



# The moral behavior of ethics professors: A replication-extension in Chinese mainland

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## ABSTRACT

The relationship between professional ethical reflection and corresponding moral behavior is an important theme of moral psychology in recent years. Following Schönegger and Wagner's research in German-speaking countries, through a replication-extension of the original US-based research carried out by Schwitzgebel and Rust, we aim at examining their results in the Chinese context. The previous researchers have shown that ethical reflection generally has no positive effect on moral behavior. A cross validation of this result was conducted in Chinese mainland, and three issues concerning Confucian virtues were added. Through reaching out to 4482 professors and collecting 368 responses altogether, we attempted to explore whether professional ethical reflection can influence normative attitude and the moral attitude-behavior consistency. Unfortunately, the results failed to show a statistically significant difference between ethicists and other professors on most of the moral issues, with the exception of paying academic membership fees and vegetarianism, wherein ethicists do express more stringent normative attitudes, and their moral attitude and self-reported behavior are statistically consistent. Notably, Chinese professors mainly expressed morally neutral attitudes toward the issue of eating meat, and they tended to believe that ethical reflection contributes to more and better moral behaviors.

## ARTICLE HISTORY

Received 14 February 2022  
Accepted 24 May 2022


## KEYWORDS

Moral psychology; ethical reflection; normative attitude; moral behavior; attitude-behavior consistency; vegetarianism

## 1. Introduction

Ethical reflection has long been believed to play a vital role in daily lives and the enhancement of people's well-being, which partly explains the importance attached to moral education (Althof & Berkowitz, 2006; Kohlberg, 1966; Noddings, 2010; Schuitema et al., 2008). Nowadays, in the field of

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 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/09515089.2022.2084057>

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moral psychology and moral philosophy, the effect of ethical reflection on moral behavior is controversial (Barkan et al., 2015; Behnam & Rasche, 2009; Hedberg, 2017; Schönegger & Wagner, 2019; Schwitzgebel & Rust, 2014; Sneddon, 2020; Telech & Leiter, 2016), which will be discussed in detail in the second section of this paper (Section 2). Generally speaking, although researchers have tremendously emphasized the value of ethical reflection and moral reasoning in ethics (Bear & Rys, 1994; Cappelen et al., 2011; Eisenberg & Shell, 1986; Haan et al., 1968; Karpiak & Baril, 2008; Kohlberg, 1969; Shields et al., 2018; Trevino, 1992), various studies have also shown that when combined with other motivational variables, ethical reflection cannot always make a significant difference in behaviors such as elementary school students' current and future aggressive behavior (Manning & Bear, 2011), adolescents' risky behavior (Kuther & Hhiggins-D'alessandro, 2000), undergraduates' cheating behavior (Malinowski & Smith, 1985), and auditors' misreporting behavior (Schatzberg et al., 2005). Particularly, Sneddon (2020) devises and evaluates eleven psychological hypotheses to explain why ethical reflection might have motivational influence for vegetarianism but not for other behaviors investigated by Schwitzgebel and Rust (2014).

Similar to the western philosophers, Chinese philosophers have also shown great enthusiasm on this topic. According to Suzuki (1908, p. 242), the moral life can be said to have been the only philosophical subject which has seriously interested the Chinese and has been considered worthy of their earnest speculation. Pre-Qin Confucianism regarded practice as the most fundamental way of self-cultivation, and emphasized the need to recognize and achieve morality in personal practice. Confucius himself once said that, "As far as knowledge of literature is concerned, what I've achieved is similar to that of others. But when it comes to the practice of moral principles as a man of integrity, I still have a long way to go" (*The Analects*, Chapter Shuer 述而). Therefore, according to Confucianism, knowledge and action should be closely connected with each other and moral cultivation should be conducted in everyday life by people themselves. As an important follower of Confucianism, Xunzi also advocates that no matter how rich one's moral knowledge is, if he or she does not act on it, his or her knowledge will not make any sense, and he or she cannot be considered moral anyhow; instead, he or she will be trapped by the so-called knowledge (*Xunzi*, Chapter Ruxiao 儒效). Above all, the confucianists generally believe that ethical reflection should and will lead to the discovery of moral truth and the practice of moral behaviors in personal life.

