

Personal Belief in a Just World Moderates the Link Between Induced Empathy and Willingness to Volunteerism among Non-volunteers, but not Volunteers

Sevval Aymila Soyoren¹  · Busra Eylem Aktas² 

Accepted: 26 August 2024 / Published online: 12 September 2024
© International Society for Third-Sector Research 2024

Abstract Previous research suggests that empathy is a strong contributor to altruistic behavior. However, there is a lack of research regarding the role of empathy in long-term, effortful altruistic acts such as volunteering. In this preregistered study, we aimed to understand the moderating role of belief in a just world in the association between induced empathy and intentions to volunteer among both volunteers ($N = 99$) and non-volunteers ($N = 203$). Participants were randomly assigned to either the experimental group ($N = 149$) or the neutral group ($N = 153$). In the experimental group, participants read a text about the suffering of an individual with a chronic illness. In the control group, participants read a text about a typical Tuesday for someone. Then, all participants were asked to complete surveys regarding empathy levels, prosocial intentions, belief in a just world, and demographics. Results showed that inducing empathy did not directly affect the levels of intention to volunteer in the future. However, empathy induction was effective for non-volunteers, particularly those with lower levels of personal (but not general) belief in a just world. These results suggest that increasing levels of empathy might be ineffective when personal belief in a just world poses a barrier to displaying volunteering acts. Notably, these findings were observed specifically for non-volunteers, not for volunteers. Thus, future research should explore potential

differences due to previous volunteering experiences and the levels of belief in a just world in the motivating roles of empathic concerns for displaying long-term, effortful helping behaviors.

Keywords Empathy · Volunteerism · Prosocial intentions · Volunteers · Belief in a just world

Introduction

Volunteerism is the intentional, long-term commitment to benefit society, free from financial expectations (Macduff, 2005; Overgaard, 2019; Penner, 2002). The motivation behind volunteering stems from the desire to help others in need, making it closely intertwined with altruism (Jabari et al., 2012; Wardell et al., 2000). A key aspect of volunteering is its proactive nature, involving consistent effort rather than spontaneous aid to those in need (Livi et al., 2019). Simply put, volunteering demands both mental and physical dedication. Consequently, the motivation to volunteer can evolve over time, and individuals may not always be inclined to participate in volunteer work. Hence, exploring the specific factors motivating individuals to become volunteers remains an important question warranting further research.

Numerous studies propose that empathy serves as a motivation for altruism (Batson et al., 1991). While these investigations are scarce when it has been extended to volunteering intentions. Some research offer diverse findings on the link between and volunteering intentions (Stolinski et al., 2004; Veludo-de-Oliveira et al., 2015), while they also refer that individual differences may play a crucial role in the link between empathy and volunteering (Rehberg, 2005; Veludo-de-Oliveira et al., 2015).

✉ Busra Eylem Aktas
busra.aktas1@medipol.edu.tr

¹ Department of Psychology, Istanbul Bilgi University, Istanbul, Turkey

² Department of Psychology, School of Humanities and Social Sciences, Istanbul Medipol University, 34214 Istanbul, Turkey

Therefore, it is not yet clarified whether empathy has a motivational contribution specifically in the context of volunteering.

Furthermore, since volunteering is intricately linked to a form of altruism associated with societal benefit, it is reasonable to consider that intentions related to volunteering may also be influenced by how individuals interpret the social world. For example, exploring the role of evaluations regarding the victim's or the situation's positioning when interpreting the disadvantaged conditions of those in need could help understand under what circumstances the impact of empathy on volunteering intentions is more pronounced. The belief in a just world (BJW; Lerner, 1980) appears as a psychological factor predicting individuals' helping behaviors toward those in need, specifically in the context of volunteering. In other words, BJW may facilitate the manifestation of empathy's impact on volunteering. Considering the scarcity of investigation on this topic, this study primarily aims to address the moderator role of BJW in the link between empathy and volunteering intentions.

Individual Differences in Volunteerism

Previous studies have shown who is more inclined to volunteer by focusing on specific personality traits and individual differences. Some studies showed that higher levels of extraversion, conscientiousness, and lower levels of emotional stability, which are among the five-factor personality traits, have been found to be positively related to prosocial motivation (Tortumlu & Uzunbacak, 2021). For instance, extraversion (Ackermann, 2019) and agreeableness (Halis et al., 2020) have been found to be positively associated with volunteering (Paterson et al., 2009). In another study, it was found that participants with higher responsibility levels showed greater commitment to their volunteering activities (Kossowska & Laguna, 2018). In a more recent study, the fundamental motivations for volunteering were identified as recognition, reactivity, and understanding (Aslan & Tuncay, 2023).

Beyond five-factor personality traits, past research indicates that prosocial personality characteristics might utilize the intentions of volunteering (Penner & Finkelstein, 1998). For instance, the relationship between agreeableness and the concept of altruistic self has been found as a positive contributor of being a volunteer and sustaining volunteerism (Capra et al., 2021). In parallel with this, Carlo et al. (2005) demonstrated that prosocial value motivation plays a significant role in individuals' participation in volunteer activities. Prosocial orientation has been found to increase the willingness to be a volunteer (Van Lange et al., 2011), and prosocial motivation has been observed to be high in individuals who are already volunteers (Tortumlu

& Uzunbacak, 2021). In another study, individuals reporting higher levels of prosocial personality were found to have a higher sense of moral obligation compared to others, leading to a higher likelihood of volunteering (Chambré & Einolf, 2008).

In general, an increase in characteristics associated with prosocial personality predicts an increase in individuals' likelihood of engaging in volunteer actions (Aydinli-Karakulak et al., 2016; Finkelstein, 2009). In summary, previous studies suggest that prosocial personality, in addition to some personality traits such as extraversion, agreeableness, conscientiousness, and emotional stability, are significant determinants for engaging volunteering actions.

Empathy and Volunteering Intentions

Empathy not only emerges as a psychological variable associated with positive personality traits (Melchers et al., 2016; Penner, 2002) but also stands out as an important dimension of prosocial identity (Carlo et al., 2005). In line with this, many studies emphasize the crucial role of empathy in general prosocial behaviors (Batson et al., 1991), but fewer specifically delve into the role of empathy on voluntary engagement (Nowakowska, 2022).

Among the various definitions of empathy, an important distinction for empirical research procedures is the classification of trait and state empathy (Cuff et al., 2016). Trait empathy refers to individual differences in the capacity to experience empathic concerns. This definition approaches empathy as an ability or capacity that is genetically and biologically based (Banissy et al., 2012) or as a socially learned trait that can be enhanced through education (Thomas et al., 1997). In addition to trait empathy, people also experience empathy differently due to contextual and environmental factors. For instance, using words, visual cues, scenarios, or phrases to enhance empathy may lead people to display higher empathic reactions. This implies that empathy has a contextually triggered effect, referred to as state empathy. Although this classification of empathy definitions clarifies its effects as observed in research, it is important to note that the interaction between state and trait empathy influences social behavior (Cuff et al., 2016; Fernandez et al., 1999; Pithers, 1999; Rameson et al., 2012).

According to Batson's empathy-altruism hypothesis, altruistic behaviors are primarily fueled by empathy (Batson et al., 1991). In other words, Batson et al. (1991) proposed that altruism arises from an other-oriented emotional response. For this to happen, the first step is to notice someone in need, because this recognition generates an emotion that motivates the individual to provide help.

While altruistic behaviors may not always emerge just because this emotion is present, but if individuals recognize that there is someone in need, and if this person value intrinsically to the welfare of others, empathy motivates altruism. Feeling sad, stressed, or concerned for someone else makes it easier to act altruistically, according to the empathy–altruism hypothesis. Several studies have shown that higher empathy is linked to more altruistic behaviors compared to lower empathy (Batson, 2017). Furthermore, Batson’s empathy–altruism hypothesis explains altruistic behaviors better than alternative explanations, which suggest individuals act to alleviate their own negative feelings rather than those of the victim (Batson et al., 1989). Consistently, for instance, Paciello et al. (2013) showed that participants with high levels of empathic concern exhibited high levels of prosocial moral reasoning, and both empathy and prosocial moral reasoning were associated with helping behaviors. Another study showed that, in terms of perspective-taking and empathic concern, voluntary participants were superior to non-volunteers (Paterson et al., 2009). In addition to this, there was a positive correlation between the amount of money transferred to an anonymous person in the dictator game and the tendency to show volunteering (Carpenter & Myers, 2010).

