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Master Social Psychology

THESIS

Towards Making the World as Just as We Believe It Is:

The Effect of Power on Helping Innocent Victims.

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Abstract

Research on belief in a just world (BJW) has centered around negative reactions towards innocent victims. The current study is aimed at investigating what motivates people to help victims instead. Power has been related to behavioral activation and less deliberation as well as more risk taking and goal-directed behavior and decreased sensitivity to threats. An experiment was conducted to test the hypothesis that power can cause people to engage in more helping behavior in a BJW threatening situation. Results indicate that social power led males to help more than personal power did. Moreover, females showed opposite responses and the effects only occurred when BJW threat was high. Though no mediation was found, social power seemed to be related to a higher sense of control and composure and less strength and action. Also, females' self-esteem suffered under high BJW threat, while males' didn't. Furthermore, for high threat and personal power, helping was negatively correlated with felt responsibility. Differences between male and female helping behavior as well as mechanisms related to power and helping behavior in relation to BJW threat are discussed.

keywords: belief in a just world, social power, personal power, helping, innocent victims

Towards making the world as just as we believe it is: the effect of power on helping innocent victims.

From childhood onwards people learn from their parents that "who does good things, will receive good things in return." And in the same way bad people also get what they deserve, because "crime doesn't pay". This isn't such a crazy thought, given that we have a legal system and society socially monitors itself. However one cannot deny that the world is not a righteous place. Across the globe, wealth is unevenly distributed and daily there are many innocent victims of crime, hunger or disease while offenders often go unpunished. This tends to evoke different reactions in people. In an ideal world we would all try to help each other as much as possible, however the reality of the matter seems to be somewhat more complicated.

The question is what might explain this incongruence. In some cases, people simply lack certain resources required for helping a fellow human being in need, whether it be opportunity or physical means such as money. Though oftentimes this is not the case and it are psychological constraints that cause our inhibitions. There are a lot of situations where people have a choice to help another person, but fail to do so, while in other instances people do find the strength to help a victim. Finding out what drives people to actually help a person in need is key in order to understand and promote benevolent behavior. In order to figure this out it is also necessary to understand why people often don't help others when they have the chance.

A lot of these situations where help is needed are threatening to the potential helper, which discourages them to help. People generally have a need for balance in their lives. And as Leon Festinger in 1957 already showed when he first introduced his *theory of cognitive* dissonance, people will go to great lengths to relieve any disruption to this balance. Innocent victims pose a problem, as they form a threat to one of people's fundamental belief systems.

In 1980 Lerner presented *Just world theory*, which proposes that people have a fundamental need to believe that the world is a righteous place. Comparable to cognitive dissonance theory, people are committed to uphold this belief, even when confronted with the reality of indisputable injustice. According to just world theory there are several ways in which people are able to cope with an unjust world. By either actively or passively, knowingly or unknowingly addressing threats to their high held belief that the world is just, people are able to create or restore inner peace or balance.

The Belief in a Just World

Justice is a value people generally have a high regard for (Ellard, 2007). A sense of BJW develops in early childhood, as a mechanism to deal with absence of immediate gratification (Lerner, 1977). This way children gradually learn that according to principles of fairness or deservingness, they do not need to fear a delay of gratification. In adulthood this principle evolves to function as a mechanism to maintain cognitive stability. Believing the world is fair enables us to hope, trust, give and reciprocate (Lerner, 1980) because it allows us to assume we will not be disadvantaged when we do not deserve it. Because people dislike uncertainty they abide by a system or the status quo (Jost, Benaji, & Nosek, 2004). It helps to make a complex and vast world comprehendible and predictable. Adhering to a BJW allows people to not constantly having to ponder it. In a way it could be called a heuristic, which allows people to go on with their daily lives with little worry or thought to be spent on this matter, making room for other endeavors.

Apart from this cognitive aspect of the BJW effect, research has also shown that a higher BJW is related to feeling better and being able to better cope with stress (Furnham, 2003). This explains why even without thinking about it, people prefer to adhere to the BJW principle. Moreover, witnessing injustice causes a threat to the BJW. Because this causes negative affect, people adopt even irrational strategies to lift this threat.

