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ABSTRACT

This article investigates the relationship between the belief in a just world (BJW) and distress at school. On the basis of just world theory, the authors argue that strong student BJW should be associated with low school distress. Two questionnaire studies with German secondary school students attending grades 7 to 13 are reported. Both studies found strong BJW to be associated with less distress at school, better grades, and the evaluation of grades and teachers as more just. Moreover, the relationship between strong BJW and low school distress persisted when controlled for grades, justice of grades, and teacher justice. This relationship held for all students, independently of their school track, grade level, or gender. Overall, the pattern of results reveals school distress to have a unique association with BJW and school-specific justice cognitions.

Key words: just world belief; school distress; justice cognitions
The belief in a just world and distress at school

From the student perspective, justice is usually one of the top three characteristics that make a good school teacher (Hofer, Pekrun, & Zielinski, 1986). Consequently, justice—and particularly teacher justice—are widely discussed topics at school. On the one hand, most school teachers report that they try to treat their students fairly (Kanders, 2000) and that they strive to be just when making important decisions such as grading or reproving their students or when distributing privileges. On the other hand, students often complain about being treated unfairly by their teachers. Students may feel that they deserve a better grade than the one they received, for example, or think that they have been reproved unfairly, claiming that other students, who behaved (even) more inappropriately, were punished less severely. Gage and Berliner (1996) suggest that the experience of injustice may have a negative impact on students' personalities and sense of coherence, reduce their motivation, and consequently impair their performance. Thus, for those who deal with school students and classroom problems on an everyday basis, justice and the consequences of injustice are central issues.

The just world hypothesis is a prominent approach in social psychology when it comes to analyzing the consequences of injustice, either observed or experienced (for reviews, see Furnham, 2003; Furnham & Procter, 1989; Lerner & Miller, 1978). Thus far, however, just world theory has not been systematically applied to the school context and there have only been a few exploratory studies on the effects of belief in a just world (BJW) and justice cognitions in school students (Dalbert & Maes, 2002; Maes & Kals, 2002). Against this background, the aim of the present article is to apply just world research to the school context. We first present an overview of just world theory (e.g., Lerner, 1980) and of hypotheses derived for the school context. We then test the relationship between BJW and well-being in the school context in two questionnaire studies with students attending grades 7 to 13 of upper, middle, and lower track secondary schools.
Just World Reasoning at School

Just world theory was first described by Melvin Lerner (e.g., 1970), who proposed that individuals have the need to believe in a just world in which people—including themselves—get what they deserve and deserve what they get. This belief enables people to confront their physical and social environment as though it were stable and orderly (Lerner & Miller, 1978). Consequently, the BJW serves important adaptive functions, and people try to protect this belief when confronted with injustice. It is well documented that the strength of the BJW varies between individuals (Rubin & Peplau, 1973, 1975). While the first decades of just world research focused on the negative side of the BJW, with studies evidencing a positive relationship between the BJW and phenomena such as victim derogation (e.g., Lerner & Simmons, 1966), in the last decade more and more studies have investigated the full impact of the BJW, and its positive as well as negative social implications. This has shifted the focus to the consequences of BJW for the believers themselves (for a review, see Furnham, 2003). One line of research has examined the hypothesis that BJW serves as resource that bolsters subjective well-being.

In a representative sample of Irish adults, Ritter, Benson, and Snyder (1990) observed that those high in BJW were less depressed than those low in BJW, and that this relationship remained stable even when controlling for effects such as the economic situation or the belief in internal control over the way one’s life maps out. Schmitt and Maes (2000) also reported a significant negative relationship between BJW and depression. Schill, Beyler, and Morales (1992) reported that especially men low in BJW showed a strong tendency toward self-defeating behavior. Furthermore, Burke (1985) showed that those who were afraid that justice would not prevail in the long run were more likely to display Type A behavior. Other studies explored the relationship between BJW and well-being within samples of victims. For
example, Bulman and Wortman (1977) examined accident victims with spinal cord injuries and observed a significant positive relationship between their reports of current happiness and strength of BJW. Dalbert (2002) conducted two experiments investigating the relationship between BJW and well-being in anger-evoking situations and revealed that participants high in BJW were less angry than participants low in BJW and that they suffered no decrease in self-esteem, whereas those low in BJW reported increased feelings of anger and decreased self-esteem.

Overall, the results available suggest that there is a positive relationship between strong BJW and well-being. This also seems to apply to achievement contexts, as demonstrated by Tomaka and Blaskovich (1994). When presented with mathematical laboratory tasks, participants high in BJW felt less distressed than participants low in BJW, as reflected in their subjective reports as well as in their physiological data. As the school is also an achievement context, a negative relationship between strong BJW and distress might be expected for school students as well.