Nevertheless, findings regarding the relationship between empathy and volunteerism are mixed. For instance, one study showed that there was no significant difference in terms of empathy and altruism among participants actively involved in volunteer activities and strongly committed to volunteering, compared to those who showed less commitment (Veludo-de-Oliveira et al., 2015). Furthermore, Einolf (2008) showed that planned helping behaviors, such as volunteering, were less linked to empathic concern when compared to spontaneous helping behaviors. Evaluating mixed findings together, results suggest that the relationship between empathy and volunteering is not as crystal-clear as the link between empathy and prosocial behaviors. Therefore, exploring other potential variables that may moderate the relationship between empathy and volunteering could contribute to a more nuanced understanding of this matter.

The Role of Belief in a Just World in the Link Between Empathy and Volunteerism

Volunteering, as mentioned earlier, represents a sustained form of prosocial behavior that demands stronger motivation than impromptu helping behaviors. Considering the varying findings concerning the link between empathy and volunteering, a shift to examining volunteering intentions, as opposed to spontaneous helping behaviors, suggests that the motivational impact of empathy may vary depending

on individual variables. Specifically, empathy could swiftly amplify helping behavior because the focus of helper is on alleviating the immediate stressful situation of the victim, necessitating minimal effort, relative to volunteering behaviors. Conversely, when helping behavior entails a long-term commitment, the motives behind the act of assistance may undergo more scrutiny for the person offering help. In the context of volunteering, attributions to the causes of the distress experienced by the disadvantaged people may consequently hold more significance compared to spontaneous helping behaviors.

Thus, in this context, beliefs about why the victim is distressed can shape an individual’s intention to volunteer. In other words, the motivation required for volunteering may be influenced by attributions to the social context where the hardships of those in need unfold. At this point, we deem that the belief in a just world (Lerner, 1980; BJW) could emerge as an important psychological variable playing a significant role in determining individuals’ intentions to volunteer.

According to the main assumptions of BJW (Lerner, 1980), individuals have a predisposition to believe that the world is a fair place. This predisposition sometimes leads individuals to attribute the cause of the victim’s distress more to the victim’s own responsibility rather than explaining it with situational factors. In certain situations, in other words, higher levels of BJW might prompt individuals to place blame on the victim (Montada & Lerner, 1998). BJW leads individuals to comprehend the social world, encouraging them to perceive it as something that can be controlled (Dalbert, 2001). In this context, we deem that if individuals think the world is a just place where good things happen to good people and bad things happen to bad people, this belief may pose a barrier to investing prolonged effort to alleviate disadvantaged situations. Alternatively, individuals with higher levels of BJW might be more inclined to engage in volunteering, as they believe that their volunteer efforts will be rewarded by a just world. Considering two alternative explanations, we adopt an exploratory approach to test BJW as a potential moderator in the relationship between empathy and volunteering intentions.

BJW consists of two dimensions: personal and general BJW. People with a high personal BJW believe they will get what they deserve based on their own actions and behavior. Distinctively, general BJW is a broader belief that the world overall is fair and has been shown to relate to strict social attitudes and the fair distribution of rewards and punishments (Kaiser et al., 2004). Personal BJW, different from general BJW, is associated with greater prosociality (Bègue et al., 2008). Additionally, personal BJW is a better predictor of psychological well-being than general BJW (Dalbert, 1999). In sum, previous results

suggest approaching BJW by considering the potentially varying roles of personal and general BJW.

There are limited studies exploring the relationship between the BJW and voluntarism intentions. However, there are a number of research showing that people with higher levels of BJW have more tendency to display prosociality and norm conformity (Bègue, 2014; Bègue et al., 2008; Correia et al., 2016; Hafer et al., 2005). Zuckerman (1975), in one study, demonstrated that individuals holding a stronger BJW are more likely to engage in helping behaviors (see also Bègue et al., 2008). In a different study, it was found that individuals with a high BJW are inclined to exhibit more helping behavior when they are aware that the victim is not responsible for their illness, as opposed to situations where the victim has a responsibility (Turner DePalma et al., 1999). Miller (1997) conducted two experiments to investigate how justice motivation and the impression of victim impact individuals' willingness to help victims. The results indicated that individuals with a stronger BJW are inclined to contribute a greater sum of money when they perceive the victim's suffering as temporary, as opposed to situations where the suffering is seen as ongoing. According to a recent study conducted with college students after the pandemic, results claimed that BJW positively influences altruistic behaviors and empathy has a significant mediator role in this relationship (Wang et al., 2023). Another study revealed that a higher overall BJW enhances prosocial behavior among volunteers, particularly when their self-efficacy is high. Notably, on the other hand, this relationship does not manifest among non-volunteers (Correia et al., 2001). Moreover, it has been observed that there is a significant positive link between the BJW and the desire to assist those in need, but this relationship is found to be insignificant among individuals who are already volunteers (Correia et al., 2016). Therefore, it has been suggested that whether individuals are volunteers or not may change the relationships between helping intentions and the BJW.

The Present Study

Previous studies have found a significant relationship between BJW and prosocial behaviors (De Caroli & Sagone, 2014) in general, and volunteerism in particular (Correia et al., 2016). Those research suggest that individuals with a high BJW may be more attuned to the misfortunes of others, potentially making them more responsive to those in need. Conversely, those with a lower BJW might also tend to attribute negativity to the victims, leading to a decrease in helping behaviors. Notably, there is a gap in existing research regarding the interplay of empathy, BJW, and volunteering intentions. This

experimental study aims to fill this gap by investigating how increased empathy sensitivity influences volunteering intentions, particularly when considering its interaction with the BJW.

The hypotheses of this preregistered¹ study are as follows:

1. Pre-experimental empathy scores would be positively correlated with willingness to volunteerism.
2. BJW would be positively related to willingness to volunteerism.
3. Empathy inducement would increase willingness to volunteerism.
4. BJW would moderate the relationship between empathy inducement and willingness to volunteerism. Specifically, we expected a significant relationship between empathy induction (experimental vs. control group) and willingness to volunteerism, especially for participants with higher scores in BJW (Turner DePalma et al., 1999) since individuals with higher BJW are more inclined to create a positive destiny by engaging in more prosocial behavior compared to those with lower BJW (Dalbert, 1998). However, the relationships between empathy inducement (experimental vs. control group) and willingness to volunteerism would be nonsignificant for participants with lower scores in BJW.
5. People who are already attending to volunteer actions would report higher levels of empathy relative to people who have no volunteering experiences.

Building on insights from prior research (Correia et al., 2016), hypothesized relationships were investigated separately among volunteers and non-volunteers in an exploratory manner. Additionally, recognizing that past research highlights the significant link between prosocial personality characteristics and not only empathy but also the willingness to volunteer (Finkelstein, 2009; Paciello et al., 2013; Paterson et al., 2009), we approached prosocial intentions as a control variable in the hypothesized relationships (Aydinli-Karakulak et al., 2016; Carlo et al., 2005). Lastly, acknowledging the potential impact of empathy manipulation on mood alterations (Batson & Weeks, 1996), post-experimental mood has been considered as a control variable throughout the main analyses.

¹ The anonymized preregistration form can be found on the following link: https://osf.io/r8jsz/?view_only=dee52c90d53f4986993bcee635dc75c7

Methods

Experimental Design

To test the impact of empathy on volunteering intentions, we considered empathy as the independent variable with two levels (experimental and control groups) and willingness to volunteer as the dependent variable. Additionally, we examined the moderating roles of general and personal BJW on the relationship between empathy and willingness to volunteer, using separate regression models for each moderator. We tested the hypothesized relationships separately for volunteers and non-volunteers, while controlling for both negative and positive emotions as well as prosocial intentions.

Participants and Procedure

Power Analysis

A power analysis was conducted using G*Power 3.1 (Faul et al., 2007). The results of the first power analysis indicate that a minimum of 85 participants is required to investigate whether the significant impact of an increase in empathy on willingness to volunteer varies depending on the level of BJW. This analysis was performed with a significance level of 0.05, 80% power, and a medium effect size ($f^2 = 0.15$). Given that the research question is intended to be tested in both volunteers and non-volunteers, the goal is to include double the number of participants, totaling 160 individuals. Considering control variables (prosocial intentions and mood), this test was re-performed for the multiple regression analysis. According to the results, this power analysis showed that a minimum of 98 participants is necessary to observe the moderator role of BJW on the link between empathy inducement and intentions toward volunteering while controlling for prosociality and mood, with an alpha level of 0.05 and 80% power, and a medium effect size ($f^2 = 0.15$).