There are different strategies for coping with an unjust world. One way is through compensatory rationalizations which, similar to cognitive dissonance theory, relies on rationalizations to relieve a threat to one's worldviews of justice (Gaucher, Hafer, Kay, & Davidenko, 2010). Another way people are known to cope with an unjust world is by immanent justice reasoning (Callan, Ellard, & Nicol, 2006), where causal links are unnecessary for accepting fairness or deservingness. However, probably the most alarming and seemingly counterintuitive strategy for relieving BJW threat is victim blaming and derogation (Hafer, 2000). A lot of research has focused on this strategy. Several studies have shown that when people are confronted with innocent victims, they blame and derogate these victims as a reaction to the threat to the BJW (for an overview, see Hafer & Bègue, 2005).

However on the other side of the spectrum, helping victims can also be a useful way of reducing BJW threat. Still little is known about this strategy. Therefore the challenge is finding what motivates or enables people to adopt this strategy, as it is – one could argue – the only actually positive and fair option of coping with injustice. That is, since it doesn't involve either ignoring something unpleasant or blaming innocent people for it, but rather entails accepting something negative and trying to make it better. Nevertheless, helping someone requires effort, will and opportunity. Since having means or resources to achieve something is related with power (Magee, Galinsky, & Gruenfeld, 2007), it may require an individual to be empowered in order to acquire this.

Power and Behavioral Activation

Definitions of power regularly center around the control over resources and social independence. According to Magee et al. (2007) power can be defined as "the capacity to control one's own and others' resources and outcomes." They argue that power is basically the opposite of dependence. Power has been studied in relation to several social psychological constructs. A number of aspects that have been related to power seem to hint at

a possible relation with helping behavior, even in a situation that is threatening to one's personal belief system.

First of all, power increases proactive behavior (Magee et al., 2007). This is crucial, because rather than passively blaming or derogating, helping someone requires action. Principally, because powerful people are less dependent on others for resources, they face less social constraints which potentially facilitates action (Galinsky, Gruenfeld, & Magee, 2003). Moreover, Keltner, Gruenfeld and Anderson (2003) proposed the *power-approach theory*, which suggests that power is related to approach and reduced power is related to inhibition. Possessing power activates the behavioral approach system (BAS) and deactivates the behavioral inhibition system (BIS). Conversely, a lack of power, or powerlessness activates behavioral inhibition.

Keltner et al.'s (2003) study furthermore showed that power is among others associated with positive affect and disinhibited social behavior, whereas reduced power is associated with negative affect, attention to threat and inhibition. Isen and Levin (1972) showed that feeling good led to helping behavior. Given that power can increase positive affect it is apt to expect that it could in turn also increase helping behavior.

The choice for helping a victim in a threatening situation instead of rationalizing away the threat may depend on the amount of deliberation that is concerned in this process. In their study Keltner et al. (2003) related power to automatic information processing, whereas reduced power is associated to more controlled information processing and more deliberation. In line with this reasoning, Galinsky et al. (2003) showed that people with power show lower levels of deliberation.

Galinsky et al. (2003) also found that power led to more risk taking. Anderson and Galinsky (2006) also showed that a sense of power causes people to perceive risks more optimistically and in turn leads them to engage in more risky behavior. Furthermore,

Galinsky et al. (2003) suggest that high-power individuals are more likely to engage in goal-directed behavior than low-power individuals. So next to reduced deliberation, power can actually cause people to venture into behaviors they would otherwise be inhibited to.

In line with these findings, Anderson and Berdahl (2002) found that participants who had control over resources were more likely to perceive rewards and less likely to perceive threats. Galinsky et al. (2003) consider even more studies that seem to confirm the notion that empowered individuals are more focused on acquiring rewards and are less sensitive to potential threats (Croizet & Claire, 1998; Zander & Forward, 1968; in Galinsky et al., 2003).

To sum up, these findings indicate that power causes people to take action and disregard potential risks. Empowered individuals tend to deliberate less about their actions and are primarily focused on achieving rewards. Furthermore, they are more optimistic and less concerned about threats. So far these findings seem to support the idea that power could be a defining factor in whether or not individuals choose to help innocent victims instead of responding negatively.