There are at least two possible reasons for such a relationship between strong BJW and distress at school. First, individuals high in BJW may tend to interpret the events of their life as being more just. BJW endows individuals with great trust in the justice of the world, and this has several adaptive consequences. Individuals are therefore motivated to defend their BJW whenever it is threatened. Being confronted with injustice, either observed or experienced, threatens the belief that justice prevails in the world. Individuals high in BJW therefore try to restore justice either in reality or psychologically. When they experience an injustice that they do not think can be resolved in reality, they try to assimilate the experience to their BJW. This can be done by justifying the experienced injustice as being at least partly self-inflicted (e.g., Bulman & Wortman, 1977; Comer & Laird, 1975; Lupfer, Doan, &
Houston, 1998), by playing down the unfairness (e.g., Lipkus & Siegler, 1993), and by avoiding self-focused rumination (Dalbert, 1997). This assimilation of injustice to one’s BJW often helps to maintain subjective well-being (e.g., Hafer & Correy, 1999). Thus, we expect school students high in BJW to evaluate events in their school life as being more just than students low in BJW.

The second reason for the expected positive relationship between a strong BJW and well-being relates to the differential achievements of students high or low in BJW. Tomaka and Blascovich (1994) observed that individuals high in BJW obtained better results than individuals low in BJW. Consequently, a positive relationship between BJW and well-being in the achievement context may be caused by performance outcomes such as grades—better results are expected to correlate positively with BJW and negatively with distress. Hence, the hypothesized relationship between BJW and well-being should not only be controlled for school-specific justice cognitions, but for also achievement.

Following suggestions originating from earlier research (Furnham & Procter, 1989; Lerner & Miller, 1978), recent investigations have shown that it is necessary to distinguish the belief in a personal just world from the belief in a general just world (Dalbert, 1999; Lipkus, Dalbert & Siegler, 1996). The personal BJW reflects the belief that, overall, events in one’s life are just, whereas the general BJW reflects the belief that, basically, the world is a just place. It has been shown that individuals tend to endorse the belief in a personal just world more strongly than the belief in a general just world and that the personal BJW is a better predictor of well-being than the general BJW (Dalbert, 1999; Lipkus et al., 1996). In a sample of Slovakian students and unemployed adolescents, moreover, the personal but not the general BJW displayed a positive relationship with life satisfaction and positive affect. This relationship persisted when controlled for objective (gender, unemployment-status) and situational
(subjective financial situation) predictors and further personality dimensions like extraversion or neuroticism (Dzuka & Dalbert, 2002). Taken collectively, the belief in a personal just world seems to reveal a unique relationship with subjective well-being.

In sum, school students’ personal BJW was expected to be negatively correlated with their distress at school and positively correlated with their justice evaluations of their experiences and achievements at school. However, the association between the belief in a just world and school distress may be partly mediated by school achievements or school-specific justice cognitions, such as the evaluation of one’s teachers as being just or unjust. Consequently, the main justice cognition at school was also expected to relate to the grades obtained, as students may judge their grades as being more or less just (e.g., Israelashvili, 1997). To investigate our hypotheses, two questionnaire studies were conducted with secondary school students. Both studies were conducted in Germany, with students attending grades 7 through 13 of upper track secondary schools (Study 1) and grades 7 through 9 of upper, middle, and lower track secondary schools (Study 2). As a rough indicator of achievement, the participants’ grades were obtained.

Study 1

**Method**

**Participants and Procedure**

Participants were $N = 1,139$ students attending grades 7 to 13 of three upper track secondary schools (German "Gymnasium") in a medium-sized city in the western part of Germany. Of these, 412 were male and 712 female (information on gender was missing for $n = 15$ students). Age ranged from 12 to 21 years ($M = 15.5; SD = 2.0$). Two to four classes were recruited from each school and in each grade level. The assessment was conducted in the classroom during lesson time. Participants were guaranteed anonymity.

