Moral Common Sense: Examining the False Consensus Effect of Morality in Japan

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Abstract

Researchers have continually studied the classical false consensus effect (FCE) and documented its robustness across specific contexts. Under the influence of the FCE, people create an illusory perception of others around them and maintain this perception, believing that own opinion serves as "common sense." Because shared morality plays an important role in group contexts, people's (illusory) perceptions about how much their morality is shared should be clarified. Therefore, the present study investigated the presence of the FCE in the domain of morality based on the Moral Foundations Theory (MFT). The pilot study required participants to rank the five moral foundations according to their perceived level of importance and estimate others' perceived importance of the same five foundations. The Purity foundation of the MFT was not sufficient to identify Japanese values on religion and cleanliness. Thus, the main study supplemented the pilot study with the Purity Orientation–Pollution Avoidance Scale (POPA). The importance given to the moral foundations among participants in the main study was measured using both the Moral Foundations Questionnaire (MFQ) and the POPA. The results from both studies showed that the FCE occurs in the moral domain among Japanese individuals. Furthermore, the use of the POPA in addition to the MFQ can benefit future research on morality in cultures that are not Western, educated, industrialized, rich, and democratic such as Japan. The present research will contribute significantly to further understanding the role of morality in group contexts.

Keywords: morality, false consensus effect, culture, moral foundations theory, purity

1. Introduction

Moral judgment refers to the process of differentiating right from wrong, and it also entails the social aspect because it can affect and be affected by others' moral judgment. Haidt (2001) proposes that culture is influenced and sustained by a standard of morality that people follow, which in turn is based on the foundations described herein: (1) Care (to protect from suffering), (2) Fairness (to exchange fairly), (3) Ingroup (to pursue collective good), (4) Authority (to respect hierarchy), and (5) Purity (to avoid the impure). The moral foundation emphasized in a culture varies depending on the culture's characteristics. For example, research has found that the morality of people in the United States of America focused on the Care and Fairness foundations, whereas that of people in India prioritized morality based on cooperation and Authority (Shweder, Much, Mahapatra, & Park, 1997). Individuals who lack respect for the set of morality foundations emphasized in their culture are often criticized, punished, and ostracized. Cultural development involves learning how to distinguish right from wrong behavior or characters often surrounding the individuals. The confirmation among group members of their shared morality is a rule for ensuring group development and maintenance (Simpson, Willer, & Harrell, 2017). Zou et al. (2009) describe the implicit representations of consensual values and beliefs in one culture as "common sense." As common sense involves morality, the present study regards shared morality as moral common sense.

The notion of culture from an academic perspective is not defined by specific groups, such as "Japanese" and "liberals." However, the concept of culture includes some vague groups to which people can belong, including "society" and "community" (Matsuo & Brown, 2022). An individual described as an exemplary member of a culture ought to believe that own morality is shared with other members around oneself. Particularly, this morality guides people's behavior, such that they strive to engage in "right" behaviors and not on behaviors that

violate this morality (Ellemers & van den Bos, 2012). As mentioned above, betraying the rule signifies a lack of moral common sense (Carnes, Allmon, Alva, Cousar, & Varnam, 2022). Previous studies found that a member in a group who violates the moral rules is ostracized to ensure group reputation management (Giner-Sorolla, Kupfer, & Sabo, 2018), societal sanction (Kupfer & Giner-Sorolla, 2017), and moral system maintenance (Hofmann, Meindl, Mooijman, & Graham, 2018). Meanwhile, group members often obey the group's morality as they want to ensure they become exemplary members and avoid exclusion. Consequently, these members assume that others around them appreciate the same morality.