Participants

Initially, 433 participants took part in the study. However, 99 participants ($N_{\text{experimental group}} = 42$) were excluded as they did not complete 70% or more of the questionnaires, and an additional 28 participants ($N_{\text{experimental group}} = 13$) were excluded from the analyses because they provided an incorrect answer to the attention check question. After these exclusions, we identified outliers using z scores. Four participants were further excluded from the analyses as their z scores exceeded the criteria of ± 3.29 among the

main study variables. Consequently, the final sample consisted of 302 participants ($N_{\text{experimental group}} = 149$) with 246 women and 56 men. Furthermore, 42 participants in the experimental group and 57 participants in the control group took part in voluntary activities in the last one year. The study included both volunteers ($N = 99$) and non-volunteers ($N = 203$), allowing for a comparative approach in testing the hypothesized relationships.

The average score of subjective socioeconomic status (SES) among the participants was found to be 4.83 on an 11-point Likert-type scale (Adler et al., 2000).² The majority of participants reported that they resided predominantly in metropolises (76.8%) or cities (17.2%), and the highest level of education attained was high school (57%) or university (32.8%). The average age of volunteers was 27.59 (SD = 12.00), while it was 24.05 (SD = 7.21) for non-volunteers. Volunteers ($N = 98$) were asked to report the average hours and days dedicated to volunteering activities. On average, volunteers reported engaging in volunteering for 5.95 h (SD = 8.01) per week and 142.34 days (SD = 127.29) during a year. Mean age of the participants was 25.20 (SD = 9.19). Volunteers' mean age was 27.59 (SD = 11.99), while non-volunteers' mean age was 24.04 (SD = 7.21).

While information was obtained about the participants' volunteering experiences in the last year, the participants were also asked to answer in which areas they were actively working. Ninety-nine people responded positively to the question "I have volunteered in the last year," but 10 participants did not answer the question "In which field do you work?" Additionally, one participant answered, "I am not working" and another participant answered, "I am not working at the moment." According to the answers, the fields where only one person works are shown in the "Other" category. When the frequency of answers is examined, it is seen that volunteers are most active in the field of education (see Table 1).

Procedure

After obtaining approval from the Human Subjects Ethics Committee (Decision No: 69), we disseminated the study by sending an email to a group of students at a university from Türkiye, Istanbul, and various NGOs, along with an online survey link in Türkiye. The study has been

² We found no significant differences between either volunteer men ($M = 4.65$, $SD = 1.35$) and women ($M = 4.71$, $SD = 1.14$) on SES, $t(97)$, $p = 0.843$, Cohen's $d = 0.33$; or non-volunteer men ($M = 5.17$, $SD = 1.76$) and women ($M = 4.83$, $SD = 1.29$), $t(201) = 1.312$, $p = 0.288$, Cohen's $d = 0.10$. We found a significant difference between volunteers' ($M = 27.59$, $SD = 11.99$) and non-volunteers' age ($M = 24.04$, $SD = 7.21$), $t(132.017) = 2.70$, $p = 0.008$, Cohen's $d = 0.36$.

Table 1 Frequencies of categories related to volunteering areas

Volunteering areas		
Categories	f	%
Education	22	22.4
The welfare of children	14	14.3
Psychological support	13	13.3
Social help and solidarity	12	12.2
Other	8	8.2
Disaster	6	6.1
Social services	5	5.1
Health	4	4.1
Political	3	3.1
NGO	3	3.1
The red crescent in Turkey	2	2
An organization	2	2

preregistered on the *Open Science Framework* (OSF; see the anonymized link: https://osf.io/r8jsz/?view_only=dee52c90d53f4986993bcee635dc75c7). Participants were asked to complete self-reported questionnaires via SurveyMonkey. The study involved a single questionnaire that included all surveys and manipulation text. To ensure random assignment to the groups, we provided two different links. Participants were instructed to complete either the first or second questionnaire based on their birth month. Those born between January and June were assigned to one group, while those born in the remaining months were assigned to the experimental group. To ensure random assignment, we counterbalanced the birth-month distribution between the experimental and control groups while distributing the survey across different platforms.

Initially, they were instructed to fill out the empathy scale (Spreng et al., 2009). Following this, participants were assigned the task of reading presented texts. They were instructed to immerse themselves in the perspective of the person described in a text about someone suffering from a chronic illness (empathy-induced text) or to maintain objectivity (neutral text) while reading about a typical Tuesday. This type of manipulation, designed to augment empathic concerns, has previously been found effective in a relevant study (McAuliffe et al., 2020). Then, participants responded to three manipulation check questions. Afterward, participants were informed about the definition of volunteerism, and answered three questions regarding their willingness to volunteer. Next, participants responded a mood scale (PANAS; Watson et al., 1988). Subsequently, they completed questionnaires about prosocial intentions (Baumsteiger & Siegel, 2018) and BJW (Dalbert, 1999). The demographic form was presented at the end of the

online survey. Finally, participants were provided information about the aims of the research with a written debriefing form. The average participation time was 15 min.

Empathy-Induced group. Participants were presented with a story about a person suffering from a chronic illness to augment empathic concerns of participants in the experimental group. Specifically, the experimental group received the following instruction: “*Please read the text on the next page and try to empathize with the person as much as possible, putting yourself in their shoes. Focus on understanding what they have experienced by paying attention to their emotions and how their illness has affected their life. At the end of the text, three questions will be asked. Please read these questions carefully and provide your answers.*”

Control group. For the control group, participants were presented with a story about a person describing a regular Tuesday. The control text has the same length in order to the word number of the manipulation text to eliminate any potential confounding due to the length of the text. Before participants read the passage, we asked them to maintain an objective stance as much as possible while reading the passage, contrary to the experimental group in which we asked participants to putting themselves in the shoes of the person described in the text.

Manipulation Check. Afterward, participants responded to three questions which we created regarding the passage they read as follows: “*How intensely did you feel the situation described by the person you read about?*”, “*How impactful did you find this text?*”, and “*How much do you think you put yourself in the shoes of the person in the text?*” to examine if the manipulation worked as expected. The sum of the scores has been calculated to obtain a manipulation check score. Significantly higher scores in the experimental group, compared to the control group, was expected to be certain that the manipulation efficiently worked in enhancing empathic concerns.

Materials

Empathy Scale. The Toronto Empathy Scale was developed by Spreng et al. (2009) to measure individuals’ levels of empathy. Toronto Empathy Scale was adapted to Turkish by Totan et al. (2012). The scale is a 5-point Likert type (1 = *Not at all appropriate*—5 = *Completely appropriate*) and consists of a total of 13 questions (a sample question is *I describe myself as a very soft-hearted person*). Cronbach’s α of the scale was found to be acceptable (0.67).

Willingness to Volunteerism Scale. Three questions were created to measure participants’ intentions, desires, and plans to volunteer: “*In the next year, I “intend” to/ be*

“willing” to/ “plan” to volunteer for a charity or non-governmental organization” (Cronbach’s $\alpha = .097$). A composite score was used by averaging the responses to these items. The items were obtained from Dogrul (2019) and they were answered on a 5-point Likert scale (1 = *Not likely at all*—5 = *Very likely*).

The PANAS Scales. The positive and negative affect schedule (PANAS) scale developed by Watson et al. (1988) consists of two subscales, encompassing 20 items measuring 10 positive and 10 negative emotions. The 5-point Likert scale ranges from 1 (*I feel very little or none at all*) to 5 (*I feel a lot*). The composite scores of positive or negative emotions were used to measure affect of participants. The scores varied between 10 and 50 for positive and negative affect. The scale was adapted into Turkish by Gençöz (2000). In this study, the internal consistency for both positive and negative emotions was found to be satisfactory (Cronbach’s $\alpha = 0.87$).

