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Journal of Interpersonal Violence

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

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Manuscripts

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

For Peer Review

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

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3 **The Relationship between Belief in a Just World and Antisocial Behaviour through**
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5 **Anticipated Guilt, Victim Deservedness, and Punishment Frame**
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8 The Belief in a Just World (BJW) concept, first coined by Lerner (1965), states
9
10 plainly that people get what they deserve. Studies have shown that believing in a just world is
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12 a robust predictor of antisocial behaviour (e.g., Bartholomaeus & Strelan, 2016; Donat et al.,
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14 2014; Dzuka & Dalbert, 2007; Otto & Dalbert, 2005; Sutton & Winnard, 2007; Wenzel et al.,
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16 2017). However, there is still a scarce amount of research explaining why this relationship
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18 occurs. Therefore, the present study intends to add further contribution considering the
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20 underlying elements of the relationship between BJW and antisocial behaviour.
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25 BJW enables people to approach their lives with a feeling of stability and provides a
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27 psychological buffer against harsh, unfair realities (Dalbert, 1998). It is argued to stem from
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29 an implicit 'personal contract' developed when toddlers learn to forego immediate enjoyment
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31 and follow moral laws and conventions in exchange for longer-term rewards (Lerner, 1980).
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33 Belief in this personal contract gives individuals' lives a sense of predictability and allows
34
35 them to plan their futures with optimism. Despite this, the real world provides lots of
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37 evidence that the world is not always a just place. Many people suffer hardships that they do
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39 not necessarily deserve, as seen in cases of poverty and illness. Thus, BJW can lead to strong
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41 believers in a just world adopting several defence mechanisms such as victim blaming or
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43 derogation to protect themselves against this evidence and to maintain their belief (Furnham,
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45 2003; Van den Bos & Maas, 2009). BJW was therefore described as a 'fundamental delusion'
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47 by Lerner (1980): fundamental as it appears critical for individual functioning, but a delusion
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49 in the sense that it is motivated and erroneous.
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55 Research has shown that BJW should be distinguished into two dimensions, self and other.
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57 The Belief in a Just World for Others (BJW-Others) is the belief that people, other than
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Running Head: Belief in a Just World and Antisocial Behaviour

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2
3 themselves, get what they deserve. In contrast, Belief in a Just World for Self (BJW-Self) is
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5 the belief that people feel they get what they deserve. The two dimensions correlate to each
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7 other positively, however their roles seem separate (see Dalbert, 1999; Lipkus et al., 1996).
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9 B JW-Others is related to more negative tendencies than B JW-Self. These negative tendencies
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11 include prejudice, discrimination, and the desire for inequality. Having a strong B JW-Others
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13 has been found to be a unique predictor of harsher attitudes to individuals facing misfortune
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15 for example, the poor (Sutton & Douglas, 2005) and refugees (Khera et al., 2014).
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20 Additional findings concerning B JW-Others and the negative treatment of others
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22 reveals that individuals who tend to score higher in B JW-Others consider the circumstances
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24 people find themselves in as fair and that their treatment by others is just. This motivates
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26 these individuals to go in pursuit of status and power as it enables them to distribute rewards
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28 and punishments and legitimise the positive and negative consequences people face (Strelan
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30 & Van Prooijen, 2014). As well a pursuing of power, those with a strong B JW-Others are
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32 more inclined to engage in corrupt behaviours when in power. This is because they perceive
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34 these behaviours as not being corrupt even when adjusting for the perceived likelihood of
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36 punishment. Therefore, intentions to take part in behaviours such as bribery and nepotism
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38 might be more likely (Bai et al., 2014).
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44 Over the years, research has mounted to suggest a positive relationship between B JW-
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46 Others and antisocial behaviour as well as harsh social attitudes. One study by Sutton &
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48 Winnard (2007) showed that, in a sample of vulnerable participants aged 16-25, B JW-Others
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50 positively predicted not only harsh attitudes to others (see also Bègue & Bastounis, 2003;
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52 Sutton & Douglas, 2005), but intentions to participate in delinquent behaviours. This finding
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54 suggested that harsh attitudes to others may be accompanied by the willingness to commit
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56 crimes against them. Moreover, after experiencing transgression those with high B JW-Others
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58 tend to be less likely to forgive people (Lucas et al., 2014) and more likely to respond
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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; Stupnianeck & 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 (DeJucibus & 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