Most famously, Shouren Wang, a great Confucianist in the Ming dynasty of ancient China, when asked about the relationship between moral truth and the behavior concerned, responded that, "There is no one who knows the truth but does not act on it. If you know the truth but

do not practice it in your daily life, then this is equal to saying that you do not know it at all” (Wang, 2021, p. 11). Accordingly, Wang put forward his most influential idea of “unity of knowledge and action,” regarding “action” as the natural result of “knowledge” and considering “action” as an important source of “knowledge.” Wang’s view has long influenced the moral outlook of Chinese people for hundreds of years. However, a question that is of great interest to us is whether the “unity of knowledge and action” norm has really been adhered to in Chinese people’s, especially the Chinese ethicists’, daily lives.

On the other hand, philosophy and psychology have recently experienced a remarkable development in extensive interdisciplinarity, e.g., moral psychology, the study of human thoughts and behaviors in ethical contexts, wherein psychologists freely draw on philosophical theories to help structure their empirical research, while philosophers freely draw on empirical findings from psychology to help structure their theories (Doris et al., 2020). A great mass of moral psychology literature explored the factors that influence moral behavior, moral capability, moral motivation, moral emotion, moral reasoning, and so on (Crawford, 2001; Krebs & Rosenwald, 1977; Malti et al., 2010; Nunner-Winkler, 2007). The relationship between ethical reflection and moral behavior is also a hot topic in moral psychology, but relevant studies in Chinese mainland are still lacking first-hand, systematic research, and our work is just such an attempt at this regard.

In the following, we will firstly outline the original study conducted by Schwitzgebel and Rust (2014), and the replication study by Schönegger and Wagner (2019) (Section 2). Then we will present our own replication-extension, including the materials, method (Section 3), and results (Section 4). Finally, we will compare our results in Chinese mainland with the previous ones in the US and the German-speaking countries, and discuss about the possible explanations and implications of the differences among these results (Section 5).

## 2. Overview of the original study

Ethical reflection is the method or the state that will emerge when one is thinking of ethical issues in an ethical or philosophical fashion (Schwitzgebel & Rust, 2014). Due to frequent deliberation on ethical problems, ethicists have long been regarded as the ones with well-above-average level of ethical reflection (Schönegger & Wagner, 2019, p. 533). However, most researchers in this area pay more attention to the lay person (Gold et al., 2015; Krebs & Rosenwald, 1977; Malti et al., 2010). Because of the difficulty in measuring and experimentally manipulating ethical reflection, comparing professional

ethicists' moral attitudes and behaviors to appropriate reference groups remains a promising way to figure out the relationship between ethical reflection and moral behaviors (Schönegger & Wagner, 2019, p. 533).

Schwitzgebel (2009, 2013, 2014), together with Schwitzgebel and Rust (2009, 2010, 2011, 2013, 2014, 2016), Schwitzgebel and Cushman (2012, 2015), Schwitzgebel et al. (2012, 2020, 2021), has conducted a set of studies to systematically investigate the empirical relationship between normative attitude and moral behaviors of professional ethicists and the comparison groups. Most famously, Schwitzgebel and Rust (2014) compared the self-reported and directly observed behaviors of professional ethicists with their expressed normative attitudes to determine the consistency of the three. Counter-intuitively, they concluded that although ethicists expressed somewhat more stringent normative attitudes on some issues, on no issues did ethicists show unequivocally better behavior than the comparison groups.

Schwitzgebel and Rust (2014, pp. 295–6) formulated four models of the relationship between ethical reflection and moral behavior. *Booster view* declares that philosophical moral reflection leads to the discovery of moral truths, which have a significant positive overall effect on moral behavior, thus increasing the overall consistency between one's broad normative attitude and practical moral behavior. *Rationalization view*, on the contrary, asserts that it is not that ethical reflection affects moral behavior, but that people adjust their attitudes in order to conform to their existing or past moral behaviors. *Inert discovery view* proposes that although ethical reflection leads to the discovery of moral truths, it does not alter the practical behavior of those who make the discoveries. *Epiphenomenalist view* argues that philosophical moral reflection can neither essentially alter behaviors or moral attitudes, nor increase attitude-behavior consistency.

