Cognitive and Affective Empathy, Personal Belief in a Just World, and Bullying Among Offenders

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Abstract

Bullying extract a heavy toll on offenders and the prison staff alike. We examined factors that may contribute to having a positive attitude towards bullying in a sample of offenders. Specifically, we studied the previously overlooked relationship between age and positive attitude towards bullying and whether this relationship is mediated by affective and/or cognitive empathy. Furthermore, we assessed the relationship between personal belief in a just world and positive attitude towards bullying, given that previous research on the topic is scarce. We found that age predicted a positive attitude toward bullying, mediated by affective empathy. However, we did not find a positive relationship between a positive attitude toward bullying and a personal belief in a just world. The results are discussed in terms of their application in possible intervention programs.

Keywords: bullying; empathy; age; personal belief in a just world
Cognitive and Affective Empathy, Personal Belief in a Just World, and Bullying Among Offenders

A report in *The Guardian* vividly portrayed the prevalence and consequences of bullying within prison walls (Taylor & Laville, 2014). According to two interviewed inmates, bullying (e.g., threats or insults) was present every single night. This violence has led to deterioration in the safety of jails that has translated into a 69% increase in inmate deaths in prisons in England and Wales during 2013–2014 (Bowcott, Taylor, & Laville, 2014). Bullying, thus, exacts a heavy toll from both prisoners and the prison system. Having a better understanding of the underlying factors associated with bullying behavior in prison, therefore, could have both practical and theoretical implications.

In the potentially very hostile environment of prison, bullying may represent an adaptive solution to a problem (Ireland, 2002). In fact, one in four males and one in seven females reported having bullied while in prison (Jolliffe & Farrington, 2006). Yet, as a report by the Home Office Prison Service (1999) revealed, prisoners who are bullied face a wide range of problems, such as depression, fear, illness, and financial debt. This report also showed that bullying generates a host of problems for the prison system, such as jeopardizing the safety of the prison staff.

**Empathy, Belief in a Just World, and Bullying in Prison**

Bullying in prison has largely been explained by environmental factors, namely, the deprivation of material goods (Ireland, 2000), high population density (Levenson, 2000), the hierarchical structure of prisons (Ireland, 2000), and the attitudes of peer groups (Ireland, 2000). However, environmental factors alone are not sufficient to explain bullying. Indeed, personality or psychological variables might also contribute to bullying behavior. In other words, while the environment may provide the conditions to reinforce bullying, individual characteristics are additional determining factors (Ireland, 2002; South & Wood, 2006).
Research on bullying outside prison has shown systematic relationships between certain personality traits and bullying behavior. Many studies have highlighted the importance of neuroticism and low agreeableness for bullying to happen (Connolly & O’Moore, 2003; Menesini, Camodeca, & Nocentini, 2010). Bullying has also been linked to moderately higher levels of callous-unemotional traits that include lack of guilt, use of another for personal gain, and lack of empathy (Barry et al., 2000; Viding, Simmonds, Petrides, & Frederickson, 2009). In fact, lack of empathy has been seen as one of the main factors underlying bullying tendencies (Jolliffe & Farrington, 2006).

Empathy is defined as a trait that facilitates the understanding of the emotions of others (i.e., cognitive empathy) and experience of an emotional reaction coherent with the other person’s affective state (i.e., affective empathy; Cohen & Strayer, 1996; Davis, 1996). Previous research has reported a link between low empathy and antisocial behavior (e.g., Hare, 1999), offending (e.g., van Langen, Wissink, van Vugt, Van der Stouwe, & Stams, 2014), and bullying (Jolliffe & Farrington, 2004; Olweus, 1991; Rigby, 1996). Some authors have suggested this is because those with low empathy may fail to comfort others in distress because their actions are not tempered by the vicarious emotional experience and/or comprehension of the emotional states of others (Jolliffe & Farrington, 2004, 2006; Lauterbach & Hosser, 2007). Furthermore, deficits in empathy have been linked to higher dissociation from the victim and more suppression of the awareness of the victim’s distress (Abel et al., 1989). Therefore, focusing on concrete deficits in certain characteristics could be extremely helpful for intervention or prevention programs on bullying (Olweus, 1997).

An important meta-analysis has examined the association between cognitive and affective empathy and offending. It found that cognitive empathy is the strongest predictor of offending behavior (van Langen et al., 2014). Importantly, it also reported that age is a strong predictor of cognitive and affective empathy, with young offenders exhibiting lower levels of
cognitive and affective empathy. In fact, the relationship between cognitive/affective empathy and offending was clearly mediated by age, such that the effect was stronger for young offenders (up to age 18 years) compared to adults (over 18 years old).