Mechanisms Underlying the Relationship Between Power and Prosocial Behavior

Power seems to have remarkable effects on human behavior. Galinsky, Magee, Gruenfeld, Whitson and Liljenquist (2008) explain this by proposing that power reduces the strength of the situation and increases the strength of the individual. This means that when people are empowered, they pay less attention to contextual influences and rely more on their own social value orientation. They posit that power is not only about being able to influence others, it also entails "the capacity to be *uninfluenced* by others."

A part of the effects of power may also be due to a sense of control it elicits. Fast et al. (2009) suggested that "the experience of power leads to an illusion of personal control." They argue that this *illusory control* leads power holders to believe that they have control over

matters even out of their reach. This sense of control might explain why power actually elicits deviant behaviors in individuals

Perceived control is related to self-esteem (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009). Next to the idea of being able to accomplish more, generally feeling better about oneself also influences people's reactions to certain situations. Greenberg et al. (1992) showed that self-esteem can function as a buffer for anxiety. In other words when people experience high self-esteem they experience less anxiety in response to threats. According to Pyszczynski, Greenberg, Solomon, Arndt and Schimel (2004) high levels of self-esteem do not only reduce anxiety but also defensive behavior related to anxiety. Harmon-Jones et al. (1997) showed that worldview defense as a response to mortality salience was lower for people with high self-esteem. Given that self-esteem serves as a protection against thoughts of mortality, it might also prove to be a protection against threats to other belief systems, like the BJW.

These findings seem to point at a relation between self-esteem and people's reactions to innocent victims. Moreover it is a mechanism that has been related to power. On these grounds it is expected that in certain cases the relationship between power and reactions toward innocent victims is mediated by self-esteem. Power is however by no means an unequivocal concept and is likely to be driven by different mechanisms.

Differentiating Social and Personal Power

Lammers, Stoker and Stapel (2009) argued that there are two kinds of power. They differentiated social power and personal power. Social power being "the ability of a person to influence others and make them do things they would not do otherwise". On the other hand personal power is "the ability to do and get what you want, without being influenced by others". Social power is therefore associated with interdependence and responsibility, whereas personal power is associated with independence and freedom. Lammers et al. argue

that social and personal power can have opposite effects, though only when the distinction between independence and interdependence is relevant. For example they found opposite effects of stereotyping for social and personal power, but found parallel effects on behavioral approach.

The distinction between independence and interdependence has been shown to be relevant in relation to reactions toward innocent victims. However, this has been investigated with self-construal rather than power. Van Prooijen and Van den Bos (2009) found that social or interdependent self-construal was associated with victim blaming when BJW threat was high, whereas individual or independent self-construal was not. However, Howard and Thompson (2007) also found that empowered individuals with an interdependent self-construal (as opposed to independent) were likely to exhibit more benevolent reactions toward others. Duval, Duval and Neely (1979) argued that self-focus increased felt responsibility for victims which led to more helping behavior.

It seems that interdependence is associated with stronger reactions to others, which could be explained by a heightened sense of responsibility. When confronted with someone in need of help, feeling responsible for that person increases the urgency of the threat and therefore the strength of the reactions. This can find expression in either helping (Howard & Thompson, 2007) or blaming (Van Prooijen & Van den Bos, 2009).

Power and Social Distance

The findings on power in relation to reactions to victims can be ambiguous. Though a lot of these findings suggest that power could have a positive effect on helping behavior, there are also findings that could be interpreted differently. For example several studies show that power is associated with a lack of empathy, increased social distance and or objectification of people (Lammers, Galinsky, Gordijn, & Otten, 2012; Lammers & Stapel,

2010; Galinsky, Magee, Inesi, & Gruenfeld, 2006; Gruenfeld, Inesi, Magee, & Galinsky, 2008).