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3 in false information about sexual assault incidents and can affect how the victims are treated.
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5 Their findings showed a significant positive relationship between BJW-Others and rape myth
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7 acceptance as well as a significant negative relationship between BJW-Self and rape myth
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9 acceptance. These results meant that as BJW-Others increased so did blaming rape victims
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11 and that as BJW-Self increased blaming rape victims decreased. In addition, BJW- Others has
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13 been strongly linked to harsh attitudes towards blaming the poor and victims of bullying (Fox
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15 et al., 2010; Sutton & Douglas, 2005).
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21 Victim blaming and derogation contributes to antisocial behaviour because it can
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23 make perpetrators feel justified in acting antisocially and reinforce their behaviour by making
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25 them less concerned with the social costs of their actions (Gracia, 2014). For example,
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27 stealing from an individual who is extremely drunk can be justified by the perpetrator by
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29 blaming the victim for being so intoxicated and as a result vulnerable to being mugged. On
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31 the contrary, an individual who perceives a victim as undeserving and not to blame for their
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33 ill-treatment is less likely to behave in an antisocial way towards them as they would be more
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35 concerned with the social costs of their behaviour as this treatment would be unfair.
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40 In the context of just world beliefs, we follow Sutton and Winnard (2007) in
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42 proposing that those with a strong BJW-Others may blame victims and believe them to be
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44 deserving of negative consequences and thus become willing to behave antisocially towards
45
46 them. In contrast, those with a strong BJW-Self are more concerned with their own behaviour
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48 and fulfilling their personal contract so do not tend to victim blame nor engage in antisocial
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50 behaviours as this would mean negative consequences for themselves.
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54 As well as victim blaming, however, another potential explanation for these links
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56 between BJW-Others/Self and antisocial behaviour is that antisocial behaviour is affected by
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58 increases or decreases in guilt. Guilt is an unpleasant feeling individuals experience when our
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3 moral standards are violated. Anticipated guilt is how much a person expects to experience
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5 guilt after wrongdoing and has been related negatively to rule-breaking and antisocial
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7 behaviour in adolescents and college students (Krettenauer & Eichler, 2006; Olthof, 2012;
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9 Quiles et al., 2002). This is because guilt is an emotional state that arises due to an
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11 individual's moral standards. It motivates people to do good things and avoid doing bad
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13 things as not to create a conflict with one's moral compass which may lead to negative
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15 consequences. Still more research is needed to enlighten the meaning of feeling guilt in the
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17 relationship between BJW and antisocial behaviour.
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22 **Study 1**

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25 Based on the aforementioned literature, the aim of the current study was to identify the
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27 mechanisms that could explain the link between BJW-Others and Self with antisocial
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29 behaviour. This was done using a cross-sectional correlation design examining the
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31 relationship between BJW-Others and Self with intentions to commit everyday crime, victim
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33 deservedness, and anticipated guilt. The hypotheses were as follows: H1. Adjusting for BJW-
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35 Self, BJW-Others will be related to (a) increased intentions to commit, (b) higher victim
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37 deservedness, (c) reduced anticipated guilt. H2. Adjusting for BJW-Others, BJW-Self will be
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39 related to (a) reduced intentions to commit and (b) higher anticipated guilt. H3. Higher
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41 intentions to offend will be associated (a) with higher victim deservedness and lower
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43 anticipated guilt, (b) also after adjusting for BJW-Self and BJW-Others. H4. BJW-Others will
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45 be positively related to intentions to commit everyday crimes through increased victim
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47 deservedness and decreased anticipated guilt (a) and BJW-Self will be negatively related to
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49 intentions to commit everyday crimes through a decrease in victim deservedness and an
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51 increase in anticipated guilt (b).
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58 **Method**

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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” ($\alpha = .73$)). 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 ($\alpha = .82$), 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?” ($\alpha = .79$). 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 ($\alpha = .87$) 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

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3 contained eight items (e.g., “I feel that I get what I deserve” ($\alpha = .86$)). Participants were
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5 asked “How well do you think the following statements apply to you?”. They answered on a
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7 seven-point scale for all cases (1 = Strongly disagree, 7 =strongly agree).