Previous research has established a connection between low empathy and bullying in prison, but it has largely ignored the role age might play, which has been studied only in the relationship between empathy and offending (e.g., Jolliffe & Farrington, 2004; Olweus, 1991; Rigby, 1996). Previous research has suggested that empathy is a complex emotion that may show an inverse-U pattern across the adult life span, such that there is an increase in empathy until middle-adulthood but then a decrease (Labouvie-Vief, Grühn, & Studer, 2010; O’Brien, Konrath, Grühn, & Hagen, 2012). Given these results, investigating the effect of age seems to be a promising direction for elucidating the link between empathy and bullying. Earlier work (Labouvie-Vief et al., 2010; O’Brien et al., 2012) has suggested that emotional representations are based on cognitive representations, and hence it is expected that emotional representations will increase from early to middle adulthood but then decrease. Results from longitudinal and cross-sectional studies support this line of argument, as both cognitive and affective empathy (i.e., perspective taking and empathic concern, respectively) have been shown to decrease from middle adulthood (Grühn, Rebucal, Diehl, Lumley, & Labouvie-Vief, 2008; O’Brien et al., 2012).

While the link between empathy and bullying (in prison) has received some attention in the literature, other factors, such as a belief in a just world (BJW), might also help shed light on the phenomenon. The personal BJW refers to the belief that, overall, events in one’s life are fair, compared to the general BJW that, basically, the world is a just place. The personal BJW rather than the general BJW should endow individuals with more trust in being treated fairly by others, because it directly depicts the trust in being treated fairly in one’s own life (Alves & Correia, 2010; Dalbert, 2002). Different studies have shown that the personal
BJW is more important than the general BJW in predicting psychological well-being (Dalbert, 1999; Lipkus, Dalbert, & Siegler, 1996); therefore we measured personal BJW in this study.

Indeed, the personal BJW seems to play an important role in predicting bullying behavior in a number of nonprison contexts, such as the workplace (e.g., Öcel & Aydin, 2012) and schools (e.g., Peter, Dalbert, Kloerckner, & Radant, 2013). However, the study of its link with offending is, to our knowledge, limited (Dalbert & Fike, 2007; Otto & Dalbert, 2005). Otto and Dalbert (2005) found in a sample of 66 male prisoners that those with a strong general BJW had fewer disciplinary problems while imprisoned, believed that their legal proceedings were more just, and also reported having more feelings of guilt over their past criminal behaviors. The study by Dalbert and Fike (2007) showed that prisoners with a strong personal BJW also assessed the legal proceedings that coincided with their imprisonment as correct judicial decisions. Furthermore, they reported higher well-being, fewer aggressive outbursts, and a sense of being treated fairly by prison officers. In this regard, it seems reasonable to assume that those who believe the world is just place where everyone gets what they deserve might exhibit less of a tendency to bully than those who see the world as an unjust place (Dalbert, 1999).

The Present Research

Previous research has established the relationship between low empathy and positive attitude toward bullying in prison but has not investigated the relationship with age, or if empathy mediates the relationship between age and bullying. Given that age is associated with changes in empathy levels (e.g., Labouvie-Vief et al., 2010), we explored if age—mediated by cognitive and affective empathy—predicts positive attitude toward bullying among offenders. Furthermore, given the paucity of research on the relationship between personal BJW and positive attitude toward bullying in prison, we designed the present study to examine this link. Hence, this research had two aims: first, to test the effect of age on the
relationship between cognitive and affective empathy with attitudes towards bullying; and second, to test the relationship between a personal BJW and attitudes towards bullying in offenders. We tested offenders with a large age range from early-middle to late adulthood to investigate the effect of age on cognitive and affective empathy and bullying. We had two specific hypotheses: that both cognitive and affective empathy would mediate the relationship between age and attitudes towards bullying, and that offenders who exhibited a high rate of personal BJW would exhibit a reduced level of positive attitudes towards bullying behavior.