Belief in a Just World Scale. The belief in a just world scale, developed by Dalbert (1999). The personal belief in a just world scale consists of seven items, whereas the general belief in a just world scale, with a total of six items, employs a 5-point Likert-type scale (1 = *Strongly agree*, 5 = *Strongly disagree*). The scale was translated and adapted into Turkish by Göregenli (2003). Higher scores represent a stronger belief in a just world. The scales were administered to the participants in a single form, as in the original. In the present research, the combined internal reliability of the scale was found to be satisfactory (Cronbach’s $\alpha = 0.83$). The mean was calculated for each scale to examine the roles of general belief in a just world (a sample item is “*I think the world is basically a just place*”) and personal belief in a just world (a sample item is “*I think that important decisions made concerning me are usually just*”) scores separately throughout the analyses. The general belief in a just world scale (Cronbach’s $\alpha = 0.712$) and the personal belief in a just world scale (Cronbach’s $\alpha = 0.828$) both demonstrated satisfactory internal reliability in this study.

Prosocial Intentions Scale. The scale developed by Baumsteiger and Siegel (2019) comprises four items on a 7-point Likert scale (1 = *Absolutely would not do*, 7 = *Absolutely would do*). A higher score indicates a stronger intention for prosocial behavior (Cronbach’s $\alpha = 0.72$). The adaptation study of the scale was conducted by Anlı (2019). A sample item from the questionnaire is “*Help a stranger find something they lost, like their keys or a pet.*”

Demographic Form. The demographic form comprised questions regarding participants’ age, the primary location (city, metropolis, village, town) where they have resided the longest, their volunteering behavior (yes or no), the duration of their volunteering experience (in months and

hours per week), gender, subjective socioeconomic status, and the field of their volunteering activities. More specifically, participants provided information about their involvement in volunteer activities in the past year, the duration of their voluntary work, the number of hours per week dedicated to volunteering, and the specific areas in which they volunteered.

Results

A bivariate correlation analysis was conducted to examine relationships among the study variables. Table 2 presents the results of the bivariate Pearson correlations for both volunteers and non-volunteers. As expected, findings revealed that pre-experimental empathy scores were positively correlated with intentions of future volunteering for both volunteers ($r = 0.39$, $p < 0.001$) and non-volunteers ($r = 0.14$, $p < 0.05$). We tested the link between BJW, empathy, willingness to volunteering by using both personal and general BJW subscales. According to these results, general BJW was not correlated with the volunteering intentions and empathy for both volunteers and non-volunteers, $ps > 0.05$. Personal BJW was significantly correlated with empathy ($r = 0.24$, $p < 0.05$). However, this link was not significantly related to willingness to volunteer for participants who defined themselves as volunteers ($ps > 0.05$). Additionally, personal BJW was not correlated with volunteering intentions for both volunteers and non-volunteers ($ps > 0.05$). Due to the absence of significant correlations between general BJW and the main variables, we opted to conduct the main analyses using personal BJW scores instead of general BJW.

To test the effectiveness of the empathy induction, an independent samples t test was conducted. According to the results, participants in the experimental group ($M = 4.75$, $SD = 1.20$) reported higher levels of empathic concerns in the manipulation check questions compared to the control group ($M = 3.39$, $SD = 1.30$), $t(300) = 9.42$, $p < 0.001$, Cohen’s $d = 1.087$. Additionally, we also tested whether the manipulation worked effectively for both groups. In both the volunteer ($MD = 1.12$, $SE = 0.26$, $p < 0.001$, Cohen’s $d = 0.88$) and non-volunteer ($MD = 1.48$, $SE = 0.17$, $p < 0.001$, Cohen’s $d = 1.198$) groups, the experimental group reported significantly higher levels of empathic concerns in response to the manipulation check questions.

We conducted another independent samples t test to investigate whether there was a significant impact of empathy induction on willingness to volunteer. Contrary to our hypothesis, there was no significant impact of empathy induction on the willingness to volunteer among the group of volunteers ($MD = -0.09$, $SE = 0.25$), $t(97) = -0.37$,

Table 2 Correlations for study variables

	1	2	3	4	5	6	7	8	9
1 Emp	—	0.39***	0.24*	0.04	0.05	0.04	0.13	0.36***	0.49***
2 Vol	0.14*	—	0.06	− 0.03	0.07	0.30**	− 0.08	0.10	0.33**
3 BJWp	− 0.07	0.05	—	0.34**	− 0.03	0.19	0.23*	0.15	0.12
4 BJWg	− 0.06	− 0.002	0.44***	—	0.04	0.03	0.14	0.10	0.06
5 Age	− 0.01	− 0.31***	0.02	− 0.02	—	0.16	− 0.20*	0.01	0.003
6 Dur	− 0.06	− 0.01	− 0.02	− 0.05	0.02	—	0.07	− 0.05	− 0.02
7 SES	− 0.05	0.03	0.20**	0.24**	− 0.09	0.01	—	0.02	0.01
8 Gender	0.20**	0.18*	0.04	− 0.02	− 0.21**	0.03	− 0.09	—	0.08
9 Pros	0.50***	0.24***	− 0.03	− 0.04	− 0.09	− 0.02	0.05	0.13	—

The upper side of the table shows the correlations for volunteers ($N = 99$), while bottom side shows the correlations for non-volunteers ($N = 203$)

Emp pre-experimental empathy scores, *Vol* volunteering intentions, *BJWp* personal belief in a just world, *BJWg* general belief in a just world, *Dur* volunteering duration, *SES* socioeconomic status (higher scores indicate lower perceived SES); *Gender* 1 males, 2 females

* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$

$p = 0.71$, Cohen's $d = 0.07$. Similarly, the willingness to volunteer among non-volunteers ($MD = 0.20$, $SE = 0.18$) was not influenced by the empathy induction, $t(201) = 1.11$, $p = 0.27$, Cohen's $d = 0.16$. Results indicated no impact of empathy on the willingness to volunteer in both groups. Thus, contrary to our expectations, there was no influence of empathy induction on willingness to volunteer.

To test the moderation hypothesis, we employed Hayes' (2013) PROCESS Macro Model 1 using SPSS Statistics 25.0. The grouping variable, including the two conditions (i.e., experimental group vs. control group), was a focal predictor, and personal BJW was included as the moderator.³ The control variables (positive and negative mood scores and prosocial intentions) were included in the model. Total model was significant $F(6, 295) = 6.65$, $R^2 = 0.12$, $p < 0.001$. Prosocial intentions significantly predicted willingness to volunteering, $b = 0.38$, $SE = 0.08$, $p < 0.001$, 95% CI [0.2280, 0.5408]. Although positive and negative mood showed no significant relationship with willingness to volunteering, $ps > 0.05$. Besides, empathy induction had no influence on the willingness to volunteering, $b = -0.02$, $SE = 0.15$, $p = 0.87$, 95% CI [− 0.3178, 0.2694]. Personal BJW significantly and negatively predicted willingness to volunteering, $b = -0.90$, $SE = 0.41$, $p = 0.03$, 95% CI [− 1.718, − 0.0889]. Additionally, there was a moderator role of personal BJW in the association between empathy inducement and willingness to volunteering, $b = 0.65$, $SE = 0.29$, $p = 0.01$, 95% CI [0.1444, 1.1610] $\Delta R^2 = 0.02$ (see Fig. 1). Specifically, higher levels of personal BJW in the experimental group were associated with lower levels of willingness to volunteer compared to the control group. Thus, personal BJW

seemed to act as a potential barrier, hindering the display of higher levels of willingness to volunteer when empathic concerns were heightened.

Building on prior research that has demonstrated varied relationships BJW and volunteering among both volunteers and non-volunteers (Correia et al., 2001, 2016), we conducted tests using the same model. Specifically, we analyzed the model separately for volunteers (see Table 3) and non-volunteers (see Table 4). All of the variables in these models were remained the same. The results for volunteers showed that there was no impact of empathy inducement on the willingness to volunteering. In addition this, there was no relationship between personal BJW and willingness to volunteer for volunteers. Lastly, for volunteers, there was no moderator role of personal BJW in the relationship between empathy inducement and willingness to volunteer. Therefore, we concluded that the moderator role of personal BJW was not evident for volunteer people.

Afterward, we conducted tests using the same model but limited the analysis to include only non-volunteers (see Table 4). The findings revealed that the personal BJW of non-volunteers significantly moderated the relationship between empathy inducement and willingness to volunteer, similar to the initial model we examined (see Fig. 2). Consequently, these results imply that the importance of personal BJW in enhancing intentions toward volunteering is specific to individuals who are not actively engaged in volunteering.