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10 Finally, participants were asked for their age, gender.

11 12 13 **Procedure**

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16 This online study took on average 10-15 minutes to complete. Participants were
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18 presented with an information sheet including the contact details of the researchers and text
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20 explaining their confidentiality and right to withdraw. They then provided their informed
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22 consent by ticking a box before the survey commenced.

23 24 25 26 27 **Results**

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29 As seen in Table 1, BJW-Others and BJW-Self were not significantly correlated with
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31 intentions to commit everyday crime at zero order. BJW-Others was positively correlated
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33 with victim deservedness and BJW-Self was positively correlated with anticipated guilt. In
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35 addition, higher intentions to offend was associated with higher victim deservedness and
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37 lower anticipated guilt.

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42 *-Please insert Table 1 here-*

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45 A path analysis using the maximum likelihood estimation method was conducted to
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47 test hypothesized relationships among study variables. In the path model BJW-Others and
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49 BJW-Self were independent variables, victim deservedness and anticipated guilt were
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51 mediators and intentions to commit everyday crime was dependent variable. In addition, as
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53 male associated with victim deservedness and intentions to commit everyday crimes these
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55 associations were added to the model.

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60 *-Please insert Figure 1 here-*

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Model chi-square and fit statistics indicated that the proposed model had almost a good fit to the data, $\chi^2(2) = 6.423, p = .04, CFI = .98, RMSEA = .08, 90\% CI [.01, .15]$. 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, $\chi^2(6) = 9.807, p = .133, CFI = .98, RMSEA = .04, 90\% CI [.00, .09]$.

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

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3 to antisocial behaviour was first advanced speculatively by Sutton and Winnard (2007), who
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5 wrote that “~~that~~ a strong BJW-others may have caused some of our participants to want in
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7 some sense to punish society by offending against it”, and is consistent with the known
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9 association between BJW-others and punitive attitudes generally (e.g., Bègue & Bastounis,
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11 2003; Kaiser et al., 2004). For this aim, the following hypotheses were pre-registered (THE
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13 LINK IS BLINDED): H1. Adjusting for BJW-Self, BJW-Others will be related to (a)
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15 increased intentions to commit, (b) higher victim deservedness, (c) reduced anticipated guilt,
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17 (d) higher desire to punish. H2. Adjusting for BJW-Others, BJW-Self will be related to (a)
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19 reduced intentions to commit, (b) higher anticipated guilt, and (c) lower desire to punish. H3.
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21 Higher intentions to commit will be associated (a) with higher victim deservedness, lower
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23 anticipated guilt, and higher desire to punish, (b) also after adjusting for BJW-Self and BJW-
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25 Others. Finally, even though it was not pre-registered, the last hypothesis of the study 1 was
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27 tested for the study 2 as well. That is, H4. BJW-Others will be positively related to intentions
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29 to commit everyday crimes through increased victim deservedness and decreased anticipated
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31 guilt (a) and BJW-Self will be negatively related to intentions to commit everyday crimes
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33 through a decrease in victim deservedness and an increase in anticipated guilt (b).
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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

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3 As in the Study 1, intentions to commit everyday crimes was measured using an
4 adaptation of the Everyday Crime Scale (Karstedt & Farrall, 2006; $\alpha = .76$) made up of four
5 items. Participants were asked to complete an adapted version of the same scale for victim
6 deservedness ($\alpha = .87$); anticipated guilt ($\alpha = .81$), and punishment frame ($\alpha = .89$).
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13 To assess belief in a just world levels of participants, Belief in a Just World for Others
14 Scale ($\alpha = .91$; Lipkus et al., 1996) and Belief in a Just World for Self Scale ($\alpha = .93$; Lipkus
15 et al., 1996). All responses were taken on a 7-point Likert-scale.
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20 Finally, participants were asked for their demographics such as age, gender, and
21 economic level.
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25 26 **Procedure**

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29 The data for this study was collected through Prolific as part of a larger project.
30 Participants were presented with an information sheet including the contact details of the
31 researchers and text explaining their confidentiality and right to withdraw. They then
32 provided their informed consent by ticking a box before the survey commenced.
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38 39 **Results**