Notably, this belief describes a "false consensus" because an individual assumes that own internalized morality is identical to that of other members, albeit this belief occurs independently of what other members may think. The false consensus effect (FCE) is defined as the tendency to estimate a higher consensus on own opinion than would people with a different opinion (Ross, Greene, & House, 1977). Ross et al. (1977) revealed, after requesting participants to decide on a hypothetical situation after being presented with a pair of options, that undergraduate students overestimated the percentage of their peers who chose the same option as themselves. Since this first observation of the FCE, a large amount of literature has demonstrated its robustness. Researchers also eventually extended the original research by manipulating the contents of the opinion and behavior (e.g., one's opinion on climate change; Leviston, Walker, & Morwinski, 2013). However, knowledge is limited on the FCE in terms of "value." Based on the aforementioned social function of the FCE, it is possible that this effect can be observed in the context of morality where morality is regarded as both opinion and value. This means that people are expected to relatively overestimate the degree of appreciation that people around them hold about the same morality. Therefore, the present study aims to investigate the FCE in terms of the morality that an individual emphasizes using Haidt's Moral Foundations Theory (MFT).

The present study contributes by providing methods to access intergroup relations in today's society. Most people in a group illusorily believe that the number of members that expect for a same moral common sense to be respected/appreciated is larger than it actually is. This leads people to often become upset and stigmatize individuals who express less care in this regard. As morality and culture are interwoven, morality plays an important role in cultural diversity (Jia & Krettenauer, 2017). To achieve global diversity and inclusion, people need to work on issues related to different beliefs and values, including morality, as well as address traditional and well-documented categories in scientific research (e.g., ethnicity, social class, age, and gender). Analyses from the perspective of sharing moral common sense can provide novel evidence that may help us clearly understand the concepts of stereotypes, discrimination, and social exclusion. Finally, the present study contributes to clarifying the mechanism of social divisions between groups, which is a severe social issue.

2. Pilot Study

To the best of our knowledge, researchers thus far have not investigated the appraisal of moral foundations using the FCE framework. Thus, this pilot study aims to explore the frequency of people who deem each moral foundation the most important and the ratings of people's estimations regarding the morality of others. The present study employed a traditional methodology for studies on morality, where respondents are asked to decide on their moral foundations and estimate how many people surrounding them consider each foundation as the most important.

2.1 Method

2.1.1 Participants

The sample consisted of 334 Japanese participants (143 men, 190 women, and 1 other; M_{age} = 39.58, SD = 10.48) recruited online using the Internet crowdsourcing service CrowdWorks. All the procedures of this study were approved by the Research Ethics committee of Toyo University (#P220009).

2.1.2 Procedure

First, each participant received short descriptions of Haidt's five moral foundations as they were used in previous research (e.g., "Morality of no harm: This morality is concerned with protecting vulnerable individuals and states that you should not physically or mentally offend others" for the Care foundation; Matsuo, Sasahara, Taguchi, & Karasawa, 2019). After reading the descriptions, participants were asked to arrange the foundations from the most to the least important. Thereafter, they were instructed to indicate how many people from their community rank each foundation based on their importance by noting the percentages for each foundation, which amounted to 100% in total (e.g., care 35% + fairness 25% + ingroup 20% + authority 15% + purity 5% = 100%). The structure of the items was based on previous FCE studies and culturally consensual beliefs (Choi & Cha, 2019). The exploratory investigation measured the individual's behavioral intention of volunteer activities and the

estimation of another person's behavioral intention of those same volunteer activities. However, these findings will not be discussed further.

2.2 Results and Discussion

Table 1 shows the frequency of the moral foundations ranked according to their importance. For each of the five moral foundations, the means of the ratings of the estimated importance were compared. The participants who regarded Care as the most important foundation had a higher average rating score of the estimation than the other participants did. These differences were significant, $t(332) = -7.16$, $p < 0.01$. The tendency was similar for the Fairness ($t[332] = -4.84$, $p < 0.01$), Ingroup ($t[332] = -2.72$, $p < 0.05$), and Authority foundations ($t[332] = -3.09$, $p < 0.05$). In contrast, the mean difference for the Purity foundation was not significant ($t[332] = -1.37$, *n.s.*).

