# The Relation of Moral Conviction and Moral Obligation to Collective Action

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Group 1

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### **Abstract**

A link between people with moral convictions (i.e. a belief in the fundamental right or wrong of an issue) and their increased likelihood to engage in collective action has been shown in previous studies. Similar effects have been found relating moral obligation (i.e. a sense of duty to act on a moral belief) to collective action. The goal of this paper is to replicate these effects and furthermore explore the influence moral obligation has on the relationship between moral conviction and collective action. First year university students (N = 227) were provided with a questionnaire that included measures for the three constructs of moral conviction, moral obligation and collective action intention. Results of the correlation study indicated in line with our assumption that moral conviction predicted collective action. Moral obligation also predicted collective action. Moderation analysis however did not show an influence of moral obligation on the relationship between moral conviction and moral obligation. Theoretical implications discuss the place that moral convictions and moral obligations could take in future theory development on collective action behavior.

Keywords: moral conviction, moral obligation, collective action, obligation, duty, social activism

# The Relation of Moral Conviction and Moral Obligation to Collective Action

In 1934 a classic study by LaPiere showed that attitudes and behavioral intentions of hotel owners with regards to foreigners in his time did often not tend to correspond with their actual behavior. Since then, the apparent disconnect between people's attitudes and beliefs about a particular issue and their actual behaviour has been repeatedly thematized in the research literature<sup>1</sup>(e.g., Burhans, 1971; Ajzen & Fishbein, 1977). Though moral attitudes tend to have higher correlations with behavior compared to other types of attitudes(Skitka, 2021; Luttrell et al., 2016), this disconnect still extends to some degree to actions based on our moral attitudes, as thematized for example by Blasi(1983). Improving our ability to study the conditions under which moral attitudes translate into group-based action remains of significance in today's rapidly evolving world. Social movements, such as the Iranian and international feminist protests after the death of Mahsa Amini<sup>2</sup> serve as reminders of the profound impact that collective action driven by moral convictions can have. This study investigates whether and when moral convictions relate to collective action. Particularly, we examine whether moral obligation moderates this relationship. By analysing the interplay between these three factors, we aim to deepen our understanding of the conditions that enhance or hinder the translation of moral attitudes into group-based action.

### **Moral Conviction**

Attitudes in general are defined as dispositions to respond favourably or unfavourably to objects, people, institutions, or events (Ajzen, 1988). Attitudes based on moral convictions differ in important ways from other types of attitudes. Skitka et al.(2005) have used a

The degrees of specificity in questionnaires used to measure attitudes is shown to be a methodological factor that can influence the extent of this discrepancy(Ajzen & Fishbein, 1977).

The protests started after the Iranian citizen Mahsa Amini was arrested for incorrectly wearing the hijab and died in police custody under suspicious circumstances. It caused a long lasting civil uproar in Iran with over one hundred protesters arrested and killed(Al Jazeera, 2022).

framework inspired by social domain theory (e.g., Nucci, 2001; Turiel, 1998) to draw these distinctions. Accordingly, there are three sub-types of attitudes: Those based on a) preference, b) convention and c) moral convictions. a) *Attitudes based on preferences* are considered by its holders to be a matter of taste and people tend to be accepting of others whose preferences diverge from their own. b) *Attitudes based on conventions* relate to situations that are seen as normatively rather than inherently moral. An example would be the side of the road someone is driving on – while people do not tolerate violation of that rule, they know that a different arrangement would be also work, if everyone kept to it. It is thereby not seen as a universal rule. c) *Attitudes based on moral convictions* represent an individuals fundamental beliefs about right and wrong (Skitka et al., 2005). In contrast to the previous attitude-types, moral convictions are seen by its holders as both objective and universal facts. People furthermore hold onto them independently of potentially differing views of their peers (Skitka et al., 2002; Skitka et al., 2005; Shweder, 2002).