To test these four models, Schwitzgebel and Rust (2014) contacted 980 professors, among which 198 ethicists, 208 non-ethicist philosophers, and 167 non-philosophy professors responded. The survey contains three sections: the first two are questions about respondents' normative attitude and their own behaviors on moral issues including theft, academic society membership, voting, staying in touch with one's mother, vegetarianism, organ donation, blood donation, response rates to student e-mails, charity, and survey response honesty. The third section asks the respondents to report the level of abstraction at which they tend to consider ethical issues (metaethics, normative ethics, applied ethics, or no ethics-related area among their specializations), and to report what normative ethical view they find broadly most appealing (deontological, consequentialist, virtue ethical, skeptical, or no settled position).

Schwitzgebel and Rust (2014) concluded that, while ethicists expressed somewhat more stringent normative attitudes on some issues, they did not show “unequivocally better behavior” and the results of “attitude-behavior consistency were mixed.” Specifically, ethicists showed the strongest connection on “voting” but the weakest on “charitable donation,” compared with non-ethicist philosophers and non-philosophers.

Schönegger and Wagner (2019) tried to “cross-validate this pattern of results in German-speaking countries.” Their results justified Schwitzgebel and Rust’s (2014) conclusion that ethicists behave no morally better than other academics on average. However, with respect to normative attitudes, they concluded with a “mixed result” that “ethicists and philosophers even expressed more lenient attitudes” on some issues, while it is on vegetarianism that ethicists not only held stronger normative attitude but also reported better corresponding moral behaviors (Schönegger & Wagner, 2019).

### 3. Method

We contacted 4482 professors in total, including 1182 ethicists, 1530 non-ethicist philosophers, and 1770 non-philosophers from 754 Chinese universities located in 30 provinces, municipalities and autonomous regions of Chinese mainland. We have included all the provinces in Chinese mainland except Qinghai, because there was no contact information for philosophy professors on the official website of Qinghai University at the time of our research. We did not distinguish the professional titles of the participants, so the term “professor” referred to anyone teaching and owing an academic position in the universities. The way we contacted the participants is the same as how Schönegger and Wagner (2019) did. We selected potential respondents on the basis of their areas of expertise, which can be justified by the information available on their public academic websites. For the non-philosopher comparison group, we reached out to the professors from related fields (e.g., linguists, sinologists, historians, sociologists, educationists, and archeologists). They were (when our research started) “at the same universities that the ethicists and non-ethicist philosophers were sampled from, in order to counterbalance possible differences in salary, social status of disciplines, and other possible confounds based on locality” (Schönegger & Wagner, 2019, p. 537).

Given the almost exclusive use of e-mails in academia nowadays and considering the inconvenience of delivering hard copy letters during the COVID-19 pandemic, we only sent online surveys. All e-mails were sent out manually with the potential participants’ full names or family names included at the beginning of the e-mails, in order to make participation in the survey more inviting (Schönegger & Wagner, 2019, pp. 537–8). We used Wenjuanxing, a widely accepted online questionnaire survey platform in

Chinese mainland for data collection. Our survey was not successfully delivered to 217 persons, as they either had malfunctioning e-mail addresses, or our mails were returned because the connection to the remote recipient's server was denied. We finally managed to deliver our survey to 4482 professors, and received 187 completed responses from ethicists, 90 from non-ethicist philosophers, and 91 from non-philosophers, thus with an overall response rate of 8.22% (while ethicists' response rate is 15.8%, non-ethicist philosophers' response rate is 5.89%, and non-philosophers' response rate is 5.14% ( $\chi^2 = 123.583$ ,  $p < .001$ )), while the response rate of the original US study is 58.47%, and the response rate of the replication study in German-speaking countries is 29.5%. Notably, for the 188 total responses received from ethicists, we deleted one of them, because in the comments field, this respondent clarified that he or she was a student, not a professor. And from the time when we set out to send the e-mails to the time when we finished data collection, it took us about three months altogether.