A reasonable expectation would be that this would lead to less compassion for someone else and would therefore result in less helping. Under normal circumstances this is very probable. However the current study aims to investigate what effect certain types of power have on helping behavior in particularly threatening situations. As has already been discussed, it is highly likely that power can effectively lower this threat or cause people to ignore it more, making helping a more viable option. Additionally, the fact that power decreases empathy may very well in fact contribute to the process of lowering BJW threat. After all, higher empathy means more shared feeling – and since the subject is an innocent victim – these shared feelings can be very threatening. On the other hand not feeling for the victim as much might therefore make it easier not to be frightened by the situation and to positively act upon it.

Furthermore Cialdini et al. (1987) argue that empathy-based helping isn't altruistically motivated but rather serves a selfish desire to relieve one's own sadness which is heightened by empathy. This also supports the idea that empathy doesn't need to lead to more helping in threatening situations. That is, empathy doesn't increase the desire to selflessly help someone, but merely increases personal threat and thereby the need for action.

The Current Research

The current research aims to investigate benevolent reactions towards innocent victims. While there is an abundance of research focusing on negative reactions towards innocent victims as a consequence of a threat to one's BJW, still little is known about helping victims as a means of coping with an unjust world. Due to the findings on the relationship between power and approach motivation, as well as power being associated with less deliberation and less sensitivity to threats, the author proposes a possible relationship

between power and helping behavior. Furthermore it is expected that different levels of self-esteem, self-efficacy and responsibility could account for this relationship. Specifically it is expected that 1) social and personal power are associated with more helping behavior toward an innocent victim than powerlessness, 2) this effect only occurs in a high BJW threat situation, as opposed to a low BJW threat and 3) this effect is mediated by self-esteem, self-efficacy and/or a sense of responsibility.

Method

Participants and design

A total of 97 participants took part in the study. The participants solely consisted of University students in Utrecht. 10 Participants were excluded from analysis because they were already familiar with the BJW manipulation which had been used in a pre-test. In the end this resulted in a population of 87 participants of which 48 were female and 39 were male. Their ages ranged from 17 to 50 years (M = 23.15, SD = 6.04). Participants were randomly assigned to one of the conditions of the 3 (power: personal power vs. social power vs. powerless) x 2 (BJW Threat: high threat vs. low threat) factorial design. Two separate participant lists were used for assigning male and female participants to ensure an equal division of male and female participants across the conditions.

Procedure and materials

The experiment was run for two weeks in a laboratory at Utrecht University. During the first week it was part of a chunk with two other fifteen-minute studies in front of it, for which participants could either receive a course credit or six Euros. In the second week the experiment was run after one fifteen-minute study, earning participants either a half course credit or four Euros.

After participants signed in they were escorted to an isolated computer booth where the experiment was run. The experimental procedure consisted of a series of tasks

participants had to complete on a computer. The first part of the experiment comprised the power manipulation. Participants completed an adapted version of the experimental power primes used by Lammers et al. (2009). In the social-power condition participants received the following instructions (translated to dutch):

"Please recall a situation in which you had power over one or more individuals, meaning a situation in which you controlled or directed other people. This means that you could determine what these people would get or what they had to do"

In the personal power condition participants received the following instructions:

"Please recall a situation in which you had personal power, meaning a situation in which you had the possibility to make your own decisions, independent of the influence of others. This means that you could decide what you would get or had to do."

In the powerless condition participants received the following instructions:

"Please recall a situation in which someone else had power over you, meaning a situation in which someone controlled or directed you. This means that this person could decide what you would get or what you had to do".

After completing the task participants were redirected to an ostensibly unrelated section of the study. This part of the experiment consisted of the BJW threat manipulation.

When a victim is proximal to a person, reaction toward that victim are harsher than when the

victim is more distal, indicating a higher BJW threat (Bal & Van den Bos, 2010). Therefore, participants were asked to carefully read a report about "Bas Verhoeven", a student from either Utrecht University (high threat) or the University of Groningen (low threat) who had gotten in an accident. The fictional story said that Bas was jogging in his hometown while listening to music when he got hit by a car. The injuries were so severe that they substantially set him back in his study. At the end of the entire experiment participants were informed of the fictional nature of the story and asked not to reveal this to others.