To gain a comprehensive understanding of moral convictions and their role in driving collective action, it is important to explain some of these defining characteristics. Firstly, moral convictions include the assumption of a moral judgements cross-situational and universal validity (Morgan & Skitka, 2020). People who are morally convinced of gender equality for example will most likely have that conviction in different areas of life, such as supporting gender equality in relationship and in work life. Secondly, people tend to experience their moral convictions as an objective fact about the world (Shweder, 2002). This implies that a morally convinced individual might assume that everyone else can be persuaded to share their "correct" way of looking at that moral issue (Haidt et al., 2003). Thirdly, moral convictions are characterised by strong emotional responses that accompany them, such as fear, anger, love, compassion, guilt, shame, and disgust (Skitka & Wisneski, 2011; Skitka et al., 2021). While non-moral attitudes also have affective components, the

intensity of emotional responses are generally weaker in comparison to moral convictions (Skitka et al., 2005).

### **Moral Convictions and Collective Action**

Collective actions can be defined as any action that is engaged in as a representative of a group, with the goal of enhancing the group's circumstances (Wright et al., 1990).

Research has shown people with strong moral convictions to have an increased likelihood to engage in collective actions on issues relating to their convictions. Protest behavior and signing petitions for a good cause are examples of collective actions that have been studied in this regard (Skitka et al., 2005; Morgan, 2011; Van Zomeren et al., 2012). Multiple theoretical mechanisms that have been discussed to be leading to this connection.

One approach suggests moral convictions to lead people to collective action due to its connection to group identification (Van Zomeren et al., 2012). Morality tends to bind individuals into ideological teams (Haidt, 2001), because it motivates them to care for issues that are often connected to a shared community of people (Haidt & Kesebir, 2010). Group membership in turn promotes active collaboration and mutual reinforcement on issues of the shared conviction (Carnes et al., 2022). These aspects are emphasized in the Social Identity Model of Collective Action(Van Zomeren et al., 2008). The model is based on studies that have shown strong social identification to provide the basis for perceiving group-efficacy, as well as an providing groupmembers with an increased proclivity to experience group-based anger when facing injustice (Hasan-Aslih et al., 2020). Both group-efficacy and anger are predictors of collective action, and since moral convictions can in many cases be closely connected to a social identity, their violation tends to fuel the salience of that identity(Fisher, 2006; van Zomeren et al., 2012; Hasan-Alsih et al., 2020) as well as the emotional investment of group members and thereby energise collective action(Van Zomeren et al., 2012). The tendency of violated moral convictions to lead to anger is in itself a factor that ties it to

(collective-) action (Skitka & Wisneski, 2011; Skitka, 2021). Another potential mechanism of how moral convictions can drive people to collective action is the need for self-consistency (Festinger, 1962; Higgins, 1987). According to Higgins, people feel uncomfortable if they deviate from how they see themselves and what they value. People with high moral ideals or convictions would perceive these deviations more often and more strongly. In turn, they decrease the difference to their ideal self by way of value-consistent action, which can evoke pride and satisfaction (Higgins, 1989).

### The Moderating Role of Moral Obligation

There are other interesting directions from which the connection between moral conviction and collective action can be explored. A potential role of moral obligation as a moderator between the two variables may be a promising avenue for new insights in this regard. Moral obligation has previously been defined as "a personal decision to participate in a specific collective action based on the belief that this is what should be done" (Vilas and Sabucedo, 2012, p. 371). The concept goes back to Kant's seminal work on the categorical imperative (1786/1947), which constitutes an objective principle that must be followed, regardless of consequences, individual's desires or circumstances (Cureton & Hill, 2017; Sabucedo et al., 2018). Moral Obligation includes five sub-components, namely a sense of obligation, autonomy, personal satisfaction, discomfort, and sacrifice (Sabucedo et al., 2018). While it shares similar elements to moral conviction such as its ties to an individuals autonomy and emotionality, moral obligation as a concept is more geared towards action, a "motivational force" rather than a conviction or belief (Sabucedo et al., 2018). Two elements of moral obligation that particularly emphasize this difference are that of obligation and sacrifice. The element of obligation reflects the need to comply with one's own moral standards and codes of conduct. The emphasis here is not on the outcomes of the action, but

rather on the conviction that one has to act on what is morally right (Vilas & Sabucedo, 2012)<sup>3</sup>. The element of sacrifice furthermore emphasizes that individuals act on moral obligations even despite potentially high personal costs.