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41 As seen in Table 3, BJW-Self was negatively associated with intentions to commit
42 everyday crime and positively associated with anticipated guilt, unexpectedly it did not
43 significantly associate with punishment frame. However, BJW-Others did not significantly
44 relate to any research variables other than BJW-Self. In addition, higher intentions to commit
45 was associated with higher victim deservedness and lower anticipated guilt.
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53 *-Please insert Table 3 here-*
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56 Another path analysis using the maximum likelihood estimation method was
57 conducted to test hypothesized relationships among variables for study 2. In the path model
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3 B JW-Others and B JW-Self were independent variables, victim deservedness, anticipated
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BJW-Others and B JW-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, $\chi^2(4) = 43.55, p = <.001, CFI = .90, RMSEA = .18, 90\% CI [.14, .23]$. Results
indicated that (See Table 4) while B JW-Others tended to increase punishment frame, B JW-
Self tended to increase anticipated guilt. Additionally, victim deservedness positively
predicted intentions to commit everyday crime, whereas B JW-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 $\chi^2_{\text{difference}}(1) = 35.432$). 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, $\chi^2(3) = 5.652, p = .130, CFI = .99, RMSEA = .05, 90\% CI$
[.00, .12]. Modification indices indicated that adding an error covariance between anticipated
guilt and punishment frame would further improve the model fit (expected $\chi^2_{\text{difference}}(1) =$
4.073) which seemed reasonable. The modified model had fit well to the data, $\chi^2(2) = 1.532,$
 $p = .465, CFI = 1.000, RMSEA = .000, 90\% CI [.00, .11]$.

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

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= .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, $\chi^2 (12) = 17.215$, $p = .142$, $CFI = .99$, $RMSEA = .04$, 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

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3 punish (H3). Finally, BJW-Self was associated with intentions to commit everyday crimes
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5 through increased anticipated guilt (4b), however, the hypothesized indirect association
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7 between BJW-Others and intentions to commit everyday crimes (4a) was not significant for
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9 this sample.
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13 In both studies the emerged pattern pointed out anticipated guilt might have a key role
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15 for antisocial behaviour. BJW-Self was associated with increased anticipated guilt and the
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17 relationship between BJW-Self and tendencies to offend everyday crimes was mediated by
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19 anticipated guilt. This might support the personal contract function of BJW which is the idea
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21 that people think that by adhering to society's moral standards they will, in return, receive
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23 just outcomes (Lerner, 1980). The present [studies](#) suggest that the prospect of committing
24
25 crimes in violation of those moral standards can trigger feelings of guilt, and these feelings of
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27 guilt deter the individual from offending.
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32 In both studies, victim deservedness could predict intentions to offend. This is
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34 consistent with the literature stating how perceived victim deservedness and blaming
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36 contributes to increased antisocial behaviour because it allows people to become less
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38 concerned over the social costs of their behaviour (Gracia, 2014). Even it did not mediate the
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40 relationship between BJW and antisocial behaviour in the second study, in the first study it
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42 mediated both BJW-Others and BJW-Self's relations with it. Those who believe that other
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44 people get what they deserve are likely to blame victims for their own negative circumstance
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46 to create justification for their subsequent antisocial behaviour towards them and to preserve
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48 their just world beliefs.
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53 Finally, consistent with Hayes et al. (2013), who found those who scored highly in
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55 BJW-Self scales were less likely to blame victims of rape, the first study also showed that a
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57 strong BJW-Self led to less perceived deservedness for victims of everyday crimes. An
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Running Head: Belief in a Just World and Antisocial Behaviour