Our low response rate may be due to several differences between our research and the previous two. On one hand, like Schönegger and Wagner (2019, p. 538), we did not send out printed versions of the survey, and our research did not include a ten-dollar charity incentive. But Schwitzgebel and Rust (2014, p. 313) found out that recipients were generally little moved by the ten-dollar charity incentive, so this factor should not be an influential one. On the other hand, although we sent out the e-mails over multiple days, some Chinese professors might not have the professional habit of checking their e-mails regularly, so they missed our e-mails or found our surveys long afterward. Most importantly, the rather low response rate can also to some extent represent the professors' directly observed behavior on the issue of responding to e-mails, although these e-mails were not necessarily from their own students.

As to the adequacy of the sample size, on one hand, it was determined a priori that we would aim to collect data from as many participants as possible, a method recommended when the final sample size is limited based on how many e-mail recipients decide to participate (Kim et al., 2022; Lakens, 2022; Seli et al., 2016). Therefore, we tried our best to include all the potential participants that we can have access to through sending e-mails to 4699 professors. On the other hand, we gathered all the reported effect size values of the original study (which were selectively reported as  $r$  values in the Notes), and obtained the average effect size ( $r = .240$ , which is then transformed to  $f = .247$ ) by using Fisher's  $z_r$  conversion. We performed a power analysis using G\*Power (Faul et al., 2009) with the following parameters, effect size  $f = .247$ ,  $\alpha = .05$ , power  $(1-\beta) = .90$ , 3 groups, which yielded an approximate sample size of  $N = 213$ . Since the original study achieved an overall response rate of 58.47%, we predicted that at least 365 e-mails needed to be sent. In fact, as we have mentioned above, much more

e-mails had been sent because of the low response rate of our study. Finally, the sample size of our study arrived at 368, which should be more than adequate.

When we set out to translate the survey, we discussed with several experts about how to translate it as precisely and appropriately as possible, and finally we decided to adopt the method of back translation. When direct translation of the items brings grammatical incoherence or difficulties in understanding because of cultural or institutional reasons, the questions were changed slightly to neutralize the differences (Schönegger & Wagner, 2019, p. 538). For example, while the original study asked whether one's driver license included a "statement or symbol indicating willingness to be an organ donor in the event of death" (Schwitzgebel & Rust, 2014, p. 308), we asked participants whether they had signed the consent for organ donation, because there is no compulsory provision on organ donation in Chinese law. Furthermore, after several rounds of translation back and forth, we sent both of the Chinese and English versions of our survey to a few bilingual professors for their feedback about the comprehensibility and divergence of the surveys. Meanwhile, we sent the English version of our survey to Eric Schwitzgebel for his suggestions. It needs to be emphasized that although we are extremely grateful to all the friends for their great help, they should not shoulder the responsibility for any mistake in our research.

Except for the extension, the items of our survey were virtually identical to those of the previous studies. We also divided the main body of our survey into three parts. In the "normative attitudes" part, besides the issues contained in the original US study, we also inquired about paying registration fees of academic conferences ("How often do you pay the registration fees when you attend the academic conferences (in case that you are required to pay)"), which was also investigated by Schwitzgebel (2013). Inspired by Confucianism's five cardinal virtues (五常), i.e., benevolence (仁), righteousness (義), manners (禮), wisdom (智), and trustworthiness (信), three issues were especially added in our study in order to locate our research in traditional Chinese moral culture: breaking appointments without any good reason (righteousness), not observing etiquette at the national flag raising ceremony (manners), and lying (excluding white lies) (trustworthiness).

The "self-reported moral behavior" part asked participants to self-report their own behaviors on the very same issues. At the end, we also asked about the participants' honesty in responding to previous questions and their attitude toward honesty in this survey. The extension is almost the same as Schönegger and Wagner's (2019) study, except that we asked the participants to further classify their own main research areas personally.



We used a 9-point Likert scale ranging from 1 (very morally bad/strongly disagree) to 5 (morally neutral/neither agree nor disagree), and finally to 9 (very morally good/strongly agree) to assess normative attitudes and the extension questions. Most importantly, after collecting all the surveys, we reclassified the data based on the respondents' self-reports about their own main research areas, which resulted in 151 ethicists, 105 non-ethicist philosophers, and 112 non-philosophers. The necessity for this sample reclassification will be further discussed (Section 5).