**Measures**
BJW. BJW was measured using the Personal Belief in a Just World Scale (Dalbert, 1999). The scale comprises seven items designed to capture the belief that, overall, events in one's life are just (e.g., "I am usually treated fairly," "Overall, events in my life are just") with a six-point answer scale ranging from 1 ("totally disagree") to 6 ("totally agree"). Scores were computed by averaging across items, with higher scores indicating a stronger personal BJW (Cronbach's $\alpha = .86$). Grades. In German secondary schools, three central subjects are mandatory for all students: German, mathematics, and one foreign language (usually English). Students were asked to indicate the grades they had received in these subjects in their last mid-term report. Grades in German schools range from 1 ("very good") to 6 ("unsatisfactory"), comparable to grades A to F in US schools. To provide a general indicator of school achievement, grades were reversed to range from 6 ("very good") to 1 ("unsatisfactory") and averaged across the three subjects ($\alpha = .67$). Justice of grades. Students were asked to rate each of the three grades they had received in their last mid-term report on a six-point scale ranging from 1 ("very unjust") to 6 ("very just"). The three justice ratings were averaged to give a general indicator of the justice of grades ($\alpha = .45$). Teacher justice. A single item was used to measure the degree to which students evaluated their teachers as just, with students rating their teachers' general behavior towards them on a scale from 1 ("very unjust") to 6 ("very just"). Distress. Two items were used to measure perceived distress at school, with students being asked (a) whether they experienced school life as stressful and (b) whether they liked going to school (reverse keyed). Answers were given on a six-point scale ranging from 1 ("totally disagree") to 6 ("totally agree"). Responses to the two items correlated at $r = .49$ and were averaged to form a composite measure of distress ($\alpha = .66$).

Results and discussion

First, zero-order correlations between the central variables were inspected (see Table 1). Because also minor associations may become significant in large samples, the significance
level was set to $p < .01$ in all analyses. Results showed that all variables displayed significant correlations in the expected direction. The more students endorsed the personal BJW, the better grades they received, the more they evaluated their grades and their teachers as just, and the less distress they felt in school. BJW and teacher justice were particularly strongly correlated. There was a positive, but only moderate in size, correlation between evaluations of teacher justice and justice of grades, providing first evidence that these two justice evaluations should be differentiated.

Distress was most strongly correlated with BJW and teacher justice, but, as expected, also correlated with grades and justice of grades. In order to test whether the association between BJW and distress still held when controlled for the other significant correlates of distress, a multiple regression analysis was run. The multiple regression also controlled for gender and grade level. Gender was coded with 1 for female and 0 for male. Grade levels 7 to 12 were dummy-coded with 1 for membership of the specific grade level, and overall 0 representing grade 13. Distress was regressed on gender, grade level, BJW, grades, justice of grades, and teacher justice entered stepwise (employing a $p < .01$ criterion for entering a variable). To this end, additional regression analyses were computed, with the product terms of the central predictors and the dummy variables for gender and grade level being entered in the final steps.

The results of this analysis indicated that distress was predicted by students' personal BJW ($\beta = -.22$), their evaluation of teacher justice ($\beta = -.18$), and their grades ($\beta = -.11$). Students high in personal BJW and teacher justice reported less distress than students low in BJW and teacher justice; furthermore, students with better grades reported less distress than students with poorer grades. In contrast to the zero-order correlations, the justice of grades did not
have a significant effect on students' distress beyond the influence of personal BJW, teacher justice, and grades. Moreover, none of the interaction terms was significant, indicating that this regression holds across gender and across the different grade levels of upper track secondary schools ("Gymnasium").

Overall, results were in line with expectations. BJW was associated with low school distress, and this relationship persisted when controlled for grades and justice cognitions, particularly the evaluation of teacher justice. Study 1 had two major limitations, however. First, it was rather exploratory in nature and its results needed to be replicated. Second, Study 1 was conducted with students attending upper track secondary schools ("Gymnasium") only. Consequently, its findings may be limited to students attending this school track. The German secondary school system consists of three main tracks, of which the Gymnasium is the highest. Students attend Gymnasium from grades 5 through 13, completing grade 13 with an "Abitur" diploma that gives them access to university. Thus, Gymnasium graduates are usually better educated, can expect higher salaries, and are less likely to face unemployment than graduates from the other two tracks. The "Realschule" is the middle track of the German secondary school system. Students attend Realschule from grades 5 through 10, completing grade 10 with a Realschule diploma. Students who achieve a high grade point average in their Realschule diploma have two options: they may either apply to continue their secondary education and obtain the Abitur at a Gymnasium, or they may leave school and apply for vocational training in a white-collar job. Students with a low or medium grade point average in their Realschule diploma only have the latter option. Consequently, most Realschule students do not attend university, but go on to work in white-collar jobs. The bottom track of the German secondary school system is the "Hauptschule." Students attend Hauptschule from grades 5 through 9, completing grade 9 with a Hauptschule diploma. Most Hauptschule students go on to work in blue-collar jobs. As both student ability and teacher expectations
differ markedly across the three tracks, it is important to examine whether the relationships found in Study 1 generalize across the tracks, or whether they are only found for Gymnasium students. Consequently, a second study was conducted aimed at replicating the results of Study 1 and investigating whether the pattern of results found in Study 1 also applies to the less academic and less privileged students attending middle and lower track secondary schools (Realschule and Hauptschule, respectively).