Method

Participants

One hundred and twenty-three sentenced adult male prisoners selected from a Category C prison in the United Kingdom participated in this study. The prisoners’ ages ranged between 21 and 64 years ($M_{\text{age}} = 36.61$ years, $SD = 11.64$). Sentence length ranged from under a year to life, with 2.9% of prisoners serving a sentence of under a year, 32.6% serving 1–3 years, 30.4% serving 4–6 years, 8.7% serving 7–9 years, 6.5% serving more than 10 years, 3.6% serving under an imprisonment for public protection (IPP) status, and 8.7% serving life sentences. The majority of the prisoners (54.3%) had been at the prison for under a year, and 34.9% of prisoners had been in the prison 1–6 years. Prisoners’ education ranged from no education to a university degree: no education (24%), secondary education (23%), post-secondary education (15%), vocational training (27%), and university degree (11%). Prisoners were sentenced for a wide range of offenses with some of the most common being burglary (12.3%), drugs (11.6%), grievous bodily harm (8.7%), robbery (8%), and murder (6.5%). However, 21.7% of prisoners did not specify their offense.

Materials
The Prison Bullying Scale (Ireland, Power, Bramhall, & Flowers, 2009). It assesses prisoners’ views and attitudes on bullies and victims. The scale consists of 39 items rated on a 7-point Likert-type scale, which ranged from 1 (strongly disagree) to 7 (strongly agree) (e.g., “It is better to be a bully than a victim” and “Bullying has a bad impact on the wing atmosphere”; \( \alpha = .89 \)).

Interpersonal Reactivity Index (Davis, 1983). For the purpose of this study only two subscales of the Interpersonal Reactivity Index were used: The perspective-taking (PT) subscale assesses tendencies to take the point of view of others into consideration (e.g., “When I am upset at someone, I usually try to ‘put myself in his shoes’ for a while”; \( \alpha = .80 \)). The empathic concern (EC) subscale assesses “other-oriented” feelings of sympathy and concern for unfortunate others (e.g., “I often have tender, concerned feelings for people less fortunate than me”; \( \alpha = .79 \)). Both scales are rated on a 5-point Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree).

Personal Belief in a Just World Scale (Dalbert, 1999). It is a 7-item scale that assesses people’s views on whether they are treated fairly and whether people get what they deserve, which are rated on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree) (e.g., “In my life injustice is the exception rather than the rule”; \( \alpha = .88 \)).

Procedure

The protocol was approved by both the prison and the university review boards. The prison consists of 15 units. Twenty prisoners were picked randomly from a pool of 100 prisoners in each unit and asked to participate. Each prisoner was verbally briefed on the purpose of the study and instructed on how to complete the questionnaire. Participants had to sign a consent form if they agreed to take part in the study. All prisoners were told in the briefing whom to contact if they should have any literacy problems or other needs. All prisoners were told the study was confidential and that they were under no obligation to
participate and that their sentence would not be affected by filling in or not filling in the questionnaire. Prisoners were told they had the right to withdraw from the study at any point by providing their questionnaire number. The prisoners filled out the questionnaires in their own time over the course of 2 days. The questionnaire was given to two different units each day. The prisoners were asked to hand completed questionnaires back to the unit office to be put in a sealed box. If any questionnaires were handed in after a set date the unit office would contact the experimenters and these would also be collected. Three hundred questionnaires were given out altogether and 123 (41%) were completed and returned.

Results

Perspective Taking, Empathic Concern, Personal BJW and Bullying

We calculated the scores of each scale for the total sample. Inmates scored above the average on EC ($M = 2.69$, $SD = .79$) and PT ($M = 2.69$, $SD = .79$). A paired-sample t-test analysis showed that their EC score was significantly higher than their PT score, $t(122) = 8.08$, $p = .001$, $d = .63$.

The inmates also scored above the average on personal BJW ($M = 3.74$, $SD = 1.09$). However, they scored below the average on positive attitude towards bullying ($M = 2.01$, $SD = .88$). See Table 1 for the descriptive statistics separately for the background variables (education and sentence length).

We calculated the relationship between the different dependent variables and the background variables (Table 2). Results showed that EC and PT were highly correlated and that both correlated negatively with positive attitudes bullying, as expected. However, personal BJW did not correlate with positive attitude towards bullying. Finally, age correlated positively with EC and PT and negatively with positive attitude towards bullying. Concerning the background variables, results showed that education correlated significantly and
positively with PT. Finally, sentence length did not correlate significantly with any of the main dependent variables.

**Predicting Bullying in Prison**

Given the high correlation of PT and EC, we decided to run separate linear regression analyses for each predictor (i.e., age, PT, and EC). Results showed that EC and age significantly predicted positive attitude bullying in prison, whereas PT did not (see Table 3).