Following this, I reason, that people with a strong sense of moral obligation will have a higher then average association between moral conviction and collective action. While those scoring lower in moral obligation can have moral convictions and feel strongly about an issue, they might be more likely to refrain from collective action for reasons such as low perceived efficacy of the related social group (e.g. Van Zomeren et al., 2012), lack of hope (Cohen & Van Zomeren, 2018), perceived risk related to the protest behavior, and other cost-benefit evaluations (Ganovetter, 1978; Vilas & Sabucedo, 2012). Those with a high sense of moral obligation on the other hand should be more likely to turn their moral convictions into collective action regardless of such circumstances, because their sense of obligation, sacrifice, and emotional pressure to act, demand them to.

### The Current Research

The current study aims to explore the relationship between moral conviction and collective action, with a particular focus on the potential moderating effect of moral obligation. We hypothesize that 1) moral conviction is positively associated with collective action, and that 2) moral obligation is positively associated with collective action and 3) a sense of moral obligation would moderate the association between moral conviction and collective action. That is, the relationship between moral conviction and collective action would be stronger for individuals who score high on moral obligation, compared to those who score low. The study will examine these hypotheses in the context of the 2022 protest movement in Iran, and the issue of moral conviction is gender inequality.

Similar to what was previously written, this compulsion to act is underpinned emotionally by the desire to stay consistent with ones self-image – non-action on a moral obligation leading to distress, caused by a felt discrepancy between an individuals actual and ought self(Higgins, 1987, 1989).

### Method

# **Participants and Design**

Two hundred twenty-seven first year psychology bachelor students at the University of Groningen participated in an online study via Qualtrics. Participants received 0.4 SONA credits for participation. Our sample consisted of 52 males, 171 females, and 4 reported other gender affiliation, and the age ranged between 17 and 35 years (M = 20.08, SD = 2.11). Of the 227 participants, 139 were from the Dutch bachelor program, and 83 were from the English bachelor program. We used a correlational study design with the dependent variable being collective action, the independent variables being moral conviction, and moral obligation as being the moderator.

### **Procedure**

The study was approved by the Ethics Committee of the Faculty of Behavioural and Social Sciences at the University of Groningen. Participants were recruited via SONA, an internal participant database of the University of Groningen. Participants were asked to provide informed consent and we collected and analysed their data according to General Data Protection Regulations. All questions were in English

In the first part of the study, participants answered questions about their attitudes and moral convictions about different societal issues, namely, gender equality, racial inequality and their opinion on human-made climate change. However, these latter two issues were used only as filler questions, and our target issue of moral conviction was gender equality. In the second part of the study, participants received some information about 2022 Iranian protests. Specifically, they were informed that "The 22-year-old woman named Mahsha Amini was arrested in Iran for not adhering to proper hijab (headscarf) regulations. Three days after her arrest, she died under suspicious circumstances, after being reportedly tortured by the Iranian Guidance police. This incident sparked the 2022

'Iran Revolution' movement, in which protests emerged within the country to combat the authoritative enforcement of Islamic law. Protesters in the country are demanding that women's rights and freedom of expression should be strengthened and that wearing a hijab should be a woman's own choice".

Afterwards, they answered questions regarding their motivation to participate in collective action towards that issue and completed measures of moral obligation and moral conviction as well as other measures that were not relevant for the hypothesis of this study. Finally, they provided some socio-demographic information, that is, age and gender, and participants were debriefed about the study's intentions.