Study 2

Participants, Procedure, and Measures

Participants were N = 1,830 secondary students from the same city as Study 1, attending grades 7 to 9. Of these, n = 537 (207 male, 330 female) were enrolled in upper track secondary schools (Gymnasium), n = 911 (399 male, 512 female) in middle track secondary schools (Realschule), and n = 382 (208 male, 174 female) in lower track secondary schools (Hauptschule). Three schools were recruited from each type of school, and three to four classes from each school and in each grade level. Students' age ranged from 12 to 20 years (M = 14.1; SD = 1.2). The procedure was exactly as in Study 1, and personal BJW (Cronbach's α = .82), grades (α = .63), justice of grades (α = .57), teacher justice (single item), and distress (α = .84) were all measured in exactly the same way as in Study 1.

Results

As in Study 1, zero-order correlations were inspected first (see Table 2). Again, all variables displayed significant correlations in the expected direction. Moreover, all correlations in Study 2 were very similar to those observed in Study 1. Next, distress was regressed on gender, grade level, school track, BJW, grades, justice of grades, and teacher justice entered stepwise (again employing a p < .01 criterion). School track was dummy-coded with 1 for attendance of a specific track (Hauptschule or Realschule), and overall 0 representing the
upper track (Gymnasium) throughout. Additional regression analyses were computed, with
the product terms of the central predictors and the dummy variables for gender, grade level,
and school track being entered in the final steps.

As in Study 1, the results indicated that distress was predicted by students' personal BJW ($\beta = -.23$), their evaluation of teacher justice ($\beta = -.18$), and their grades ($\beta = -.09$). Additionally, there were effects of gender ($\beta = -.09$) and for students attending middle track schools ($\beta = .11$), with male students reporting more distress than female students and middle track school students reporting more distress than lower or upper track school students. Students high in personal BJW and teacher justice reported less distress than students low in BJW and teacher justice; furthermore, students with better grades reported less distress than students with poorer grades. As in Study 1, however, and again in contrast to the zero-order correlations, the justice of grades did not have a significant effect on students' distress beyond the influence of personal BJW, teacher justice, grades, and gender. The school track did not have a significant effect either. Finally, none of the interaction terms was significant, indicating that the observed pattern of results applied equally to students attending different school tracks, male and female students, and students of different grade levels.

While the results of Study 2 revealed that the school track attended and gender were associated with significant mean differences in distress at school, the pattern of results identified in Study 2 was very similar to that identified for the upper track school students in Study 1. Most importantly, in both studies (a) the personal BJW's association with distress persisted when controlled for school-specific justice cognitions and grades ($\beta = -.22/-23$ in Study 1 and 2, respectively), (b) the BJW and teacher justice ($\beta = -.18/-28$) were more strongly related to distress than grades were ($\beta = -.11/-09$), and (c) the evaluation of one’s
teachers as just was uniquely associated with students’ distress at school, but the evaluation of one’s grades as just was not.

General Discussion

A clear pattern of findings emerged across both studies with respect to our main hypothesis that BJW serves as a resource that strengthens subjective well-being at school. As expected, students' BJW and distress at school revealed a unique relationship, even when controlled for school-specific justice cognitions and school achievement. The more students endorsed the belief that, overall, events in their life are just, the more they evaluated their teacher and their grades to be just, the better the grades they obtained, and the less distress they reported at school. Specifically, a high personal BJW and high teacher justice were associated with less distress at school. Additionally, both studies provided evidence that it is possible to distinguish at least three justice constructs in the school context: personal BJW, perceived justice of grades, and perceived teacher justice. Justice of grades and teacher justice display only moderate correlations. Moreover, relative to the justice of grades, teacher justice was less strongly associated with school grades, but more strongly associated with personal BJW. Finally, teacher justice, but not justice of grades, was significantly associated with distress in addition to personal BJW. In sum, results showed that both the belief in a personal just world and the evaluation of one’s teachers as just have unique and complementary relationships with distress at school.