Table 1. The frequency of ordered moral foundations for their importance in the pilot study ($n = 334$)

Rank	Harm	Fairness	Ingroup	Authority	Purity
1	238	72	12	7	5
2	73	177	57	15	12
3	14	55	159	65	41
4	6	28	79	145	76
5	3	2	27	102	200

Except for the Purity foundation, the present results demonstrated that participants overestimated the appreciation that others held of a moral foundation for the foundation that they deemed the most important. This tendency indicates the occurrence of FCE. Particularly, the participants assumed that others appreciated the same moral foundation at the same level as themselves. Furthermore, participants who appreciate the Purity foundation might not care whether other people place the same importance on that foundation, or might have consciously known that their preferred value is rarely spread. However, a surprisingly small number of participants appreciated the Purity foundation (5 out of 334). This imbalanced proportion could have been included by the procedure, as participants were explicitly asked to identify which of the five moral foundations was the most important. The Moral Foundations Questionnaire (MFQ) can be used for the participants to assess the level of importance of each foundation (Graham et al., 2011). In addition, the main study used the Purity Orientation–Pollution Avoidance Scale (POPA; Kitamura & Matsuo, 2021) to determine the general feelings about religiousness and cleanliness among Japanese individuals.

3. Main Study

The main study aimed to investigate whether the FCE was observed in terms of morality using the MFT framework with a hypothesis. Based on the preliminary findings, the main study predicts that, for the moral foundation appraised as the most important for a participant, the participant will rate the others' appreciation of this same moral foundation higher than the others' actual appreciation of this moral foundation.

3.1 Method

3.1.1 Participants

The sample consisted of 975 Japanese participants (382 men, 588 women, and 5 others; $M_{age} = 39.43$, $SD = 10.82$) who were recruited online using CrowdWorks, an online crowdsourcing service. All the procedures of this study were approved by the Research Ethics committee of Toyo University (#P220014).

2.1.2 Procedure

The present study used the 30-item version of the Japanese MFQ to measure how participants appraise each moral foundation (Kanai, 2013). The Japanese version of the MFQ has been used widely in morality research conducted in Japan and has a five-factor model as predicted by the MFT (Murayama & Miura, 2019). The Japanese MFQ used in this study consisted of 30 sentences rated on a six-point Likert-type scale, ranging from 1 to 6 (strongly agree to strongly disagree). The responses were summed to create a score for each foundation,

with higher scores indicating a higher level of concern for that foundation. Cronbach's alphas for the five foundations in this study were 0.65 (Care), 0.57 (Fairness), 0.60 (Ingroup), 0.57 (Authority), and 0.59 (Purity).

Due to the complexity associated with Haidt's Purity concept, we also used the POPA in this study, which was originally developed to measure Japanese lay concepts about the rightness/wrongness of purity and impurity. Because traditional Japanese attitudes toward spirituality do not underscore Christian beliefs, POPA can serve as a substitute for the scale to measure the concept of purity in Japan. Similar to the MFQ, the POPA consisted of 27 sentences rated on a seven-point Likert-type scale, ranging from 1 to 7 (strongly agree to strongly disagree). The responses were summed to create a score for each of the four subscales of Mental Purity, Respect for Religion, Bodily Purity, and Pathogen Avoidance. The Cronbach's alphas for the four subscales were 0.82, 0.80, 0.78, and 0.72, respectively.

The dependent variables comprised the participants' estimation of how much surrounding community members ranked the importance of each of the five moral foundations, which in turn was rated on a 7-point scale (e.g., "The people from my community regarded 'Morality of no harm' as the most important foundation"; Miyajima, 2017). As aforementioned, the Purity items on the MFQ are based on Christianity (i.e., "whether someone acted in a manner in which God would approve."), meaning that using the MFQ alone would have been insufficient to appropriately scrutinize the Purity foundation in Japan. Hence, the POPA subscale scores were also entered into the analysis for the Purity foundation. This means that while the independent variables were the scores for the five foundation subscales of the MFQ, the scores for the four subscales of the POPA were added as independent variables only for analyzing the Purity foundation. The procedure in the present research was pre-registered (https://aspredicted.org/pm33c.pdf).

2.2 Results and Discussion

Table 2 presents the correlations of the scores for the MFQ and POPA subscales with their respective means and standard deviations.