#### Measures

### Moral Conviction

We first measured their general attitude toward gender equality. Participants indicated the extent to which they supported or opposed gender inequality, by using a 7-point Likert scale ( $1 = Strongly \ oppose \ 7 = Strongly \ support$ ). Moral conviction was measured using three questions adapted from Skitka et al. (2005), participants indicated: "How much your opinion on gender inequality..." was "a reflection of your core moral beliefs and convictions?", "connected to your beliefs about fundamental right and wrong?", "based on moral principle?", by using a 7-point Likert scale ( $1 = not \ at \ all \ to \ 7 = very \ much$ ). Cronbach's alpha for moral conviction was .88 (M = 5.70, SD = 1.17).

### Collective Action

The measure for participants' willingness to engage in collective action was adapted from Leal et al. (2020). Participants indicated on a 7-point Likert-scale (1 = not at all to 7 = very much) the extent to which the following items applied to them: "participate in an upcoming protest to support gender equality for Iranian women", "share some information about ongoing gender inequality issues in Iran on my social media", "change my profile

picture on my social media to raise awareness about women's rights in Iran", and "sign a petition to support gender equality in Iran". Cronbach's alpha for collective action was .83 (M = 4.32, SD = 1.45).

# Moral Obligation

Moral obligation was measured using four questions which were adapted from Sabucedo et al. (2018). Participants indicated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) to which extent they agreed with the following statements: "I feel morally obliged to take action to support women's rights in Iran.", "I feel guilty if I do not take action to support women's rights in Iran.", "I feel morally obliged to do something to support women's rights in Iran." and 'I feel morally obliged to participate in activism to support women's rights in Iran, regardless of what anyone thinks.'. Cronbach's alpha for moral obligation was  $.92 \ (M = 2.98, SD = 1.03)$ .

### **Results**

# **Preliminary Analysis**

Means, standard deviations of the variables and correlations between them were examined (see table 1). We found that moral conviction and collective action were significantly and positively correlated (r = .481, p < .001). Moral obligation was also significantly and positively correlated with collective action (r = .743, p < .001), and moral conviction (r = .442, p < .001). Assumption checks were conducted, all the assumptions were met (see Appendix).

**Table 1**Means, Standard Deviations and Correlations of the Variables

Variable	α	M	SD	1	2	3
1. Moral Conviction	0.88	5.70	1.17	_	.442**	.481**
2. Moral Obligation	0.92	2.98	1.03		_	.743**
3. Collective Action	0.83	4.32	1.45			_

Note: This table shows the reliability analyses, means, standard deviations, and correlations of all variables relevant for the hypotheses testing of this study (N = 227). Moral Conviction and Collective Action were assessed on a 7-point Likert scale ( $1 = not \ at \ all \ to \ 7 = very$  much); Moral Obligation was assessed on a 5-point Likert scale ( $1 = strongly \ disagree \ to \ 5 = strongly \ agree$ ). \*\* Correlation is significant at the 0.01 level (2-tailed).

# **Data Analysis Strategy**

We first centered the independent variable (i.e., moral conviction) and the moderator (i.e., moral obligation) and then computed the interaction effect between them. We included moral conviction about gender equality, moral obligation and the interaction between the two in a regression model to predict collective action. The overall model was calculated and showed a significant fit (F(3, 223) = 103.395, p < .001).

## **Hypothesis Testing**

Our first hypothesis was that there is a positive relationship between moral conviction and collective action. We found a significant association between moral conviction and collective action ( $\beta$  = .204, t(223) = 3.868, p < .001, 95% CI [.12, .38]). The second hypothesis stated, that moral obligation and collective action was positively associated. Supporting this hypothesis, we found that moral obligation was positively and significantly associated with collective action ( $\beta$  = .656, t(223) = 13.506, p < .001, 95% CI [.785, 1.053]). Our third hypothesis proposed a moderating effect of moral obligation on the relation

between moral conviction and collective action. Against our hypothesis, we did not find a significant interaction effect ( $\beta = .030$ , t(223) = 0.642, p = .522, 95% CI [-.064, .127]) and the hypothesis could therefore not be supported (see table 2).