The main limitations of the present studies are that they were both cross-sectional in nature and focused on student cognitions. Experimental or longitudinal studies are needed to confirm that the observed relationships of personal BJW and teacher justice with emotional school outcomes are causal in nature. Furthermore, teacher-independent measures of school achievement and more refined measures of school-specific justice cognitions are needed. In particular, the teachers’ (un-)just behavior should be described in more detail. Finally, future
studies in the school context should control for other personality dispositions known to correlate with BJW. This applies in particular to personal control beliefs, given that a positive correlation between BJW and the belief in internal control is well documented (for a review, see Furnham & Procter, 1989). While outside the school context, Correia and Vala (2004) and Ritter et al. (1990) have demonstrated that BJW and well-being show unique associations, even when controlling for belief in internal control, control beliefs and especially school-related self-efficacy are well-known predictors of school success (e.g., Satow & Schwarzer, 2000; Skinner, Wellborn, & Connell, 1990) and should therefore be controlled in future studies inspecting the relationships of BJW and grades.

Moreover, according to just world theory, BJW is a stable personality disposition that can be seen as a cause of behavioral and emotional outcomes (for a review, see Dalbert, 2001). If this causal direction can be demonstrated in the school context, future studies should expand the justice approach to explain why these justice effects occur. Individuals high in BJW should perform better because they perceive the demands of school life to be more of a challenge than a threat (Tomaka & Blascovich, 1994), are more confident of success, and have a moderate aspiration level (Dalbert & Maes, 2002). Moreover, individuals high in BJW should perceive their teachers as behaving more justly. This is because they are more likely to attribute their success or failure at school to internal forces such as their own efforts or the learning strategies applied, whereas students low in BJW tend to attribute their achievements to external forces as chance, class climate, and particularly their teachers (Dalbert & Maes, 2002). These and other possible mediators of the justice effects should be examined in future studies.

Despite these limitations, the present application of just world theory to the school context demonstrates the importance of justice cognitions within the school context. The general
belief that events in one’s life are just, as reflected in the personal BJW, and the evaluation of one’s teachers as just seem to be of particular importance for emotional development at school and should be further explored. In their relationship with school distress, both justice constructs seem to be more important than performance outcomes—here, school grades. To conclude, the present studies demonstrate that an insight into students’ belief in a personal just world and justice cognitions at school can help to understand their emotional development at school.
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Table 1

Study 1: Descriptives and Correlations for Students Attending Grades 7 Through 13 of Upper Track Secondary Schools ("Gymnasium")

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Personal BJW</th>
<th>Grades</th>
<th>Justice of grades</th>
<th>Teacher justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal BJW</td>
<td>4.23</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades</td>
<td>4.14</td>
<td>0.74</td>
<td></td>
<td>.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justice of grades</td>
<td>4.58</td>
<td>0.95</td>
<td>.29</td>
<td>.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher justice</td>
<td>4.35</td>
<td>0.88</td>
<td>.44</td>
<td>.24</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Distress</td>
<td>3.29</td>
<td>0.95</td>
<td>-.32</td>
<td>-.19</td>
<td>-.22</td>
<td>-.31</td>
</tr>
</tbody>
</table>

Note. N ≥ 1,107. BJW = belief in a just world. All correlations are significant at p < .01.
Table 2

Study 2: Descriptives and Correlations for Students Attending Grades 7 Through 9 of Lower, Middle, and Upper Track Secondary Schools ("Hauptschule", "Realschule", and "Gymnasium," respectively)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Personal BJW</th>
<th>Grades</th>
<th>Justice of grades</th>
<th>Teacher justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal BJW</td>
<td>4.15</td>
<td>0.90</td>
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<td></td>
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<tr>
<td>Grades</td>
<td>3.79</td>
<td>0.74</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justice of grades</td>
<td>4.59</td>
<td>1.08</td>
<td>.25</td>
<td>.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher justice</td>
<td>4.38</td>
<td>1.02</td>
<td>.39</td>
<td>.15</td>
<td>.32</td>
<td></td>
</tr>
<tr>
<td>Distress</td>
<td>3.40</td>
<td>1.05</td>
<td>-.36</td>
<td>-.20</td>
<td>-.20</td>
<td>-.40</td>
</tr>
</tbody>
</table>

Note. N ≥ 1,775. BJW = belief in a just world. All correlations are significant at p < .01.
Claudia Dalbert is Professor of Psychology at the Martin Luther University of Halle-Wittenberg, Germany. Her research focuses on the justice motive theory. Currently she is investigating the impact of justice cognitions at school and during adolescence development, and also the differentiation between an implicit and a self-attributed justice motive and how the justice motive develops. Her other interest is concerned with the tolerance of uncertainty.

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