Table 2. MFQ and POPA correlations with the means and standard deviations of the subscales in the main study ($n = 975$)

Subscale (M, SD)	MFQ Care	MFQ Fairness	MFQ Ingroup	MFQ Authority	MFQ Purity	POPA Mental	POPA Religion	POPA Body
MFQ Care (4.57, 0.68)								
MFQ Fairness (4.07, 0.62)	0.55**							
MFQ Ingroup (3.45, 0.67)	0.33**	0.32**						
MFQ Authority (3.44, 0.65)	0.22**	0.20**	0.60**					
MFQ Purity (3.95, 0.65)	0.53**	0.45**	0.47**	0.44**				
POPA Mental (4.44, 0.96)	0.30**	0.17**	0.37**	0.27**	0.42**	0.66**		
POPA Religion (5.40, 1.01)	0.34**	0.13**	0.30**	0.23**	0.35**	0.49**	0.47**	
POPA Body (4.52, 0.98)	0.30**	0.22**	0.32**	0.27**	0.45**	0.22**	0.22**	0.36**
POPA Pathogen (4.56, 1.17)	0.16**	0.15**	0.09**	0.06†	0.18**	0.08**	0.17**	0.10**

Note. MFQ, Moral Foundations Questionnaire; POPA, Purity Orientation–Pollution Avoidance Scale.

A series of multiple regression analyses were performed to determine the MFQ scores which represented the participants' estimations of how other community members ranked the importance of each moral foundation based on their moral concerns. The scores for the POPA subscales for the Purity foundation were entered as the additional predictors. The present study observed the strongest significant main effect for the MFQ scores for the Care, Fairness, Ingroup, and Authority foundations based on the estimation score of the corresponding foundation. The main effects of the POPA Mental Purity, Bodily Purity, and Pathogen Avoidance scores only for the Purity foundation were observed with no main effect on the purity score using the MFQ. Table 3 shows

relevant pieces of the results from the regression analyses, showing only significant predictors for each criterion variable (see the Appendix for the complete summary of the results).

Table 3. Summary of the results of regression analyses for the variables predicting scores for the MFQ and POPA

Criterion Variable	Predictor	β	t	95% CI	R^2
Estimation of others' significance of Harm foundation	MFQ Care Score	0.28**	7.13	[.20, .36]	.11**
Estimation of others' significance of Fairness foundation	MFQ Care Score	0.11**	2.81	[.03 .19]	.09**
	MFQ Fairness Score	0.19**	4.88	[.11, .26]	
Estimation of others' significance of Ingroup foundation	MFQ Fairness Score	0.12**	3.06	[.04, .19]	.08**
	MFQ Ingroup Score	0.17**	4.14	[.09, .25]	
Estimation of others' significance of Authority foundation	MFQ Ingroup Score	0.11**	2.75	[.03, 19]	.08**
	MFQ Authority Score	0.13**	3.31	[.05, .21]	
Estimation of others' significance of Purity foundation	MFQ Ingroup Score	0.15**	3.87	[.07, .22]	.25**
	MFQ Authority Score	0.08*	2.10	[.01, .15]	
	POPA Mental Score	0.30**	7.43	[.22, .37]	
	POPA Body Score	0.09*	2.45	[.02, .16]	
	POPA Pathogen Score	0.07*	2.47	[.02, .13]	

Note. Only significant predictors are shown.

4. General Discussion

The present research aimed to assess whether the FCE was observed with the MFT framework in the Japanese context. The results from both the pilot and the main study demonstrated that the FCE occurs in the moral domain among Japanese participants. Surprisingly, this study found that the score for the Purity foundation subscale of the MFQ did not predict the estimation of other members' appreciation of the Purity foundation. However, the scores for the POPA, which is a tool considered to represent the Japanese concept of purity, predicted this estimation. This unique representation of the FCE in the context of Purity presents an important finding. The fact that the POPA can serve better as the Purity foundation subscale in the MFT framework may also explain why the pilot study did not observe a significant difference for the Purity foundation. This finding may help solve the unstable and low reliability of the score for the Purity foundation subscale of the MFT among Japanese samples (e.g., Murayama & Miura, 2019).

Leveraging the evidence from both the MFQ and POPA, the present research confirmed and extended previous

study findings. The participants were likely to illusorily perceive that others in their society valued the same moral foundation as the most important. This tendency can be applied both to face-to-face human relationships and online communication. In addition to the existing literature on the traditional function of morality to bind people (offline; Carnes et al., 2022), recent research focused on the cyberspace have shown that shared opinions and values connect people in this setting (O'Reilly, Maher, Lüders, & Quayle, 2022). Past researchers have also shown that when people perceive that others share their values, people may come to trust these others with whom they have shared values and experience pain when they observe others undergoing dire situations (Huang, & Han, 2014). Thus, shared morality can also contribute to the knowledge of intergroup relations.