Following the experimental procedures participants were told that they could help Bas by doing math exercises in order to generate money for a fund for Bas. This procedure is based on the charity initiative "freerice.com" (a website where people can answer questions in order to generate rice grains which will be donated to people in third world countries). The exercises were simple adding, subtracting, multiplying or dividing calculations which started very simple and got increasingly more difficult. Participants were instructed that for every two calculations they answered correctly they would raise 5 cents for the fund. On the screen there was a counter keeping track of the money that had been raised by the participant up to that point, starting at zero Euros. At any point participants had the option to either continue doing calculations or to stop and move on to the next part of the experiment.

When participants decided to stop they then had to answer a number of questions on a seven-point likert scale ($1 = totally \ disagree$, $7 = totally \ agree$). In order to measure self-esteem the Dutch version of Rosenberg's Self-Esteem Scale (RSES) (Rosenberg, 1965) was utilized. The General Self-Efficacy Scale (GSES) (Schwarzer & Jerusalem, 1995) was used to measure participant's self-efficacy. An additional item "I feel responsible for others" was added to measure sense of responsibility. The RSES consisted of 10 items ($\alpha = .86$). The GSES consisted of 10 items ($\alpha = .19$). Exploratory factor analysis revealed that the GSES measured two underlying constructs and was therefore split into two subscales of 5 items

each. In the first subscale (α = .88) the focus lies mostly on strength and action, for example: "If someone opposes me, I can find the means and ways to get what I want", whereas the second subscale (α = .84), is characterized by a sense of control and composure, for example: "I can usually handle whatever comes my way".

Results

Due to the limited number of participants, marginal results are also discussed. To test the hypotheses, we analyzed the amount of money participants generated for the innocent victim (or the amount of correct answers participants gave) and how much time they spent on doing the exercises. A GLM on 'money' and 'time' was conducted, with 'power' and 'BJW threat' as independent variables. This showed no significant results, however, a three-way interaction of BJW threat, power and sex yielded a significant effect on time F(2, 75) = 3.63, p = .03, $\eta_p^2 = .09$ indicating that the manipulations did affect the outcome variable, however differently for males and females.

Post hoc analyses revealed that when BJW threat was high, males in the social power condition (M = 921.57, SD = 776.86) spent significantly more time on doing the exercises than males in the personal power condition (M = 341.25, SD = 431.39), p = .05, as can be seen in figure 1. Also, males in the social power condition spent significantly more time on doing the exercises when BJW threat was high (M = 921.57, SE = 226.904) than when BJW threat was low (M = 278.27, SE = 169.12), F(1, 33) = 5.17, P = .03, $\eta_P^2 = .14$. For females the difference between social power (M = 130.26, SD = 114.27) and personal power (M = 429.05, SD = 566.36) when BJW threat was high was not significant P = .13, but does seem to point to a trend opposite to the effect found for males. Females in the social power condition spent marginally more time on doing the exercises when BJW threat was low (M = 481.59, SE = 154.79) than when BJW threat was high (M = 130.26, SE = 119.90), F(1, 42) = 3.22, P = .08, $\eta_P^2 = .14$ again indicating an opposite effect compared to males.

When males and females are directly compared, analysis shows that when BJW threat is high, in the social power condition males (M = 921.57, SE = 213.65) spent significantly more time on doing the exercises than females (M = 130.26, SE = 151.07), F(1, 39) = 9.42, p = .004, $\eta_p^2 = .19$. In addition, in the powerless condition males also spent marginally more time doing exercises (M = 626.18, SE = 180.57) than females (M = 188.66, SE = 159.24) when BJW threat was high F(1, 39) = 3.30, p = .08, $\eta_p^2 = .08$. Moreover, in the social power condition males also raised significantly more money for the victim (M = 2.70, SE = 0.50) than females did (M = 0.82, SE = 0.35), F(1, 39) = 9.15, p = .004, $\eta_p^2 = .19$, as can be seen in figure 2.

Mediation Analysis

In order to investigate whether the direct effect was mediated by one or more of the mechanisms included in the questionnaire, mediation analysis for multicategorical independent variables by Preach and Hayes (2013) was used. However, neither self-esteem, self-efficacy nor responsibility seemed to significantly account for the effect of the three-way interaction on time.