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3 interpretation of this finding is that because of the theoretical notion of the personal contract
4 by Lerner (1980), those with a strong BJW-Self are more concerned over their own behaviour
5 than others, thus do not tend to engage in victim blaming and instead might tend to engage in
6 more pro-social behaviour rather than antisocial behaviour. This interpretation is supported
7 by the finding that BJW-Self is positively correlated with prosocial behaviour
8 (Bartholomaeus & Strelan, 2019).
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18 On the other hand, in contrast to the results of the other studies that found a direct
19 relationship between BJW-Other/Self and antisocial behaviour (e.g., Otto and Dalbert, 2005;
20 Sutton & Winnard 2007), another pattern emerged in our studies: direct relations could not
21 be observed (see also Reinhardt et al., 2023). This might be due to the sample. The sample of
22 the first study consisted of used a sample of undergraduate students from the county of Kent
23 in the UK. Whereas-Although Sutton and Winnard (2007) used a sample containing people of
24 a similar age, however, they were a sample of vulnerable young adults who were estranged
25 from their families and had typically come from very challenged backgrounds. Even when we
26 examined the same relationship among a more diverse sample of adults in Study 2, the effect
27 was not detected. Future studies should consider the SES characteristics of the participants as
28 well as their age and should seek to reach samples with a more balanced distribution in terms
29 of SES. Note that for the current samples the information of a history of offending was not
30 checked. Considering other studies using samples with different backgrounds such as young
31 prisoners (e.g., Otto & Dalbert, 2005), the reason for nonsignificant direct relations could also
32 be other factors as well. As being a victim of a crime can also have an impact on individuals'
33 beliefs in a just world (e.g., Stupnianeck & Schmitt, 2024), it is recommended that future
34 studies take into account participants' criminal history and/or whether they have been the
35 victim of a crime.
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3 Further, both studies have a cross-sectional design. Experimental and longitudinal
4 studies are needed to make causal inferences. For example, future research could examine the
5 relationship between BJW and antisocial behaviour and in participants of a younger age
6 group using a longitudinal design to measure whether the relationship develops or changes in
7 severity over time. Being male has been found to be correlated with higher rates of
8 antisocial/criminal behaviors (e.g., Moffitt, 2003), however, only 18.7% of the participants
9 were male in the Study 1. Although we tried to overcome this limitation in the Study 2, we
10 strongly recommend that future studies use evenly proportioned samples.
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22 Although we tried to replicate the study using an older sample, the main limitation of
23 the first study was that the items may have been more suitable to a more mature sample. For
24 example, one of the four items asked about an insurance claim and as most participants were
25 aged 18-20, they most likely would not have experienced the process of an insurance claim.
26 In addition, although we collected data from ordinary people and university students, we did
27 not evaluate the criminal history of the participants, also for simple crimes. Finally, both
28 samples of this study consisted of people living in the UK, which is one of the WEIRD
29 (Western, Educated, Industrial, Rich, and Democratic) countries. The relationship between
30 BJW and outcomes related to antisocial behaviour has been tested in many different countries
31 with people from many different cultures and similar results have been obtained (e.g., Correia
32 & Dalbert, 2008; Donat et al., 2014). Nevertheless, testing the findings of this study with
33 participants from different countries and testing whether being in an advantaged or
34 disadvantaged position in a society would make a difference in the findings would contribute
35 to the generalisability of the findings of this study.
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55 To conclude, to better understand the relationship between BJW and antisocial
56 behaviour, this study has expanded our knowledge of the literature on the meaning of some
57 variables associated with antisocial behaviour in this relationship. The results underlie that
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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.

For Peer Review

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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	<i>B (SE)</i>	β	<i>p</i>
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	<i>B (SE)</i>	β	<i>p</i>
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