The present research also underscored culturally unique characteristics associated with the FCE in Japan. Choi and Cha (2019) demonstrated that Japanese people regard the "ordinary" (i.e., at the same level as others) as satisfying and safe. Thus, the participants' estimations could reflect the tendency of Japanese people. However, future researchers ought to in-depth scrutinize the concept of purity and the Purity foundation. Several scholars have recently argued that the Purity foundation is theoretically too ambiguous to stand as an independent moral foundation (Gray, DiMaggio, Schein, & Kachanoff, 2022). However, the present findings suggest that the Purity foundation functions as an independent moral foundation that can cause the FCE when measured properly.

This study had several limitations. First, despite observing the FCE, the underlying mechanisms of this effect remain unclear. Second, the size of the "society" that participants imagined in the present study was not manipulated. Tamura (2005) found that the way FCE is observed depends on the anticipated size of the group to which participants belong. Consequently, the perceptions of both the minority and majority could contribute significantly to the FCE. Overall, the present research extends traditional FCE research, presents a new direction for morality research inspired by the FCE, and offers a chance to revisit the traditional theory to identify the mechanisms related to people's morality and their communities.

Acknowledgments

Declaration of Interest Statement

The authors report there are no competing interests to declare.

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Appendix

Appendix Table. Complete summary of the results of the regression analyses for the variables predicting scores for the MFQ and POPA

Criterion Variable	Predictor	β	t	95% CI	R^2
Estimation of others' significance of Harm foundation	MFQ Care Score	0.28**	7.13	[.20, .36]	.11**
	MFQ Fairness Score	0.03	0.70	[-.05, .10]	
	MFQ Ingroup Score	0.09*	2.22	[.01, .17]	
	MFQ Authority Score	0.02	0.43	[-.06, .09]	
	MFQ Purity Score	-0.01	-0.34	[-.09, .07]	
Estimation of others' significance of Fairness foundation	MFQ Care Score	0.11**	2.81	[.03 .19]	.09**
	MFQ Fairness Score	0.19**	4.88	[.11, .26]	
	MFQ Ingroup Score	0.06	1.56	[-.02, .14]	
	MFQ Authority Score	0.06	1.46	[-.02, .14]	
	MFQ Purity Score	-0.04	-0.94	[-.12, .04]	
Estimation of others' significance of Ingroup foundation	MFQ Care Score	0.002	0.04	[-.08, .08]	.08**
	MFQ Fairness Score	0.12**	3.06	[.04, .19]	
	MFQ Ingroup Score	0.17**	4.14	[.09, .25]	
	MFQ Authority Score	0.06	1.53	[-.02, .14]	
	MFQ Purity Score	0.01	0.27	[-.07, .09]	
Estimation of others' significance of Authority foundation	MFQ Care Score	0.04	0.91	[-.04, .12]	.08**
	MFQ Fairness Score	0.03	0.86	[-.04, .12]	
	MFQ Ingroup Score	0.11**	2.75	[.03, 19]	
	MFQ Authority Score	0.13**	3.31	[.05, .21]	
	MFQ Purity Score	0.06	1.38	[-.02, .14]	
Estimation of others' significance of Purity foundation	MFQ Care Score	-0.06	-1.56	[-.13, .02]	.25**
	MFQ Fairness Score	-0.02	-0.70	[-.09, .04]	
	MFQ Ingroup Score	0.15**	3.87	[.07, .22]	
	MFQ Authority Score	0.08*	2.10	[.01, .15]	
	MFQ Purity Score	0.04	1.07	[-.04, .12]	
	POPA Mental Score	0.30**	7.43	[.22, .37]	
	POPA Religion Score	0.02	0.46	[-.06, .10]	
	POPA Body Score	0.09*	2.45	[.02, .16]	
	POPA Pathogen Score	0.07*	2.47	[.02, .13]	

Note. CI, confidence interval.

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