Nonetheless there were a few notable direct effects of the independent variables on the mediator variables. The power manipulation had a significant effect on strength and action self-efficacy F(2, 75) = 3.72, p = .03, $\eta_p^2 = .09$ and a marginal effect on control and composure self-efficacy F(2, 75) = 2.25, p = .11, $\eta_p^2 = .06$. Post hoc analyses indicated that participants in the social power condition scored significantly lower on strength and action (M = 5.31, SD = 0.80) than participants in the personal power condition (M = 6.04, SD = 0.77), p = .009 and marginally lower than participants in the powerless condition (M = 5.75, SD = 1.27) p = .10. Oppositely, participants in the social power condition scored marginally higher on the control and composure (M = 3.33, SD = 1.01) than both participants in the personal power condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21), p = .07 and the powerless condition (M = 2.70, SD = 1.21).

2.71, SD = 1.57), p = .07. So remarkably social power, which mostly influenced effort to help the innocent victim is associated with less strength and action, but with more control and composure.

Furthermore there was an interaction effect of BJW threat and sex on self-esteem F(, 75) = 4.07, p = .05, $\eta_p^2 = .05$. Regarding this interaction effect, post hoc analysis revealed that in high-threat, males scored significantly higher on self-esteem (M = 5.28, SE = 0.19) than females (M = 4.73, SE = 0.17), F(1, 75) = 4.63, p = .04, $\eta_p^2 = .06$. Furthermore, females scored significantly lower on self-esteem when BJW threat was high (M = 4.73, SE = 0.17) than when BJW threat was low (M = 5.27, SE = 0.18), F(1, 75) = 4.87, p = .03, $\eta_p^2 = .06$. These results seem to indicate that males were to a lesser extent intimidated by a higher BJW threat than females were.

Next to the effects of the independent variables on the mediator variables, there are also some noteworthy correlations between the dependent variables and the mediator variables. In high BJW threat there is a negative correlation between time and responsibility r(43) = -.31, p = .04 and between money and responsibility r(43) = -.33, p = .03. These negative correlations also occur in the personal power condition, where responsibility is negatively correlated with time r(25) = -.52, p = .006 and money r(25) = -.52, p = .005.

In the interaction between high threat and personal power, the correlations between responsibility and time r(12) = -.78, p = .001 and money r(12) = -.86, p < .001 become even stronger. Furthermore this interaction shows a positive correlation between control and composure self-efficacy and money r(12) = .59, p = .03 as well as time r(12) = .75, p = .002.

A three-way interaction of males, high threat and personal power again shows an increased negative correlation between responsibility and both time r(6) = -.98, p < .001 and money r(6) = -.92, p = .001. Also the positive correlations between control and composure and time r(6) = .92, p = .001 and money r(6) = .84, p = .009 are stronger in the three-way

interaction. Additionally, this interaction reveals a negative correlation between strength and action self-efficacy and time r(6) = -.79, p = .02 and money r(6) = -.72, p < .05.

These results indicate that for males experiencing personal power under high threat — who helped less than those experiencing social power — more helping is related to a reduced feeling of responsibility towards the victim. Additionally this condition is related with more control and composure and less strength and action, comparable with social power, however only as participants engaged in more helping behavior. Nevertheless, no causality can be deduced from these correlations.

Discussion

The results seem to indicate that in some cases, power does indeed influence helping behavior towards an innocent victim. However, unexpectedly the effects in this study were different for men and women. Most notably, when BJW threat was high, in advance recalling a social power experience caused men to spend more time helping the victim than recalling a personal power experience did. For women on the other hand, this effect seemed to function completely the other way around. Moreover, men who had recalled a social power experience spent longer helping the victim in a high-threat scenario than in a low-threat scenario (consistent with the hypothesis), while again for women this effect was reversed. In addition to these differences, comparing men and women directly also showed that in the high-threat situation, men helped the victim more than women when primed with either social power or powerlessness.

In general the results seem to suggest that a sense of social power positively influences men to engage in helping behavior in a threatening situation. This effect doesn't seem to apply to women. If anything, being primed with power seems to discourage them to engage in helping behavior in a threatening situation. A possible explanation for this issue could be that men respond more strongly to power in a threatening situation, while women

may be discouraged or overwhelmed by the combination of power salience and situational threats. It is very conceivable that men are motivated by different factors than women when it comes to helping behavior and the results of this study seem to point in that direction.