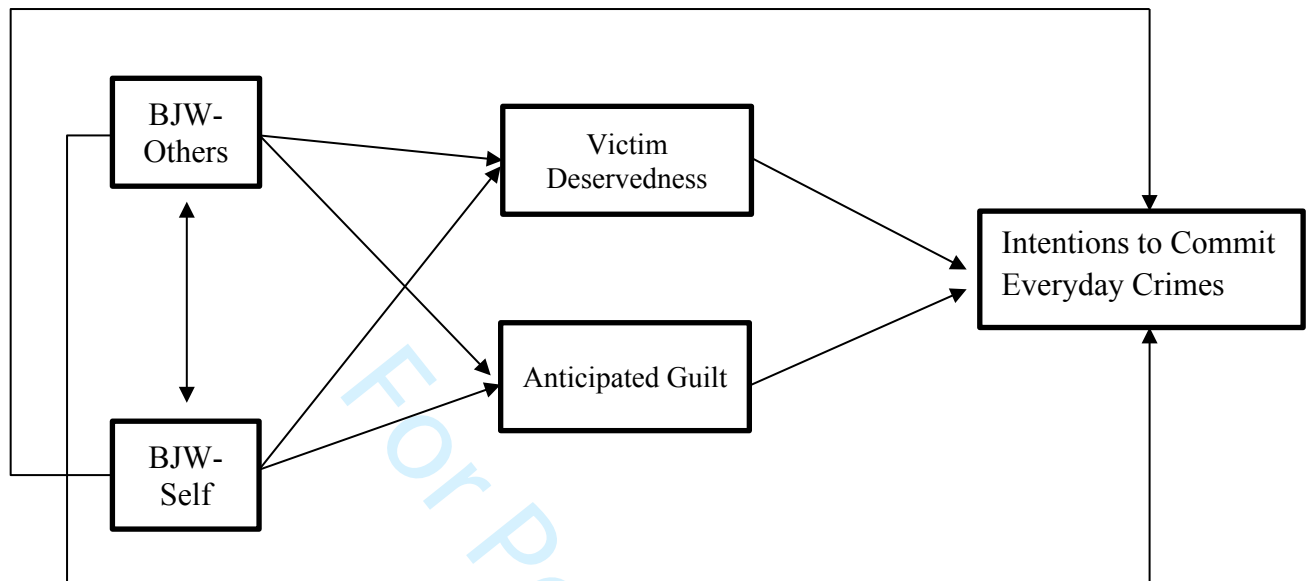


Figure 1: Hypothesized path model of the Study 1 representing the associations among research variables.

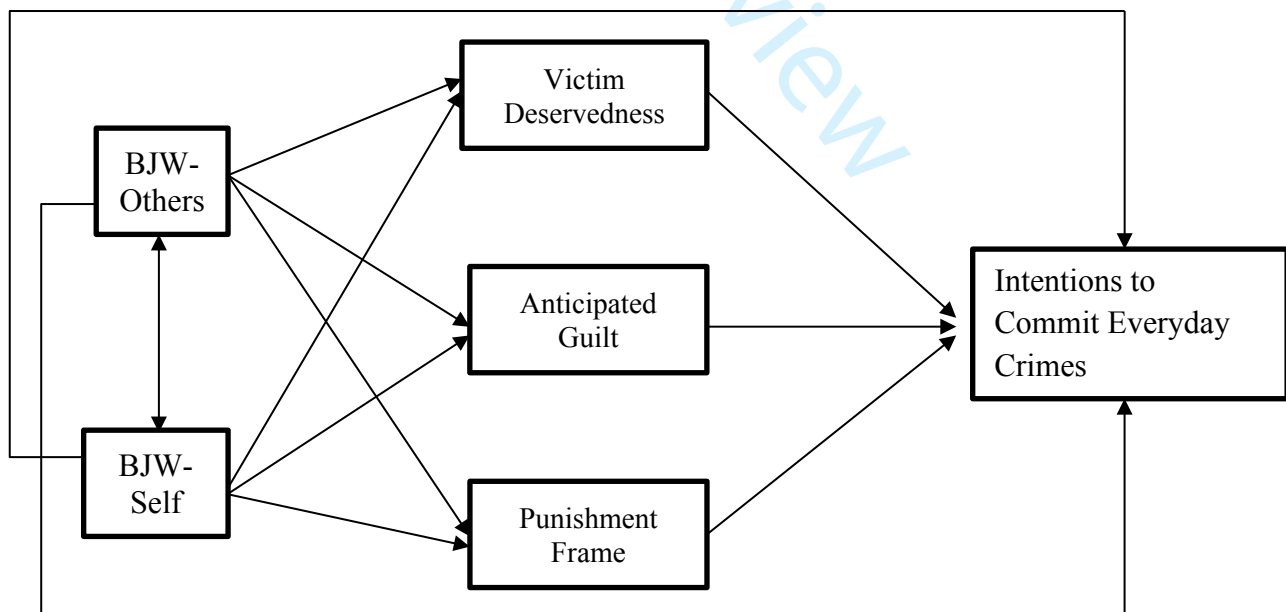


Figure 2: Hypothesized path model of the Study 2 representing the associations among research variables and gender as covariate.