**Table2**Coefficients

Variable	В	Std. Error	В	t	Sig.
Constant	4.303	.068		63.470	<.001
Moral Conviction(MC)	.251	.065	.204	3.868	<.001
Moral Obligation(MO)	.919	.068	.656	13.504	<.001
Interaction-effect MC&MO	.031	.048	.030	.642	.522

a. Dependent Variable: Collective Action

### Discussion

The goal of this research was to replicate past findings of the association of moral conviction and moral obligation to collective action (e.g. Morgan, 2011; Van Zomeren et al. 2012), and analyse the moderating effect of moral obligation on the relationship between moral conviction and collective action, in order to deepen our understanding of the conditions that enhance or hinder the translation of moral attitudes into group-based action.

We hypothesized that 1) moral conviction was positively associated with collective action, and that 2) moral obligation was positively associated with collective action and 3) a sense of moral obligation would moderate the association between moral conviction and collective action. That is, we hypothesized that the relationship between moral conviction and collective action will be stronger for individuals who score high on moral obligation, compared to those who score low.

We found support for the first and second hypotheses. However, we did not find support for the moderation hypothesis, that is, moral obligation did not seem to play a moderating role in the relationship between moral conviction and collective action.

### **Theoretical Implications and Future Research**

We successfully replicated previous results (e.g. Skitka et al., 2005; Morgan, 2011; Van Zomeren et al., 2012) in finding that moral conviction was positively associated with collective action. Our new finding was that this effect also extends to questionnaires related to gender equality in Iran. This replication thereby contributes to the knowledge of the generalizability of this effect to different contexts. It reinforces the value of moral conviction for further theory development in its relation to collective action. The utilization of cognitive dissonance theory here continues to be an insightful explanatory approach for understanding this relationship (Higgins, 1987; Higgins, 1989). It proposes that individuals with high moral conviction may experience discomfort when their values and actions are inconsistent and that this discomfort may further motivate them to engage in collective action as a means of reducing cognitive dissonance and achieving consistency between their beliefs and behaviors (Higgins, 1989). Furthermore promising are approaches like the Social Identity Model of Collective Action (Van Zomeren et al., 2008; Van Zomeren et al., 2012), which integrate moral conviction with other factors leading to collective action such as group-efficacy and group-based anger and show the reinforcing interplay between them. Such approaches show the potential for insights, that the concept of moral convictions can provide, when related to previous theoretical models about collective action.

Secondly, we found a positive association between moral obligation and collective action, replicating the effect previously found by Sabucedo et al. (2018) and Vilas and Sabucedo (2012). Since moral obligation as a separate construct to moral conviction has been less studied in connection to collective action, our replication provides affirmation of the

potential value of moral obligation in the field of collective action. Our results have shown it to differ from moral conviction in its strength of relation to collective action, provide further justification for a distinct treatment of the two variables, which has yet to be fully established in the field (Sabucedo et al., 2018). Moral obligation, as a construct specifically geared towards action may provide additional nuance in future research about collective action as it highlights with its inclusion of *obligation* and *willingness to sacrifice* different aspects compared to moral conviction (Vilas & Sabucedo, 2012). These aspects, similar in kind to elements of Zimbardo et al.'s (2017) concept of heroism, deserve further exploration, as they seem to provide the basis for a stronger relationship between moral attitude and action in people compared to moral conviction(Sabucedo et al., 2018).