## 4. Results

### 4.1. Normative attitudes

Our results are different from that of the original US study, but more similar to that of the replication study in German-speaking countries. On seven of the ten normative topics covered by the original US study and on all the three Confucian virtues that we added, the results failed to detect statistically significant effects among the three groups with regard to normative attitudes on different moral issues (see, Table 1). We did not find that ethicists unequivocally expressed more stringent normative attitudes when there were significant differences among groups. Compared to reference groups, non-philosophers generally expressed significantly more lenient attitudes, while ethicists' normative attitudes were more stringent on issues of paying registration fees of academic conferences, eating meat, not responding to student e-mails, not being honest in this survey, and breaking appointments without good reasons (see, Table 1). Following Schwitzgebel and Rust (2014, p. 300), we emphasized qualitative differences “between rating the action anywhere on the morally bad side of the scale (1–4) versus rating it as morally neutral (5) versus rating it as morally good (6–9).” Therefore, we further performed proportional analysis.

#### 4.1.1. Theft

The first question in the original US survey asked participants to evaluate the morality of “stealing \$1000 from a house where you are staying as a guest.” According to Schwitzgebel and Rust (2014, p. 299), this question was “intended to help anchor the morally bad end of the scale, providing participants with an implicit comparison point for their other responses and aiding interpretation of the scale.” But the subjects of the question sentences in this survey were all omitted, so the questions could be interpreted either from a first-person perspective or from a third-person perspective. To avoid possible ambiguity and confusion, we explicitly named the subject of the



**Table 1. Normative attitudes.**

	Evaluating statements on a 9-point Likert-scale from 1 ("Very morally bad") to 9 ("Very morally good")		
	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers
1. Committing theft of ¥10,000	.551	1.17	1.2
2. Paying academic membership fees	.006	6.70 <sup>a</sup>	6.53 <sup>b</sup>
3. Paying registration fees at professional meetings	.058	6.30	6.47
4. Honesty in voting	.011	7.52 <sup>a</sup>	7.47 <sup>b</sup>
5. Regularly talking to one's mum	.059	6.99	6.93
6. Regularly talking to one's children	.325	6.81	6.73
7. Regularly eating meat of mammals	.001	5.39 <sup>a</sup>	5.65
8. Signing the consent for organ donation	.099	8.19	7.92
9. Regularly donating blood	.079	8.03	7.77
10. Not answering student e-mails	.075	3.07	3.46
11. Donating 10% of income to charity	.240	8.29	8.05
12. Not being honest in this survey	.479	3.54	3.77
13. Often breaking appointments without any good reason	.091	2.13	2.35
14. Impertinence at the national flag raising ceremony	.745	2.35	2.19
15. Lying (excluding white lies)	.728	1.75	1.63
			Non-Philosophers
			1.08
			7.28 <sup>ab</sup>
			6.85
			8.02 <sup>ab</sup>
			7.42
			7.07
			6.04 <sup>a</sup>
			8.31
			8.18
			3.13
			8.26
			3.68
			2.53
			2.31
			1.75

abc indicating sig. ( $p < .05$ ) group differences (Scheffé).

question sentence, and rephrased this question as “Mr. Chen stole ¥10000 from his neighbor when paying a visit to the neighbor’s house.” The subsequent moral issues related to normative attitudes have also been adjusted in the same way.

Similar to the original study, almost all respondents rated theft on the morally bad side of the scale: 92.9% of respondents rated it as 1, “very morally bad,” and 98.6% rated it as either 1 or 2. Overall, Chinese professors showed much more stringent attitude toward theft as compared to the original study, wherein 76% of respondents rated it as 1 and 96% rated as it either 1 or 2. Schwitzgebel and Rust (2014, p. 300) concluded that because of the scaling issue, philosophers “may have been more likely than non-philosophers to have reserved the extreme bad end of the scale for particularly heinous deeds,” while non-philosophers were significantly more likely to rate theft “at the extreme endpoint of the scale (92% rated it as 1) than were either ethicists or non-ethicist philosophers (74% and 65% respectively).” However, our study told a quite different story: 93.4% of ethicists, 93.3% of non-ethicist philosophers, and 92.0% of non-philosophers rated it as 1.

