal of Social Psychology, 46*(3), 649-666.

Van den Bos, K., & Maas, M. (2009). On the psychology of the belief in a just world:

Exploring experiential and rationalistic paths to victim blaming. *Personality and

Social Psychology Bulletin, 35*(12), 1567-1578.

Wenzel, K., Schindler, S., & Reinhard, M. A. (2017). General belief in a just world is

positively associated with dishonest behavior. *Frontiers in Psychology, 8*, 1770.

TABLES

Table 1

Descriptive Statistics and Intercorrelations (N = 364; Study 1).

Variable	M	SD	1	2	3	4	5	6	7
1.Age	19.87	3.02	-	-.06	-.03	.01	-.00	-.05	.00
2.Gender	-	-		-	-.11*	.00	-.13*	-.13*	.10
3.BJW-Others	3.20	1.05			-	.37**	.06	.23**	.02
4.BJW-Self	4.19	1.00				-	-.07	-.03	.20**
5.Intentions to commit everyday crime	3.09	1.34					-	.29**	-.49**
6.Victim Deservedness	3.00	1.41						-	-.12*
7.Anticipated Guilt	4.67	1.39							-

Note. BJW = Belief in a Just World. *$p < .05$. **$p < .01$

Table 2

Unstandardized and standardized regression weights for the paths in the hypothesized model (Study 1).

Parameter Estimate	B (SE)	β	p
BJW-Others → Victim Deservedness	**0.37 (0.07)**	**0.27**	**<.001**
BJW-Others → Anticipated Guilt	-0.09 (0.07)	-0.07	.241
BJW-Self → Victim Deservedness	**-0.18 (0.08)**	**-0.13**	**.015**
BJW-Self → Anticipated Guilt	**0.31 (0.08)**	**0.22**	**<.001**
Victim Deservedness→ Intentions to Commit Everyday Crime	**0.22(0.04)**	**0.24**	**<.001**
Anticipated Guilt→ Intentions to Commit Everyday Crime	**-0.44(0.04)**	**-0.47**	**<.001**
BJW-Others→ Intentions to Commit Everyday Crime	-0.01(0.06)	-0.01	.874
BJW-Self→ Intentions to Commit Everyday Crime	0.04(0.07)	0.03	.563
Gender → Victim Deservedness	**-0.32(0.16)**	**-0.10**	**.043**
Gender → Intentions to Commit Everyday Crime	-0.17(0.13)	-0.06	.195

Note: Statistically significant (p<.05) regression weights were given in bold.

Table 3

Descriptive Statistics and Intercorrelations (N = 302; Study 2)

Variable	M	SD	1	2	3	4	5	6	7	8
1. Age	41.76	13.12	-	.08	.13*	.04	-.06	-.09	.09	.01
2. Gender	-	-		-	-22**	-.05	-.20**	-.12*	.21**	-.10
3.BJW-others	3.15	1.09			-	.63**	.02	.07	.02	.11
4.BJW-self	4.17	1.21				-	-.12*	-.00	.11*	-.01
5.Intent to Offend Everyday Crime	2.49	1.33					-	.12*	-.63**	-.01
6.Victim Deservedness	3.06	1.74						-	-.02	.36**
7.Anticipated Guilt	5.08	1.52							-	.08
8. Punishment Frame	3.05	1.77								-

Note. BJW = Belief in a Just World. *p < .05. **p < .01

Table 4

Unstandardized and standardized regression weights for the paths in the hypothesized model (Study 2).

Parameter Estimate	B (SE)	β	p
BJW-Others → Victim Deservedness	0.14(0.12)	0.09	.243
BJW-Others → Anticipated Guilt	-0.04(0.10)	-0.03	.697
BJW-Others → Punishment Frame	**0.31(0.12)**	**0.19**	**.009**
BJW-Self → Victim Deservedness	-0.09(0.11)	-0.07	.378
BJW-Self → Anticipated Guilt	**0.18(0.09)**	**0.14**	**.047**
BJW-Self→ Punishment Frame	-0.19(0.11)	-0.13	.075
Victim Deservedness→ Intentions to Commit Everyday Crime	**0.07(0.03)**	**0.09**	**.039**
Anticipated Guilt→ Intentions to Commit Everyday Crime	**-0.53(0.04)**	**-0.61**	**<.001**
Punishment Frame→ Intentions to Commit Everyday Crime	-0.01(0.03)	-0.01	.861
BJW-Others→ Intentions to Commit Everyday Crime	0.11(0.07)	0.09	.136
BJW-Self→ Intentions to Commit Everyday Crime	**-0.12(0.06)**	**-0.11**	**.051**
Gender → Victim Deservedness	-0.35(0.19)	-0.11	.069
Gender → Anticipated Guilt	**0.59(0.16)**	**0.21**	**<.001**
Gender → Intentions to Commit Everyday Crime	-0.13(0.12)	-0.05	.261