Finally, the hypothesized moderation effect of moral obligation on the relationship between moral conviction and collective action was examined. However, the results did not show a significant influence of moral obligation on that relationship. A possible explanation for this is that as a multifaceted construct, moral obligation may contain components that vary in their influence on the interaction effect between collective action and moral conviction, and therefore balance each other out, resulting in an insignificant effect. While a high internal association between the components of moral obligation has been shown (Vilas & Sabucedo, 2012), it may be fruitful for future research to study the moderating effect of its part-elements – such as individuals proclivity to guilt and pride, or the willingness to sacrifice – in connection to collective action.

#### Limitations

One of the primary limitations of our study is that we have used a sample of first year psychology student that does not adequately represent the general population in factors such as age and gender and outlook on life (Sears, 1986). As psychology students, they may furthermore exhibit higher levels of psychological awareness, a familiarity with

psychological concepts, which may introduce bias in their responses. Additionally, our study shares the limitations associated with WEIRD (Western, Educated, Industrialized, Rich, and Democratic) samples (Henrich et al., 2010). These samples, commonly used in psychological research, tend to be unrepresentative of the global population. As a result, our findings may have limited generalizability to other contexts. This can be addressed by replicating the study with people from a more diverse participant pool.

Secondly, the strength of testing the constructs within the novel context of gender equality related to the 2022 Iranian protest comes with the limiting factor, that the effects might not generalize to different contexts. The fact that our results align to a substantial degree with previous data however suggests that our findings can be assumed to generalize in at least these aspects.

Thirdly, it is important to note that our study measured participants intentions to participate in collective action rather than their actual protest behavior. Therefore, the generalizability of our findings to real-world protest behavior may be limited. This limitation may be addressed by future research, that longitudinally tracks intention, as well as actual collective action behavior. Doing so allows us to gain a more comprehensive understanding of the relationship between moral conviction, moral obligation, and collective action, that takes into account the dynamic between intentions and subsequent behavior.

### Conclusion

In this study, we explored the relationship between moral conviction and collective action as well as the moderating effect of moral obligation on that relationship in the context of women's rights in Iran of 2022. In line with previous research, a significant positive association was found between moral conviction and collective action. The relationship between moral obligation and collective action was also positive, while a hypothesized

moderating effect of moral obligation on the relationship between moral conviction and collective action was not substantiated.

Overall, this study contributes to our understanding of the role moral conviction and moral obligation play in influencing collective action. It underscores their significance as motivating factors for collective action and encourages the inclusion of both constructs in future theory development in the study of collective action.

### References

Al Jazeera. (2022, December 13). *Protests in Iran: Start here*. Protests | Al Jazeera. https://www.aljazeera.com/program/start-here/2022/12/13/protests-in-iran-start-here

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918.

https://doi.org/10.1037/0033-2909.84.5.888

Ajzen, I. (1988). Attitudes, personality, and behavior. Milton Keynes: Open University Press Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective.

Developmental Review, 3(2), 178–210.

https://doi.org/10.1016/0273-2297(83)90029-1

Burhans, D. T. (1971). The attitude-behavior discrepancy problem: Revisited. *Quarterly Journal of Speech*, *57*(4), 418–428.

https://doi.org/10.1080/00335637109383087

Caprara, G. V., Vecchione, M., Capanna, C., & Mebane, M. (2009). Perceived political self-efficacy: theory, assessment, and applications. *European Journal of Social Psychology*, 39(6), 1002–1020.

https://doi-org.proxy-ub.rug.nl/10.1002/ejsp.604

Carnes, N. C., Allmon, B., Alva, J., Cousar, K. A., & Varnam, Z. D. (2022a). How morality

signals, benefits, binds, and teaches. *Journal of Experimental Social Psychology*, 101, 104313.

https://doi.org/10.1016/j.jesp.2022.104313

Cohen-Chen, S., & Van Zomeren, M. (2018). Yes we can? group efficacy beliefs predict collective action, but only when Hope is high. *Journal of Experimental Social Psychology*, 77, 50–59.