A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “theft.” The result failed to detect a statistically significant main effect ( $F(2, 365) = .597, p = .551$ ), which is different from the original study. The difference in results may stem from two reasons. On one hand, there is a famous Chinese idiom that “a distant relative is not as good as a near neighbor,” which shows the great importance of one’s relationship with neighbors in the eyes of Chinese people. On the other hand, the loss of ¥10000 is already a relatively large one in Chinese mainland, so it may increase the respondents’ perceived harm caused by the theft (Schein & Gray, 2015).

#### *4.1.2. Paying academic membership fees and registration fees of academic conferences*

Proportional analysis showed that 70.5% of non-philosophers rated membership in one academic society as morally good, compared to 55.0% of ethicists and 50.5% of non-ethicist philosophers. It follows that non-philosophers are more likely to consider it morally good to pay membership fees than philosophers. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “paying academic membership fees to one’s academic society in order to support its maintenance and development.” The main effect was statistically significant ( $F(2, 365) = 5.254, p = .006, \eta^2 = .028$ ). By using the test method of Scheffé, we obtained the following significant comparisons: ethicists vs. non-philosophers ( $p = .037$ ); non-ethicist philosophers vs. non-philosophers ( $p = .011$ ).

Paying registration fees of academic conferences is not included in both the US study and the replication study in German-speaking countries, but it was investigated by Schwitzgebel (2013). The reason for us to add this issue is that some academic societies in Chinese mainland do not require members to pay their dues, while paying registration fees is more common in Chinese academia. Proportional analysis revealed that 43% of ethicists, 50.5% of non-ethicist philosophers, and 59.8% of non-philosophers regarded paying registration fees of academic conferences as morally good. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “paying the registration fees every time when attending the academic conference (in case he or she is required to pay).” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.862, p = .058, \eta^2 = .015$ ).

#### 4.1.3. *Honesty in voting*

Given the differences between electoral system in China and the US, we restricted the public elections in the original study to ordinary democratic votes. Proportional analysis showed that 76.2% of ethicists, 76.2% of non-ethicist philosophers, and 90.2% of non-philosophers regarded honesty in voting as morally good. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “being honest in voting.” The main effect was statistically significant ( $F(2, 365) = 4.524, p = .011, \eta^2 = .024$ ). By using the test method of Scheffé, we obtained the following significant comparisons: ethicists vs. non-philosophers ( $p = .034$ ); non-ethicist philosophers vs. non-philosophers ( $p = .032$ ). Similar to paying academic membership fees, non-philosophers are more likely to consider honesty in voting as morally good compared to the other two groups.

#### 4.1.4. *Communicating with mothers and children*

To increase the accuracy, smoothness, and simpleness of the Chinese translation, we reversed the question “not keeping in at least monthly face-to-face or telephone contact with one’s mother” in the original survey to “communicating with one’s mother (by phone, WeChat voice/video, or face-to-face) at least once a month.” WeChat is a commonly used messaging and calling app in Chinese mainland. Proportional analysis showed that 73.5% of ethicists, 71.4% of non-ethicist philosophers, and 84.8% of non-philosophers regarded constant communication with mothers as morally good. A one-way ANOVA was conducted to test the effect of ethical

reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “regularly communicating with one’s mother.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.849, p = .059, \eta^2 = .015$ ).

“Respecting the old and loving the young” is a traditional virtue of the Chinese people, so the issue of “often communicating with one’s children” is added in our study to compare with “often communicating with one’s mother.” Proportional analysis showed that 68.2% of ethicists, 66.7% of non-ethicist philosophers, and 75.9% of non-philosophers regarded constant communication with one’s children as morally good. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “regularly communicating with one’s children.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 1.129, p = .325$ ).

Taken together, we can find that although the results failed to detect any statistically significant main effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on communicating with one’s mother or children, communicating with one’s mother is generally regarded as moral by more participants in each group than communicating with one’s children.

#### 4.1.5. Vegetarianism

Rather different from the original US study and the replication study in German-speaking countries, only five respondents (one ethicist, one non-ethicist philosopher, and three non-philosophers) in our study rated the behavior of regularly eating meat of mammals as morally bad. Correspondingly, 99.3% of ethicists, 99.0% of non-ethicist philosophers, and 97.3% of non-philosophers did not consider eating meat as morally bad. On the whole, Chinese professors do not think that eating meat is morally bad. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “regularly eating meat of mammals.” The main effect was statistically significant ( $F(2, 365) = 7.492, p = .001, \eta^2 = .039$ ). By using the test method of Scheffé, we obtained the following significant comparisons: ethicists vs. non-philosophers ( $p = .001$ ).