**Testing the Mediation Effect of Age in the Relationship Between Affective Empathy and Positive attitude towards Bullying**

Baron and Kenny (1986) proposed a four-step approach in which several regression analyses are conducted and significance of the coefficients is examined at each step. Once the different analyses with the three variables (e.g., age, empathy, and positive attitude towards bullying) proved to be significant, we conducted a mediation analysis through a multiple regression analysis with age and EC predicting positive attitudes towards bullying. Results showed that the significant relation between age and positive attitudes towards bullying in prison, $\beta = -.31, p = .001$, was no longer significant, $\beta = -.02, p = .88$, when controlling for affective empathy (EC), which itself accounted for unique variance in positive attitude towards bullying in prison, $\beta = -.51, p = .001$. Baron and Kenny’s (1986; see also Kenny, Kashy, & Bolger, 1998) modification of the Sobel (1982) test showed that the indirect effect of age (through EC) on bullying in prison was statistically significant, $Z = 2.018, p = .02$.

**Discussion**

Bullying in prisons is a common phenomenon with serious repercussions for both offenders and the prison staff (e.g., Jolliffe & Farrington, 2006). Gaining better insight into the factors that contribute to having a positive attitude towards bullying, thus, has important implications. To address this issue, we explored the role of age in positive attitude towards bullying, as previous studies have largely focused on the relationship between low empathy
and bullying, overlooking the role that age plays in empathy (e.g., Jolliffe & Farrington, 2004). Furthermore, as earlier studies have indicated that a higher personal BJW is associated with increased well-being and reduced aggression, we also tested the relationship between personal BJW and positive attitude towards bullying.

In line with previous findings (van Langen et al., 2014), results from our research revealed that low affective empathy (EC) predicted positive attitude towards bullying. Interestingly, our data did not show any relationship between low cognitive empathy (PT) and bullying behavior. Although EC and PT were highly correlated, the data showed that affective empathy (EC) was the only significant predictor. In other words, only affective empathy seems to reduce the likelihood of having a positive attitude towards bullying behavior. With regard to the effects of age, results showed that younger offenders were more likely than older offenders to bully others. Thus, our study is the first, to our knowledge, to illustrate the importance of incorporating age when examining positive attitude towards bullying behavior among offenders. It should be noted, however, that affective empathy mediated the relationship between age and bullying.

While our findings on empathy match those of earlier investigations, our data did not show a relationship between personal BJW and positive attitude towards bullying and thus failed to support our hypothesis. Indeed, counter to our findings, earlier research has reported a link between personal BJW and bullying in the workplace (e.g., Öcel & Aydin, 2012) and schools (e.g., Peter et al., 2013); and Dalbert and colleagues (Dalbert & Fike, 2007) have found that a higher BJW was associated with fewer aggressive outbursts and fewer disciplinary problems.

What can explain our results? First, earlier studies regarding positive attitude towards bullying in prison (e.g., Ireland, 2000, 2002) reported a much higher positive attitude towards bullying compared to the present findings. Indeed, the average score on the bullying scale
was lower than in earlier reports in the literature and below the average (only 15% of participants scored above the average on this scale). Although participation was completely voluntary and anonymous, we relied exclusively on self-report measures and it is impossible to discard the possibility that offenders were reluctant to admit to having a positive attitude toward bullying behavior due to a social desirability effect. They may also have been reluctant to admit to activities that could be punishable within the prison environment. Furthermore, the obtained difference may be because in this study we assessed positive attitudes toward bullying but not bullying behavior per se. Although attitudes may be a good proxy for behavior (see Ajzen, 2011), future studies would need to test the relationship with real bullying behavior. Though we did not find a positive relationship between personal BJW and positive attitude toward bullying, future research would still need to test a possible relationship between these two constructs, as previous studies have found a positive correlation between them (Dalbert & Fike, 2007; Otto & Dalbert, 2005).

The present study has a number of additional limitations. First, the prisoners tested might not be representative of the entire prison population in the United Kingdom or globally. As such, it is uncertain whether our results capture the entire spectrum of offenders. Second, because we used a cross-section design, it is difficult to draw a causal relationship between the constructs used and bullying behavior.