Discussion

The aim of this study is to investigate the effect of empathy on volunteering intentions and whether this effect varies according to levels of BJW. Contrary to our expectations,

³ We did not test the moderator role of general BJW as there was no correlation found between general BJW and the main variables.

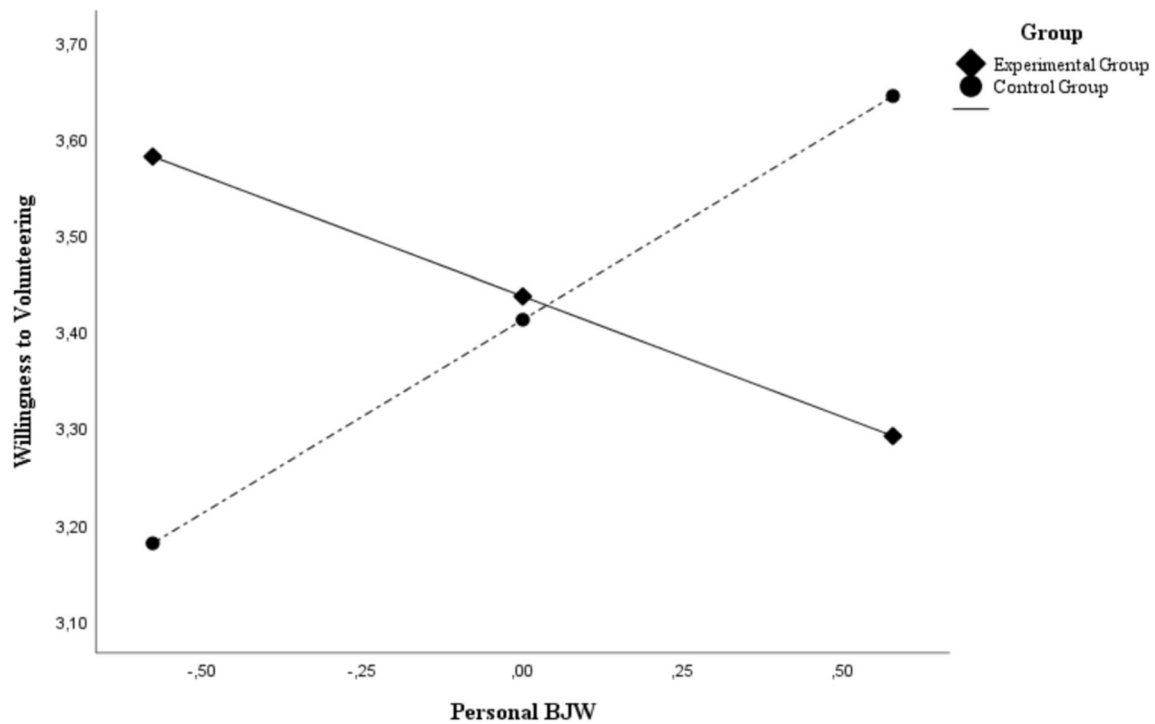


Fig. 1 Moderator role of BJW in the link between empathy inducement and willingness to volunteering including all participants

Table 3 Moderated Regression on Willingness to Volunteering among Volunteers

	Willingness to volunteering				
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
$R^2 = 0.146^*$					
Positive mood	0.15	0.15	0.33	− 0.1506	0.4434
Negative mood	− 0.23	0.17	0.19	− 0.5756	0.1159
Prosocial intentions	0.41**	0.13	0.002	0.1505	0.6801
Personal BJW	− 0.50	0.87	0.57	− 2.235	1.230
Empathy inducement	0.17	0.24	0.48	− 0.3106	0.6581
Interaction	0.34	0.49	0.49	− 0.6393	1.321

* $p < 0.05$, ** $p < 0.01$

Table 4 Moderated regression on willingness to volunteering among non-volunteers

	Willingness to volunteering				
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>LLCI</i>	<i>ULCI</i>
$R^2 = 0.12^{***}$					
Positive Mood	0.20	0.11	0.07	− 0.0159	0.4140
Negative Mood	0.06	0.11	0.58	− 0.1603	0.2841
Prosocial Intentions	0.31**	0.09	0.001	0.1283	0.4982
Personal BJW	− 0.87	0.46	0.06	− 1.779	0.0409
Empathy Inducement	− 0.19	0.18	0.29	− 0.5444	0.1621
Interaction	0.66*	0.30	0.03	0.0718	1.245

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

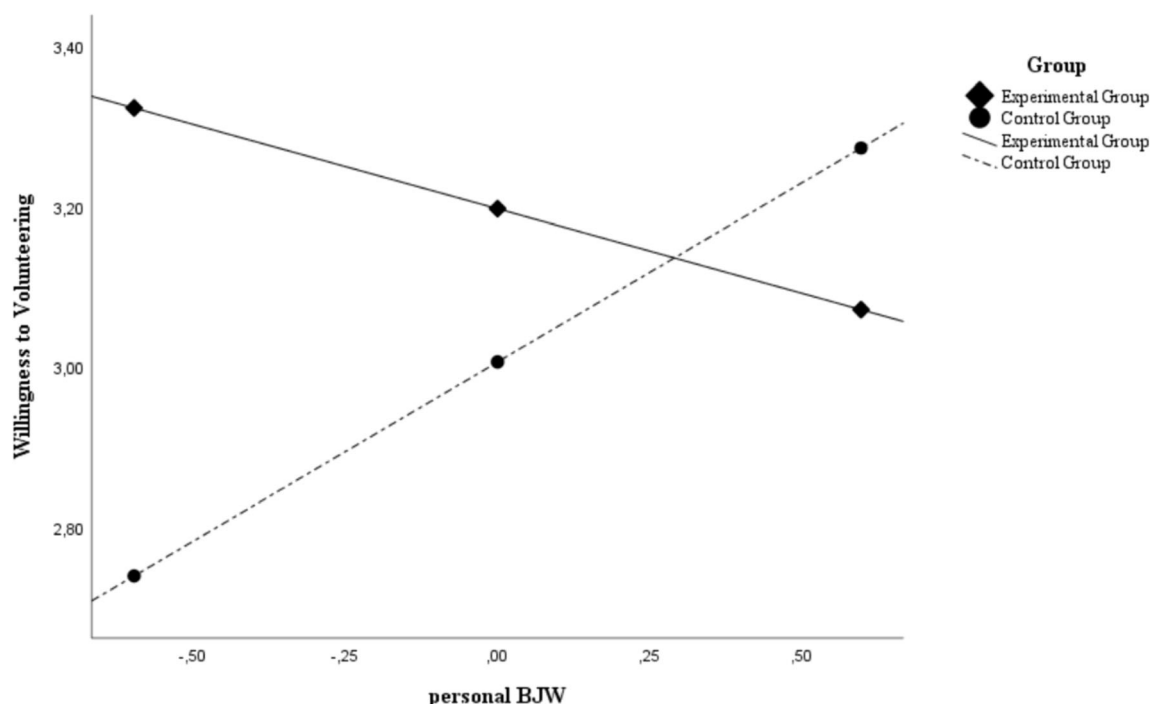


Fig. 2 Moderator role of BJB in the link between empathy inducement and willingness to volunteering among non-volunteers

the results indicate that empathy does not play a significant role in volunteering intentions. Alternatively, it has been observed that elevating empathy levels, particularly within the non-volunteer group, results in an increased inclination toward volunteering among individuals with lower BJB. However, it has been shown that such a relationship is not evident for participants who engage in volunteering. The results have a potential to provide a new perspective by highlighting the significant role of BJB in shaping the link between volunteering intentions and empathy within the relevant literature, encompassing both volunteers and non-volunteers.

Drawing from various studies exploring the connection between empathy and altruism (Batson et al., 1987; Bierhoff & Rohmann, 2004; Stocks et al., 2009), it is still unclear whether the motivating influence of empathy for altruistic behaviors extends to volunteering, which involves more planning and effort. Additionally, we have not thoroughly investigated the specific conditions under which this effect might present. The present findings, in this context, suggest that empathy has no direct contribution in increasing volunteering intentions. Indeed, according to the empathy–altruism hypothesis (Batson et al., 1989), people are motivated to show altruistic behavior through empathic motivations. Therefore, if empathic concerns are increased, empathy–altruism hypothesis suggests that individuals should demonstrate higher intentions to help. This has been supported by several studies, including both experimental and correlational designs (Batson, 2017), which is contrary

to the present findings. It is important to note that this study focuses on testing participants' intentions toward future volunteering rather than immediate helping behavior. Batson et al. (1991) suggested that intrinsic concerns for others' welfare, valuing others' well-being, and attention to detecting others' neediness are critical for showing altruistic behavior (Batson, 2017). In a real-life experimental design, if there were a person suffering from a chronic illness asking for help, individuals with heightened empathic concerns might be more likely to display altruistic acts because environmental factors would trigger their concern and attention to the victim's neediness. However, the present study only included a hypothetical scenario, which might impact participants less than a real-life event. Consequently, increased empathy might be less effective in motivating future plans compared to immediate calls for help.