In our study, most respondents considered eating meat as morally neutral (84.8% of ethicists, 77.1% of non-ethicist philosophers, and 61.6% of non-philosophers, respectively, rated 5, i.e., morally neutral, on this issue), which might be due to differences between Eastern and Western cultures. While western scholars tend to hold controversial attitudes regarding the morality

of eating meat (Callicott, 2016; Gill, 2013; Lomasky, 2013; Zangwill, 2021), in the Chinese culture, it is generally believed that eating meat or not is not a moral issue. This divergence will be further discussed (Section 5).

#### 4.1.6. *Organ and blood donation*

Proportional analysis showed that 87.4% of ethicists, 87.6% of non-ethicist philosophers, and 92.9% of non-philosophers consider organ donation as morally good. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “organ donation.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.331, p = .099, \eta^2 = .013$ ).

Proportional analysis showed that 86.8% of ethicists, 84.8% of non-ethicist philosophers, and 91.1% of non-philosophers regard “blood donation” as morally good. Similarly, non-philosophers are more likely to consider blood donation as morally good. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “blood donation.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.550, p = .079, \eta^2 = .014$ ).

#### 4.1.7. *E-mail responsiveness and charitable donation*

On the question of e-mail responsiveness, proportional analysis showed that 82.1% of ethicists, 85.7% of non-ethicist philosophers, and 85.7% of non-philosophers regarded not responding to student e-mails as morally bad. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “often not responding to student e-mails.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.614, p = .075, \eta^2 = .014$ ).

On the issue of charitable donation, proportional analysis showed that 93.4% of ethicists, 87.6% of non-ethicist philosophers, and 97.3% of non-philosophers considered it morally good to give 10% of one’s income to charity. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “donating 10% of one’s income to charity.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 1.434, p = .240$ ).

#### 4.1.8. *Survey response honesty*

Proportional analysis showed that 67.5% of ethicists, 61.9% of non-ethicist philosophers, and 64.3% of non-philosophers considered it morally bad to respond dishonestly to survey questions. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist

philosophers vs. non-philosophers) on “responding dishonestly to survey questions.” The result failed to detect a statistically significant main effect ( $F(2, 365) = .738, p = .479$ ).

#### **4.1.9. Breaking appointments without any good reason**

We added this issue in order to test participants’ normative attitude toward the Confucian virtue of “Righteousness.” Proportional analysis showed that 95.4% of ethicists, 96.2% of non-ethicist philosophers, and 93.8% of non-philosophers considered breaking appointments without any good reason as morally bad. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “often breaking appointments without any good reason.” The result failed to detect a statistically significant main effect ( $F(2, 365) = 2.416, p = .091, \eta^2 = .013$ ).

#### **4.1.10. Impertinence at the national flag raising ceremony**

We added this issue in order to test participants’ normative attitude toward the Confucian virtue of “Manners.” Proportional analysis showed that 90.1% of ethicists, 96.2% of non-ethicist philosophers, and 93.8% of non-philosophers considered not observing etiquette at the national flag raising ceremony as morally bad. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “impertinence at the ceremony of raising the national flag.” The result failed to detect a statistically significant main effect ( $F(2, 365) = .295, p = .745$ ).

#### **4.1.11. Lying (excluding white lies)**

We added this issue in order to test participants’ normative attitude toward the Confucian virtue of “Trustworthiness.” Proportional analysis showed that 93.4% of ethicists, 99.0% of non-ethicist philosophers, and 98.2% of non-philosophers regarded often lying (excluding white lies) as morally bad. A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “often lying.” The result failed to detect a statistically significant main effect ( $F(2, 365) = .318, p = .728$ ).

Taken together, we can find that although the results failed to detect any statistically significant main effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on three Confucian virtues, more than 90% of each group regarded violating any of these virtues as morally bad, which can somehow show the great influence of Confucianism in Chinese culture, and further cross-cultural research could be conducted in the future.