https://doi.org/10.1016/j.jesp.2018.03.016

- Cureton, A., & Hill, T. E. (2017). Kant on virtue. *Oxford Handbooks Online*. https://doi.org/10.1093/oxfordhb/9780199385195.013.13
- Davis, M. (1980). A Multidimensional Approach to Individual Differences in Empathy. *JSAS*Catalog Sel.Doc.Psychol., 10
- Festinger, L. (1962). A theory of cognitive dissonance. Stanford University Press.
- Fisher, R. J. (2006). Intergroup conflict In Deutsch M., Coleman P. T. & Marcus E. C. (Eds.), The handbook of conflict resolution: Theory and practice (pp. 176–196)
- Granovetter, M. (1978). Threshold models of collective behavior. American Journal of Sociology, 83(6), 1420-1443.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. Psychological Review, 108(4), 814-834.
- Haidt, J., & Kesebir, S. (2010). Morality. *Handbook of Social Psychology*. https://doi.org/10.1002/9780470561119.socpsy002022
- Haidt, J., Rosenberg, E., & Hom, H. (2003). Differentiating diversities: Moral diversity is not like other kinds. *Journal of Applied Social Psychology*, *33*(1), 6–7. https://doi.org/10.1111/j.1559-1816.2003.tb02071.x

- Hasan-Aslih S, Shuman E, Pliskin R, van Zomeren M, Saguy T, Halperin E. With or without you: The paradoxical role of identification in predicting joint and ingroup collective action in intergroup conflict. *Eur J Soc Psychol*. 2020;50:1334–1343.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not weird. *Nature*, 466(7302), 29–29.

https://doi.org/10.1038/466029a

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340.

https://doi.org/10.1037/0033-295x.94.3.319

Higgins, E. T. (1989). Continuities and discontinuities in self-regulatory and self-evaluative processes: A developmental theory relating self and affect. *Journal of Personality*, 57(2), 407–444.

https://doi.org/10.1111/j.1467-6494.1989.tb00488.x

- Kant, I. (1947). Fundamentals of the metaphysics of morals. New York: Longmans. Original work published 1786
- LaPiere, R. T. (1934). Attitudes vs. actions. *Social Forces*, *13*(2), 230–237. https://doi.org/10.2307/2570339
- Leal, A., van Zomeren, M., Gonzàlez, R., Gordijn, E., Tagar, M. R., Álvarez, B., Frigolett, C., & Halperin, E. (2020). How participation in collective action drives moralization.

  Paper presented at Justice and Morality Pre-conference, Society for Personality and Social Psychology (SPSP), New Orleans, United States.
- Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. Journal of Counseling Psychology, 48(3), 310–318.

https://doi-org.proxy-ub.rug.nl/10.1037/0022-0167.48.3.310

- Luttrell, A., Petty, R. E., Briñol, P., & Wagner, B. C. (2016). Making it moral: Merely labeling an attitude as moral increases its strength. *Journal of Experimental Social Psychology*, 65, 82-93.
- Miller, D. A., Cronin, T., Garcia, A. L., & Branscombe, N. R. (2009). The relative impact of anger and efficacy on collective action is affected by feelings of fear. *Group Processes & Intergroup Relations*, 12(4), 445-462.
- Morgan, G.S. (2011) Toward a model of morally motivated behavior: Investigating mediators of the moral conviction-action link. (Unpublished doctoral dissertation). University of Illinois, Chicago.
- Morgan GS, Skitka LJ. 2020. Evidence for meta-ethical monism: Moral conviction predicts perceived objectivity and universality across issues. Paper presented at the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA
- Morselli, D. & Passini S. (2015). Measuring Prosocial Attitudes for Future Generations: the social generativity scale. *Journal of Adult Development*, 22(1), 173–182.
- Nucci, L. P. (2001). Education in the moral domain. Cambridge University Press.
- Sabucedo, J.-M., Dono, M., Alzate, M., & Seoane, G. (2018, March 13). The importance of protesters' morals: Moral obligation as a key variable to understand collective action.