Note: Statistically significant (p<.05) regression weights were given in bold.
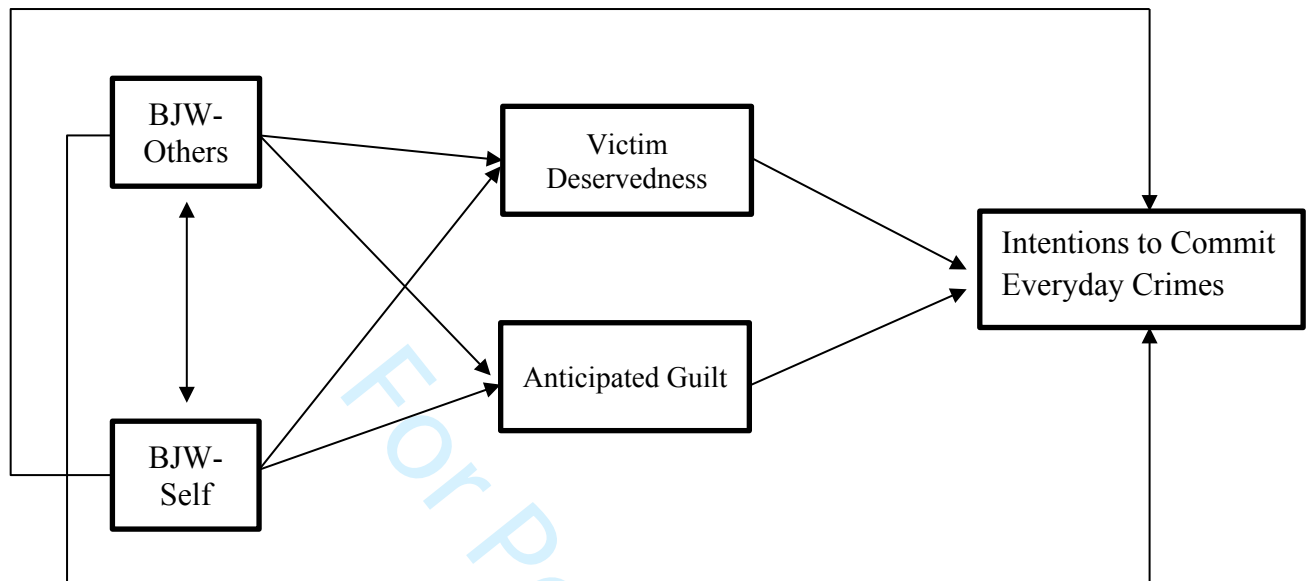
FIGURES

Figure 1: Hypothesized path model of the Study 1representing the associations among research variables.
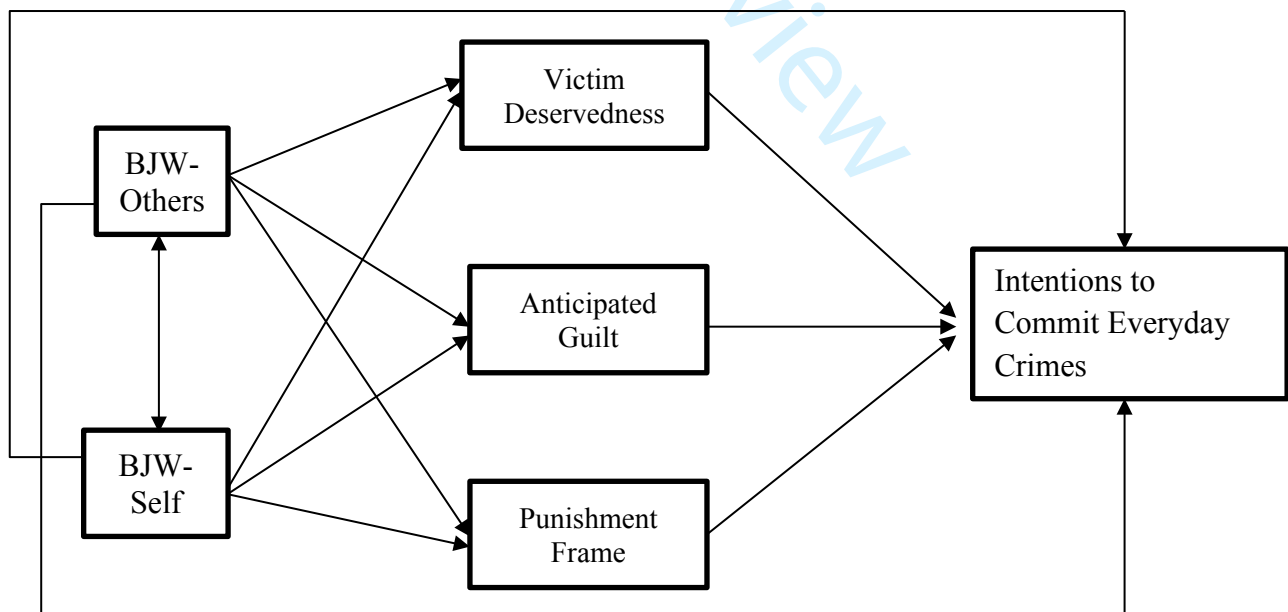

Figure 2: Hypothesized path model of the Study 2 representing the associations among research variables and gender as covariate.