Trait and state empathy have different definitions (Cuff et al., 2016). Trait empathy refers to the capacity of individuals to experience empathic concerns and the biologically based variation in empathy levels among people. State empathy, on the other hand, is defined as an immediate reaction to environmental elicitors. Previous research examining trait and state empathy separately has found differences in their relationships with altruistic behavior. For instance, individuals who reported higher levels of trait empathy were also those who gave more money to an anonymous receiver in the dictator game (Herne et al., 2022). However, the same study found no effect of state

empathy on the donation amount (Herne et al., 2022). This evidence suggests that trait empathy, rather than state empathy, may contribute to altruistic behaviors. Nevertheless, evidence regarding the effect of state empathy on altruistic behavior is mixed. Some studies have shown that state empathy leads to greater altruistic behavior (Klimecki et al., 2016), while others have found no effect of state empathy (Lönqvist & Walkowitz, 2019) or have found an effect only when state empathy interacts with trait empathy (Powell et al., 2018). When it has been approached empathic concern as a measure of personality trait, similar to previous studies, the present results showed a significant link between empathy and volunteering (Davis et al., 1999; Penner & Fritzsche, 1993). Additionally, the relationship between the tendency for spontaneous prosociality and the personality trait of empathic concerns is found to be stronger than the relationship between volunteering and empathy (Bekkers, 2005; Bekkers, 2006; Clary & Snyder, 1999; Correira et al., 2016). One possible explanation is that empathy is more effective in supporting spontaneous and immediate acts of assistance. Supporting this argument, for instance, Einolf's (2008) investigation into the link between helping behavior and empathy highlighted a robust association between spontaneous, face-to-face acts of assistance (e.g., giving money to a homeless person) and empathy. Consequently, it implies that empathy serves as a stronger motivator for impromptu acts of aid rather than planned, long-term and effortful helping behaviors.

In this study, our aim was going beyond the previously shown correlational evidence and testing whether an increase in empathic concerns would influence people's subsequent intentions to volunteer. As we stated earlier, unexpectedly, existing findings demonstrated no direct impact of empathy on volunteering intentions. Instead, BJW emerged as a moderating factor in this relationship for non-volunteers. The present findings could be attributed to importance of how individuals evaluate those in need. Specifically, these findings suggest that high levels of BJW may pose a barrier to enhancement of future volunteering intentions. One explanation for this could be the inclination of individuals with high BJW to blame the victim or needy people. When people attribute the distress of the victim or those in need to environmental factors rather than blaming the individual, particularly when offering assistance and committing to organized, long-term efforts, they are more inclined to express an intention to contribute to the well-being of the recipient in future endeavors. However, if individuals lean toward the belief that the distress of victims/needy people is a consequence of some form of justice in the world, the tendency to experience an increase in future volunteering intentions—following an increase in empathy—diminishes. Results providing support for this argument were documented in a prior study, where holding

the victim responsible for the situation reduced intentions to help of participants (Turner DePalma et al., 1999). Therefore, it can be concluded that the interplay between empathy and volunteering intentions becomes apparent under specific conditions and personality tendencies. In light of these findings, future research should explore whether contextual differences related to personal BJW amplify (or mitigate) the impact of empathy on the willingness to volunteer.

Furthermore, the current findings specifically indicate that an individual's personal BJW is related to empathy, whereas general BJW is not associated with empathy or volunteering intentions. These results underscore the importance of examining personal BJW in a particular context. The present findings are consistent with prior research (Correira et al., 2016; Guo et al., 2022), which frequently suggests that personal BJW is linked to prosocial behavior (Bègue, 2014; Bègue et al., 2008), while general BJW is tied to punitive actions (Kaiser et al., 2004). However, given the limited amount of research on this topic, future work is still needed to understand the potential reasons behind the distinct correlations observed among empathy, volunteerism intentions, and general and personal BJW.

This study has some limitations that should be addressed. One limitation is related to the sample characteristics, with a majority of participants being women, leading to insufficient representation due to the predominant inclusion of university students. While it is common for many psychology studies to focus on a similar participant group, this practice narrows the generalizability of the outcomes, requiring a cautious approach when interpreting findings. This study was announced multiple times across different platforms to increase the number of male participants; however, this effort was not successful. It is important to note that this is a significant limitation of the study and should be considered when interpreting the results. Furthermore, the data collection method in this study was online, which, in turn, prevents us from determining the extent to which participants were isolated from environmental distractions during participation. Additionally, we measured future volunteering intentions with three general questions. Incorporating more specific measurements related to volunteering intentions could offer more detailed information.

Beyond these limitations, the current study possesses several strengths. Notably, it includes both volunteer and non-volunteer participants, enhancing the scope of its insights. Additionally, by experimentally manipulating empathy, we have tested the causal role of empathic concerns—an aspect rarely explored in the realm of volunteering research. Thus, in the existing literature, we deem that this study has a potential to offer a valuable

perspectives for future work. For instance, findings underscoring the importance of individuals' BJW for fostering volunteerism by increasing empathy, potentially provide data-based input for applied research. Future applied research considers the possibly inhibiting role of BJW in increasing intentions toward volunteering.

Overall, the present results suggest that, instead of a direct influence of empathy on the willingness to volunteer, the interactions between increased empathy and BJW have the potential to enhance volunteering intentions among non-volunteers. We believe that these findings offer an insight to explore other social-psychological factors that may moderate the link between volunteering intentions and motivators of long-term altruistic behaviors.

Funding Türkiye Bilimsel ve Teknolojik Araştırma Kurumu, Project application no: 1919B012215948, Seval Aymila Soyoren

Declarations

Conflict of interest The authors report no conflict of interest in the present work. This study has been funded by TÜBİTAK—2209 Project in 2022/2 (Project application no: 1919B012215948).

Ethical Approval The study was approved by the Ethics Committee of Istanbul Medipol University and was conducted following the ethical standards of the 1964 Declaration of Helsinki. Informed consent was presented for all participants.