Indeed according to Eagly and Crowley (1986) the male gender role promotes "heroic and chivalrous" helping behavior, while female helping behavior is characterized by being "nurturant and caring". This could explain why men and women are motivated by different factors to help others, why they adopt different means of helping others or why they engage in helping in different situations. In addition, male helping behavior is more short-term in nature while female helping behavior is typically long-term, making it harder to highlight in experimental research.

Next to the gender difference, the current research interestingly brought forward a difference between social and personal power with regard to helping responses in a BJW threatening situation. Males in particular seem to be more inclined to help an innocent victim in a high threat situation when primed with social power, though not when primed with personal power. It is possible that social power elicited a more social construal, resulting in more attention to others and therefore more action directed at others. In this case it would merely be the personal or social self-construal, or independence and interdependence, that accounted for the different reactions. Though when Lammers et al. (2009) differentiated social and personal power they posited that social power is related to being able to influence others, whereas personal power is about being able to influence one's own outcomes. The currently investigated situation was purely directed at influencing someone else's outcome, conceivably explaining why only social power would affect helping behavior in this kind of situation. This interpretation would indicate that it is not just a general sense of experiencing power which influences people to help innocent victims, but that specifically a sense social power is needed to achieve this.

As to the underlying mechanisms causing power's influence on helping victims the current research fails to provide a decisive answer. None of tested constructs mediated any of the significant results. However, some direct effects were found, suggesting that the manipulations did have some influence on the way people viewed themselves.

Mainly, social power led to lower strength and action but higher control and composure than personal power and powerlessness did. This is interesting, as social power is the condition where the strongest differences were found, both between high and low threat as well as between males and females. Even though these effects weren't significantly mediated by these constructs, it is noteworthy that social power caused participants overall to experience more control and composure and less strength and action, however this only caused men to help more and only when BJW threat was high. This seems to indicate that social power activated the same self-efficacy concepts for both males and females but elicited different helping responses, again indicating that men and women are motivated differently to help.

Furthermore males seemed to be affected less by the high BJW threat, which might also help to explain why they were more inclined to help. It is possible that they were less scared off by the fictional threatening scenario and thereby faced less constrains for helping the victim.

Lastly, the correlations seem to indicate that personal power, like social power is related to more control and composure and less strength and action, though only when participants engaged in more helping behavior. It is possible that participants in this condition that did engage in helping behavior were motivated in the same way participants in the social power condition were. However those who engaged in less helping behavior, possibly because they didn't feel able to actually influence the situation, didn't experience this heightened sense of control and composure and reduced sense of strength and action.

The more males under high threat experiencing personal power helped the innocent victim, the less they indicated they felt responsible. It is remarkable that this effect only occurs for personal power and not social power, which elicited most helping. This could be explained by the fact that participants that helped less possibly didn't feel like they could actually contribute anything to the situation, however this did cause them to be left with an unresolved heightened feeling of responsibility. It is possible that the act of helping the victim influenced participants' felt responsibility. Though causality can in no way be verified, it is conceivable that for those who did seize the opportunity to help, the act of helping might have worked cathartically, in turn relieving their personal sense of felt responsibility.

Limitations

Due to circumstances while gathering the data for this study the number of participants is limited. The laboratory where the experiments were conducted was shared with other experimenters and participants were divided across the different studies.

Nevertheless, despite the limited sample and lack of power, the study yielded several significant and marginal effects. Even the marginal and some of the non-significant results, though not significant, seem to indicate probable trends.

There is the possibility that participants questioned the credibility of the story they read about the innocent victim. This could possibly influence their subsequent reactions. Whenever participants are aware that they are participating in an experimental procedure, even without knowing what is being manipulated, it is sensible to assume that some may be skeptical. However, several similar stories have been utilized before in different studies, yielding proper results (see Bal & Van den Bos, 2010; Bal & Van den Bos, 2012). Therefore, there is no apparent reason for disregarding the current results on this account.