Despite these limitations, we believe that our results provide important insights. This is the first study, to our knowledge, to examine the link between age, empathy, and positive attitude toward bullying, as well as the link between personal BJW and positive attitude toward bullying. Our data emphasize the importance of considering empathy as a construct with separate components (affective and cognitive), as in this study the affective component, that is, empathic concern, seemed to play a more important role than perspective taking in the prediction of positive attitude towards bullying and its mediation in the relationship between
age and positive attitude towards bullying in offenders. The results of this study also emphasize the importance of considering age when designing intervention programs for the prevention of bullying in prison. Thus, our data have two key implications for the prison authorities, who are keen to reduce the rate of bullying in the prison environment. First, given the limited resources prisons have, preventive programs should focus on treating or educating younger offenders, who we found to exhibit higher positive attitudes toward bullying behavior. Second, these programs should concentrate on improving young offenders’ affective empathy.
References


# Table 1

**Descriptive Statistics of Main Dependent Variables by Background Variables**

<table>
<thead>
<tr>
<th></th>
<th>Bullying (Range 1–7)</th>
<th>PBJW (Range 1–6)</th>
<th>EC (Range 0–4)</th>
<th>PT (Range 0–4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education ((n = 28))</td>
<td>1.89 (0.93)</td>
<td>3.91 (1.09)</td>
<td>2.73 (.69)</td>
<td>2.09 (0.65)</td>
</tr>
<tr>
<td>Secondary education ((n = 27))</td>
<td>2.05 (0.58)</td>
<td>3.59 (0.99)</td>
<td>2.42 (0.87)</td>
<td>2.05 (0.59)</td>
</tr>
<tr>
<td>Post-secondary education ((n = 17))</td>
<td>2.16 (1.36)</td>
<td>3.95 (1.19)</td>
<td>2.73 (0.88)</td>
<td>2.54 (0.68)</td>
</tr>
<tr>
<td>Vocational training ((n = 32))</td>
<td>1.95 (0.81)</td>
<td>3.93 (0.95)</td>
<td>2.91 (0.70)</td>
<td>2.31 (0.56)</td>
</tr>
<tr>
<td>University degree ((n = 13))</td>
<td>2.18 (0.96)</td>
<td>2.83 (1.21)</td>
<td>2.62 (0.93)</td>
<td>2.42 (0.49)</td>
</tr>
<tr>
<td><strong>Sentence length</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three years or less ((n = 47))</td>
<td>2.03 (1.01)</td>
<td>3.71 (1.11)</td>
<td>2.72 (0.76)</td>
<td>2.26 (0.59)</td>
</tr>
<tr>
<td>Between 4 and 9 years ((n = 51))</td>
<td>2.02 (0.79)</td>
<td>3.55 (1.16)</td>
<td>2.66 (0.92)</td>
<td>2.17 (0.66)</td>
</tr>
<tr>
<td>Ten years or more ((n = 24))</td>
<td>1.91 (0.78)</td>
<td>4.26 (0.78)</td>
<td>2.68 (0.56)</td>
<td>2.30 (0.58)</td>
</tr>
</tbody>
</table>

*Note.* Standard deviations are in parentheses. PBJW = personal belief in a just world; EC = empathic concern; PT = perspective taking.
Table 2

**Correlation Between Dependent (EC, PT, PBJW, Bullying and Age) and Background Variables (Education and Sentence length)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EC</td>
<td>.63**</td>
<td>.25*</td>
<td>-.51*</td>
<td>.21*</td>
<td>.08</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>2. PT</td>
<td>.18</td>
<td>- .32**</td>
<td>.26*</td>
<td>.21*</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PBJW</td>
<td>-.06</td>
<td>.10</td>
<td>-.13</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Bullying</td>
<td>-.31**</td>
<td>.05</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Age</td>
<td>-.16</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Education</td>
<td>.21*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Sentence length</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note. EC = empathic concern; PT = perspective taking; PBJW = personal belief in a just world.

* p < .05. ** p < .001.
Table 3

*Results of the Linear Regressions*

<table>
<thead>
<tr>
<th>Predictor of bulling in prison</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathic concern</td>
<td>-.55</td>
<td>.09</td>
<td>-.51</td>
<td>-6.22</td>
<td>.001</td>
</tr>
<tr>
<td>Perspective taking</td>
<td>.15</td>
<td>.14</td>
<td>.10</td>
<td>1.03</td>
<td>.31</td>
</tr>
<tr>
<td>Age</td>
<td>-.02</td>
<td>.01</td>
<td>-.31</td>
<td>-3.26</td>
<td>.002</td>
</tr>
</tbody>
</table>