References

- Ackermann, K. (2019). Predisposed to volunteer? Personality traits and different forms of volunteering. *Nonprofit and Voluntary Sector Quarterly*, 48(6), 1119–1142. <https://doi.org/10.1177/0899764019848484>
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, white women. *Health Psychology*, 19(6), 586–592. <https://doi.org/10.1037/0278-6133.19.6.586>
- Anlı, G. (2019). Adaptation of the prosocial behavioral intentions scale for use with Turkish participants: Assessments of validity and reliability. *Current Psychology*, 38(4), 950–958. <https://doi.org/10.1007/s12144-019-00277-y>
- Aslan, H., & Tuncay, T. (2023). Assessing the motives of active volunteers: A Turkish perspective. *VOLUNTAS International Journal of Voluntary and Nonprofit Organizations*. <https://doi.org/10.1007/s11266-023-00619-2>
- Aydinli-Karakulak, A., Bender, M., Chong, A. M. L., & Yue, X. (2016). Applying western models of volunteering in Hong Kong: The role of empathy, prosocial motivation and motive–experience fit for volunteering. *Asian Journal of Social Psychology*, 19(2), 112–123. <https://doi.org/10.1111/ajsp.12125>
- Banissy, M. J., Kanai, R., Walsh, V., & Rees, G. (2012). Inter-individual differences in empathy are reflected in human brain structure. *NeuroImage*, 62, 2034–2039. <https://doi.org/10.1016/j.neuroimage.2012.05.081>
- Batson, C. D. (2017). The empathy–altruism hypothesis: What and so what. In E. M. Seppälä, E. Simon-Thomas, S. L. Brown, M. C. Worline, C. Daryl Cameron, & J. R. Doty (Eds.), *The Oxford handbook of compassion science* (pp. 27–40).
- Batson, C. D., Batson, J. G., Griffitt, C. A., Barrientos, S., Brandt, J. R., Sprenkelmeyer, P., & Bayly, M. J. (1989). Negative-state relief and the empathy–altruism hypothesis. *Journal of Personality and Social Psychology*, 56(6), 922–933. <https://doi.org/10.1037/0022-3514.56.6.922>
- Batson, C. D., Batson, J. G., Slingsby, J. K., Harrell, K. L., Peekna, H. M., & Todd, R. M. (1991). Empathic joy and the empathy–altruism hypothesis. *Journal of Personality and Social Psychology*, 61(3), 413–426. <https://doi.org/10.1037/0022-3514.61.3.413>
- Batson, C. D., Fultz, J., & Schoenrade, P. A. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality*, 55(1), 19–39. <https://doi.org/10.1111/j.1467-6494.1987.tb00426.x>
- Batson, C. D., & Weeks, J. L. (1996). Mood effects of unsuccessful helping: Another test of the empathy–altruism hypothesis. *Personality and Social Psychology Bulletin*, 22(2), 148–157. <https://doi.org/10.1177/0146167296222004>
- Baumsteiger, R., & Siegel, J. (2018). Measuring prosociality: The development of a prosocial behavioral intentions scale. *Journal of Personality Assessment*, 15, 1–10. <https://doi.org/10.1080/00223891.2017.1411918>
- Bègue, L. (2014). Do just-world believers practice private charity? *Journal of Applied Social Psychology*, 44(1), 71–76. <https://doi.org/10.1111/jasp.12201>
- Bègue, L., Charmoillaux, M., Cochet, J., Cury, C., & De Suremain, F. (2008). Altruistic behavior and the bidimensional just world belief. *The American Journal of Psychology*, 121(1), 47–56. <https://doi.org/10.2307/20445443>
- Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26(3), 439–454. <https://doi.org/10.1111/j.1467-9221.2005.00425.x>
- Bekkers, R. (2006). Traditional and health related philanthropy: The role of resources and personality. *Social Psychology Quarterly*, 69(4), 349–366. <https://doi.org/10.1177/019027250606900404>
- Bierhoff, H. W., & Rohmann, E. (2004). Altruistic personality in the context of the empathy–altruism hypothesis. *European Journal of Personality*, 18(4), 351–365. <https://doi.org/10.1002/per.523>
- Capra, C. M., Jiang, B., & Su, Y. (2021). Altruistic self-concept mediates the effects of personality traits on volunteering: Evidence from an online experiment. *Journal of Behavioral and Experimental Economics*, 92, 101697. <https://doi.org/10.1016/j.socsc.2021.101697>
- Carlo, G., Okun, M. A., Knight, G. P., & de Guzman, M. R. T. (2005). The interplay of traits and motives on volunteering: Agreeableness, extraversion and prosocial value motivation. *Personality and Individual Differences*, 38(6), 1293–1305. <https://doi.org/10.1016/j.paid.2004.08.012>
- Carpenter, J., & Myers, C. K. (2010). Why volunteer? Evidence on the role of altruism, image, and incentives. *Journal of Public Economics*, 94(11–12), 911–920. <https://doi.org/10.1016/j.jpu.2010.07.007>
- Chambré, S. M., & Einolf, C. J. (2008). Is volunteering work, prosocial behavior, or leisure? An empirical study. *Centre for Nonprofit Strategy and Management*.
- Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current Directions in Psychological Science*, 8(5), 156–159. <https://doi.org/10.1111/1467-8721.00037>
- Correia, I., Salvado, S., & Alves, H. V. (2016). Belief in a just world and self-efficacy to promote justice in the world predict helping

- attitudes, but only among volunteers. *The Spanish Journal of Psychology*, 19, 1–9. <https://doi.org/10.1017/sjp.2016.29>
- Correia, I., Vala, J., & Aguiar, P. (2001). The effects of belief in a just world and the victim's innocence on secondary victimization, judgments of justice, and deservingness. *Social Justice Research*, 14(3), 327–342. <https://doi.org/10.1023/A:1014324125095>
- Cuff, B. M., Brown, S. J., Taylor, L., & Howat, D. J. (2016). Empathy: A review of the concept. *Emotion Review*, 8(2), 144–153. <https://doi.org/10.1177/1754073914558466>
- Dalbert, C. (1998). Belief in a just world, well-being, and coping with an unjust fate. In L. Montada & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 87–105). Plenum Press.
- Dalbert, C. (1999). The world is more just for me than generally: About the personal belief in a just world scale's validity. *Social Justice Research*, 12, 79–98. <https://doi.org/10.1023/A:1022091609047>
- Dalbert, C. (2001). *The justice motive as a personal resource: Dealing with challenges and critical life events*. Boston: Springer Science & Business Media.
- Davis, M. H., Mitchell, K. V., Hall, J. A., Lothert, J., Snapp, T., & Meyer, M. (1999). Empathy, expectations, and situational preferences: Personality influences on the decision to participate in volunteer helping behaviors. *Journal of Personality*, 67(3), 469–503. <https://doi.org/10.1111/1467-6494.00062>
- De Caroli, M. E., & Sagone, E. (2014). Belief in a just world, prosocial behavior, and moral disengagement in adolescence. *Procedia-Social and Behavioral Sciences*, 116, 596–600. <https://doi.org/10.1016/j.sbspro.2014.01.263>
- Dogru, U. (2019). İşlevsel yaklaşım ile gönüllülük motivasyonlarının incelenmesi: Üniversite öğrencileri üzerine bir araştırma [Examining volunteering motivations with functional approach: A research on university students]. *Gençlik Araştırmaları Dergisi*, 7, 77–100.
- Einolf, C. J. (2008). Empathic concern and prosocial behaviors: A test of experimental results using survey data. *Social Science Research*, 37(4), 1267–1279. <https://doi.org/10.1016/j.ssresearch.2007.06.003>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/bf03193146>
- Fernandez, Y. M., Marshall, W. L., Lightbody, S., & O'Sullivan, C. (1999). The child molester empathy measure: Description and examination of its reliability and validity. *Sex Abuse*, 11(1), 17–31. <https://doi.org/10.1177/107906329901100103>
- Finkelstein, M. A. (2009). Intrinsic vs. extrinsic motivational orientations and the volunteer process. *Personality and Individual Differences*, 46, 653–658. <https://doi.org/10.1016/j.paid.2009.01.010>
- Gençöz, T. (2000). Pozitif ve negatif duygu ölçeği: Geçerlik ve güvenirlik çalışması [Positive and negative affect schedule: A study of validity and reliability]. *Türk Psikoloji Dergisi*, 15(46), 19–28.
- Göregenli, M. (2003). *Şiddet, kötü muamele ve işkenceye ilişkin değerlendirmeler, tutumlar ve deneyimler [Evaluations, attitudes, and experiences regarding violence, mistreatment, and torture]*. İşkencenin Önlenmesinde Hukukçuların Rolü Projesi Raporu. İzmir: İzmir Barosu Yayınları.
- Guo, Y., Chen, X., Ma, J., Li, Y., & Hommey, C. (2022). How belief in a just world leads to prosocial behaviours: The role of communal orientation. *Personality and Individual Differences*, 195, 111642. <https://doi.org/10.1080/02134748.2023.222917>
- Hafer, C. L., Bègue, L., Choma, B. L., & Dempsey, J. L. (2005). Belief in a just world and commitment to long-term deserved outcomes. *Social Justice Research*, 18(4), 429–444. <https://doi.org/10.1007/s11211-005-8569-3>
- Halis, M., Çamlıbel, Z., & Bükey, A. (2020). The effect of personality characteristics on volunteer motivation: A study on NGO employees in the COVID-19 pandemic process. *Revista Argentina De Clinica Psicologica*, 29(5), 922–934.
- Herne, K., Hietanen, J. K., Lappalainen, O., & Palosaari, E. (2022). The influence of role awareness, empathy induction, and trait empathy on dictator game giving. *PLOS One*, 17(3). <https://doi.org/10.1371/journal.pone.0262196>
- Jabari, N., Boroujerdi, S., Ghaeini, S., Abdollahi, F., & Karimi, G. (2012). Big-five personality traits predict sport volunteer satisfaction. *World Applied Sciences Journal*, 19(4), 445–450. <https://doi.org/10.5829/idosi.mejsr.2013.13.1.1168>
- Kaiser, C. R., Vick, S. B., & Major, B. (2004). A prospective investigation of the relationship between just-world beliefs and the desire for revenge after September 11, 2001. *Psychological Science*, 15(7), 503–506. <https://doi.org/10.1111/j.0956-7976.2004.00709.x>
- Klimecki, O. M., Mayer, S. V., Jusyte, A., Schieff, J., & Schöenberg, M. (2016). Empathy promotes altruistic behavior in economic interactions. *Scientific Reports*, 6(1). <https://doi.org/10.1038/srep31961>
- Kossowska, M., & Łaguna, M. (2018). Personality, job resources, and self-efficacy as predictors of volunteer engagement in non-governmental organizations. *Journal for Perspectives of Economic Political and Social Integration*, 24(1), 69–89. <https://doi.org/10.2478/pepsi-2018-0003>
- Lerner, M. J. (1980). *The belief in a just world*. In: *The belief in a just world. Perspectives in Social Psychology*. Springer, Boston, MA.
- Livi, S., De Cristofaro, V., Theodorou, A., Rullo, M., Piccioli, V., & Pozzi, M. (2019). When motivation is not enough: Effects of prosociality and organizational socialization in volunteers' intention to continue volunteering. *Journal of Community & Applied Social Psychology*, 30(3), 249–261. <https://doi.org/10.1002/casp.2446>
- Lönnqvist, J., & Walkowitz, G. (2019). Experimentally induced empathy has no impact on generosity in a monetarily incentivized dictator game. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2019.00337>
- Macduff, N. (2005). Societal changes and the rise of the episodic volunteer. *Emerging Areas of Volunteering*, 1(2), 49–61.
- McAuliffe, W. H. B., Carter, E. C., Berhane, J., Snihur, A. C., & McCullough, M. E. (2020). Is empathy the default response to suffering? A meta-analytic evaluation of perspective taking's effect on empathic concern. *Personality and Social Psychology Review*, 24(2), 141–162. <https://doi.org/10.1177/1088868319887599>
- Melchers, M. C., Li, M., Haas, B. W., Reuter, M., Bischoff, L., & Montag, C. (2016). Similar personality patterns are associated with empathy in four different countries. *Frontiers in Psychology*, 7, 290. <https://doi.org/10.3389/fpsyg.2016.00290>
- Miller, D. T. (1977). Altruism and threat to a belief in a just world. *Journal of Experimental Social Psychology*, 13(2), 113–124. [https://doi.org/10.1016/S0022-1031\(77\)80004-8](https://doi.org/10.1016/S0022-1031(77)80004-8)
- Montada, L., & Lerner, M. J. (Eds.). (1998). *Responses to victimizations and belief in a just world*. Boston: Springer Science & Business Media.
- Nowakowska, I. (2022). Volunteerism in the last year as a moderator between empathy and altruistic social value orientation: An exploratory study. *Current Issues in Personality Psychology*. <https://doi.org/10.5114/cipp.2021.108258>
- Overgaard, C. (2019). Rethinking volunteering as a form of unpaid work. *Nonprofit and Voluntary Sector Quarterly*, 48(1), 128–145. <https://doi.org/10.1177/0899764018809419>