  Frontiers. Retrieved February 24, 2023, from <a href="https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00418/full">https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00418/full</a>
- Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, 51(3), 515–530.

  https://doi.org/10.1037/0022-3514.51.3.515
- Shweder, R. A. (2002). The nature of morality: The category of bad acts. Medical Ethics, 9, 6

  -7.

Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895–917.

https://doi.org/10.1037/0022-3514.88.6.895

Skitka, L. J., & Wisneski, D. C. (2011). Moral conviction and emotion. *Emotion Review*, *3*(3), 328–330.

https://doi.org/10.1177/1754073911402374

Skitka, L. J., & Morgan, G. S. (2014). The social and political implications of moral conviction. *Political Psychology*, *35*, 95–110. https://doi.org/10.1111/pops.12166

Skitka, L. J., Hanson, B. E., Morgan, G. S., & Wineski, D. C. (2021). The psychology of moral conviction. Annual Review of Psychology, 72, 347–366.

<a href="https://doi.org/10.1146/annurev-psych-063020-030612">https://doi.org/10.1146/annurev-psych-063020-030612</a>

Tracy, J. L., & Robins, R. W. (2004). The nature of pride: Expression and conceptual structure. *PsycEXTRA Dataset*. https://doi.org/10.1037/e633912013-034

Turiel, E. (2015). Moral development. *Handbook of Child Psychology and Developmental Science*, 1–39.

https://doi.org/10.1002/9781118963418.childpsy113

- Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of personality and social psychology*, 87(5), 649.
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative Social Identity Model of Collective Action: A quantitative research synthesis of three socio-psychological perspectives. Psychological Bulletin, 134, 504–535.

- Van Zomeren, M., Postmes, T., & Spears, R. (2011). On conviction's collective consequences: Integrating moral conviction with the social identity model of collective action. *British Journal of Social Psychology*, *51*(1), 52–71. https://doi.org/10.1111/j.2044-8309.2010.02000.x
- Vilas, X., & Sabucedo, J. M. (2012). Moral obligation: A forgotten dimension in the analysis of collective action. *Revista de Psicología Social*, *27*(3), 369-375.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, *58*(6), 994–1003.

  <a href="https://doi.org/10.1037/0022-3514.58.6.994">https://doi.org/10.1037/0022-3514.58.6.994</a></a>
- Zimbardo, P. G., Seppälä, E. M., & Franco, Z. (2017). Heroism. *Oxford Handbooks Online*. https://doi.org/10.1093/oxfordhb/9780190464684.013.34

# **Appendix**

# **Assumption Checks**

A thorough examination of the standard residuals was performed, and it was found that no outliers were present (Std. Residual Min = -2.767, Std. Residual Max = 3.091). To assess normality, a normal P-P plot was created, which aided in confirming this assumption (see Figure 1). A scatterplot of the standardized residuals revealed that the assumptions of homoscedasticity and linearity were satisfied (see Figure 2). Tests were conducted to determine whether the data adhered to the assumption of collinearity, and it was found that multicollinearity was not a concern for the following variables: Moral Conviction (Tolerance = .805, VIF = 1.477), Moral Obligation (Tolerance = .796, VIF = 1.257), and Interaction (Tolerance = .835, VIF = 1.198). In addition, the residuals were independent, as determined by a Durbin-Watson statistic of 2.021.

Figure 1

Normal P-P Plot of the Regression of Standardized Residual

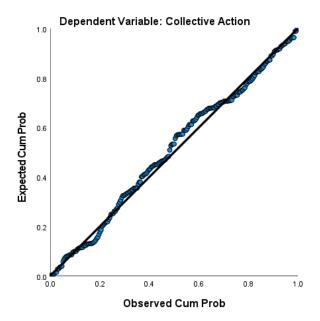


Figure 2

Distribution of standardized residuals for the dependent variable collective action