A factor that should be considered, is the fact that the subject of the victim story is male, rather than female. The different reactions of males compared to females have been

considered in this study to be a result of the respective different reactions resulting from power and threat situations. However it is also conceivable that these differences are (at least in part) due to the gender of the victim. If this is indeed the case, similar scenarios featuring a female subject should expectedly yield different results. Future studies could be conducted to try to either rule out or confirm this possibility.

The experiment was conducted as the final part of a bigger chunk, meaning that every participant had participated in one or more other studies right before starting the current one. It was required that this study was conducted at the end, allowing for participants to spend as long as they wanted on the calculations task. Ideally participants are to be influenced as little as possible before entering an experiment, yet the current circumstances were inevitable. However, the different studies were clearly separated and it was made clear that they were unrelated and to be treated as such.

Future Research and Implications

Future research on this subject should focus on further disentangling the interaction between power, BJW threats and helping behavior. The current results show some interesting effects, though remain inconclusive as to exactly how these effects work. More information is needed to find out precisely when these effects occur and what they are dependent on. What could be beneficial for explicating the effects is testing more related constructs for mediating or moderating the found effects, in order to figure out exactly which mechanism causes them. This information could help to come to a better understanding of the influence power has on people in BJW threatening situations.

Furthermore different dependent variables should be explored. Finding new ways to facilitate helping victims could possibly yield even stronger effects. For example, the current sample consisted of higher education students, who are likely to be at least moderately proficient at doing calculations. People with a lower education or lesser calculating skills

would probably perform very differently. Other ways of helping should therefore be tested for diverse populations to increase external validity.

If the results presented in this study indeed prove to be consistent across studies this could have important implications for our understanding of the belief in a just world. Finding out what motivates people to help one another, even in threatening situations that tend to elicit harsh reactions, is an important step in creating more fairness in the world. At least, it could lead to reduced blaming of people who don't deserve it and instead facilitate more help to people who could use and deserve it. As soon as we find out exactly what drives people to behave in this fashion, society can respond to this by providing informational campaigns or adapting educational programs. Ultimately society could work on making the world almost as just as its inhabitants like to believe that it is.

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Appendix

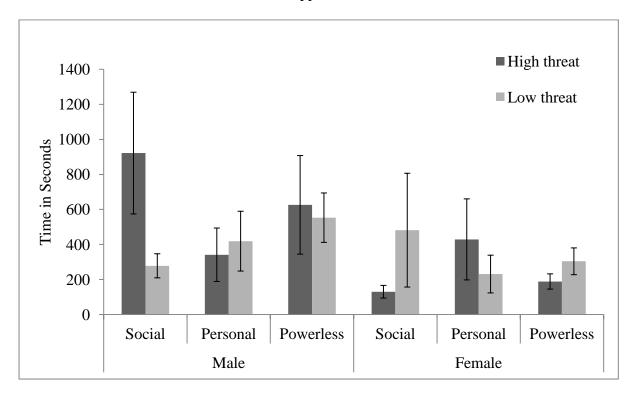


Figure 1. Mean time spent on doing calculations for the victim as a function of BJW threat and power manipulation. Error bars represent standard errors.

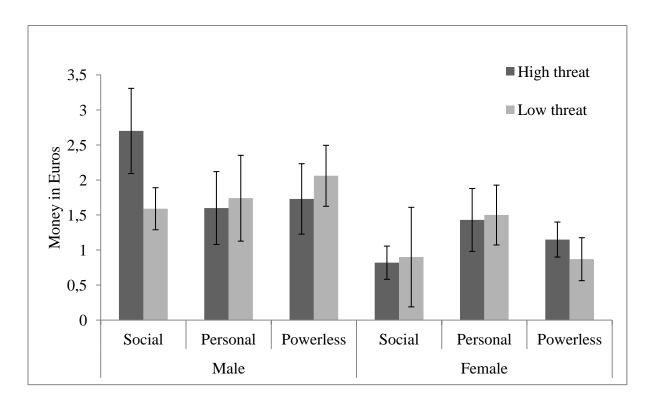


Figure 2. Mean amount of money raised for the victim by doing calculations as a function of BJW threat and power manipulation. Error bars represent standard errors.