- Paciello, M., Fida, R., Cerniglia, L., Tramontano, C., & Cole, E. (2013). High cost helping scenario: The role of empathy, prosocial reasoning and moral disengagement on helping behavior. *Personality and Individual Differences*, 55(1), 3–7. <https://doi.org/10.1016/j.paid.2012.11.004>
- Paterson, H., Reniers, R., & Völlm, B. (2009). Personality types and mental health experiences of those who volunteer for helplines. *British Journal of Guidance & Counselling*, 37(4), 459–471. <https://doi.org/10.1080/03069880903161419>
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58(3), 447–467. <https://doi.org/10.1111/1540-4560.00270>
- Penner, L. A., & Finkelstein, M. A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74(2), 525–537. <https://doi.org/10.1037/0022-3514.74.2.525>
- Penner, L. A., & Fritzsche, B. A. (1993). *Measuring the prosocial personality: Four construct validity studies*. American Psychological Association.
- Pithers, W. D. (1999). Empathy: Definition, enhancement, and relevance to the treatment of sexual abusers. *Journal of Interpersonal Violence*, 14(3), 257–284. <https://doi.org/10.1177/088626099014003004>
- Powell, P. A., Wills, O., Reynolds, G., Puustinen-Hopper, K., & Roberts, J. (2018). The effects of exposure to images of others' suffering and vulnerability on altruistic, trust-based, and reciprocated economic decision-making. *PLoS ONE*, 13(3), e0194569. <https://doi.org/10.1371/journal.pone.0194569>
- Rameson, L. T., Morelli, S. A., & Lieberman, M. D. (2012). The neural correlates of empathy: Experience, automaticity, and prosocial behavior. *Journal of Cognitive Neuroscience*, 24(1), 235–245. https://doi.org/10.1162/jocn_a_00130
- Rehberg, W. (2005). Altruistic individualists: Motivations for international volunteering among young adults in Switzerland. *VOLUNTAS International Journal of Voluntary and Nonprofit Organizations*, 16, 109–122. <https://doi.org/10.1007/s11266-005-5693-5>
- Spreng, R. N., McKinnon, C. M., Mar, R. A., & Levine, B. (2009). The Toronto empathy questionnaire: Scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of Personality Assessment*, 91(1), 62–71. <https://doi.org/10.1080/00223890802484381>
- Stocks, E. L., Lishner, D. A., & Decker, S. K. (2009). Altruism or psychological escape: Why does empathy promote prosocial behavior? *European Journal of Social Psychology*, 39(5), 649–665. <https://doi.org/10.1002/ejsp.561>
- Stolinski, A. M., Ryan, C. S., Hausmann, L. R., & Wernli, M. A. (2004). Empathy, guilt, volunteer experiences, and intentions to continue volunteering among buddy volunteers in an AIDS organization. *Journal of Applied Biobehavioral Research*, 9(1), 1–22. <https://doi.org/10.1111/j.1751-9861.2004.tb00089.x>
- Thomas, G., Fletcher, G. J. O., & Lange, C. (1997). On-line empathic accuracy in marital interaction. *Journal of Personality and Social Psychology*, 72(4), 839–850. <https://doi.org/10.1037/0022-3514.72.4.839>
- Tortumlu, M., & Uzunbacak, H. H. (2021). Genç gönüllülerin kişilik özelliklerinin prososyal motivasyonlarına etkisi [The effect of personality traits of young volunteers on their prosocial motivation]. *Pamukkale Üniversitesi İşletme Araştırmaları Dergisi*, 8(1), 101–114.
- Totan, T., Doğan, T., & Sapmaz, F. (2012). The Toronto empathy questionnaire: Evaluation of psychometric properties among Turkish university students. *Eğitim Araştırmaları-Eurasian Journal of Educational Research*, 46, 179–198.
- Turner DePalma, M., Madey, S. F., Tillman, T. C., & Wheeler, J. (1999). Perceived patient responsibility and belief in a just world affect helping. *Basic and Applied Social Psychology*, 21(2), 131–137.
- Van Lange, P. A., Schippers, M., & Balliet, D. (2011). Who volunteers in psychology experiments? An empirical review of prosocial motivation in volunteering. *Personality and Individual Differences*, 51(3), 279–284. <https://doi.org/10.1016/j.paid.2010.05.038>
- Veludo-de-Oliveira, T. M., Pallister, J. G., & Foxall, G. R. (2015). Unselfish? Understanding the role of altruism, empathy, and beliefs in volunteering commitment. *Journal of Nonprofit & Public Sector Marketing*, 27(4), 373–396. <https://doi.org/10.1080/10495142.2015.1080504>
- Wang, C., Fu, W., Wu, X., & Wang, Y. (2023). Just world beliefs and altruistic behaviors of college students during the COVID-19 pandemic: The mediating role of empathy. *Current Psychology*, 42(36), 32244–32254.
- Wardell, F., Lishman, J., & Whalley, L. J. (2000). Who volunteers? *British Journal of Social Work*, 30(2), 227–248. <https://doi.org/10.1093/bjsw/30.2.227>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Zuckerman, M. (1975). Belief in a just world and altruistic behavior. *Journal of Personality and Social Psychology*, 31(5), 972–976. <https://doi.org/10.1037/h0076793>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.