## 4.2. Self-reported moral behavior

Following Schwitzgebel and Rust (2014), sixteen questions were presented to inquire participants about the frequency of their corresponding moral behaviors. Like the original study, we generally found no trend toward ethicists behaving better across measures (Schwitzgebel & Rust, 2014, p. 315), with the exception of academic membership fees payment, vegetarianism, and percentage of charitable donations in 2019. Unlike the original study and the replication study in German-speaking countries, we found statistically significant difference in self-reported behavior on the issue of membership in academic societies. 76.2% of ethicists reported currently being a dues-paying member of their disciplines' main academic society, compared to 42.9% of non-ethicist philosophers and 43.8% of non-philosophers ( $\chi^2 = 50.000$ ,  $p < .001$ ). Furthermore, a linear trend test found statistically significant association between ethical reflection and the self-reported moral behavior of paying membership fees ( $\chi^2 = 33.726$ ,  $p < .001$ ).

On the issue of paying registration fees, the result failed to detect statistically significant difference in the three groups' self-reported behavior. 98.0% of ethicists, 93.3% of non-ethicist philosophers, and 95.5% of non-philosophers reported paying the registration fees every time when required during participating in academic conferences ( $\chi^2 = 5.554$ ,  $p = .475$ ). The result failed to detect statistically significant difference on the issue of "voting" either. 79.5% of ethicists indicated that they behaved honestly in the recent democratic vote, compared to 80.0% of non-ethicist philosophers and 80.4% of non-philosophers ( $\chi^2 = 4.464$ ,  $p = .347$ ). Similarly, the result failed to detect statistically significant difference between the three groups in their reports of contact with their mothers, with 46.4% of ethicists reporting communicating with their mothers (by phone, WeChat voice/video, or face-to-face) at least five times a month over the last two years, compared to 45.7% of non-ethicist philosophers and 41.1% of non-philosophers ( $\chi^2 = 3.785$ ,  $p = .706$ ).

For vegetarianism, following the original research, there were two corresponding questions in our study. One asked about the frequency of eating mammals' meat in this week, and the other asked about whether one had eaten meat at the last dinner. Based on answers to the first question, a one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on "number of meals containing meat in this week." The main effect was statistically significant ( $F(2, 365) = 3.896$ ,  $p = .021$ ,  $\eta^2 = .021$ ) (see, Table 2). By using the test method of Scheffé, we obtained the following significant comparison: ethicist (5.16) vs. non-philosophers (6.62) ( $p = .025$ ). Based on answers to the second question,



**Table 2.** Self-reported moral behaviors.

Self-reported moral behaviors: Mean differences between groups (ethicists, non-ethicist philosophers, and non-philosophers) with regards to self-reported behaviors on different normative issues

	Self-reported measures of moral behavior			
	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers	Non- Philosophers
1. Last contact with mum in days	.426	7.35	9.83	15.13
2. Number of meals containing meat per week	.021	5.16 <sup>a</sup>	5.50	6.62 <sup>a</sup>
3. Percentage of student e-mails usually answered	.747	94.72	95.81	94.61
4. Percentage of income donated to charity in 2019	.005	6.99 <sup>a</sup>	3.88 <sup>a</sup>	5.04

For the items 1&2, higher values indicate less self-reported moral behaviors.  
abc indicating sig. ( $p < .05$ ) group differences (Scheffé).

the result failed to detect statistically significant difference in the three groups' self-reported behavior ( $\chi^2 = 5.713$ ,  $p = .222$ ), which is distinct from the replication study in German-speaking countries.

The results failed to detect statistically significant differences in whether one had signed the consent form for organ donation ( $\chi^2 = 1.156$ ,  $p = .561$ ), or whether one would be willing to be an organ donor ( $\chi^2 = 4.567$ ,  $p = .335$ ). The failure to distinguish groups on these items was also present in the original study and the replication study in German-speaking countries. The result did not detect any statistically significant difference in whether one donated blood at least once a year ( $\chi^2 = 2.807$ ,  $p = .946$ ). Notably, 41.1% of ethicists claimed that it was unsuitable for them to donate blood for some reasons, together with 40.0% of non-ethicist philosophers and 35.7% of non-philosophers.

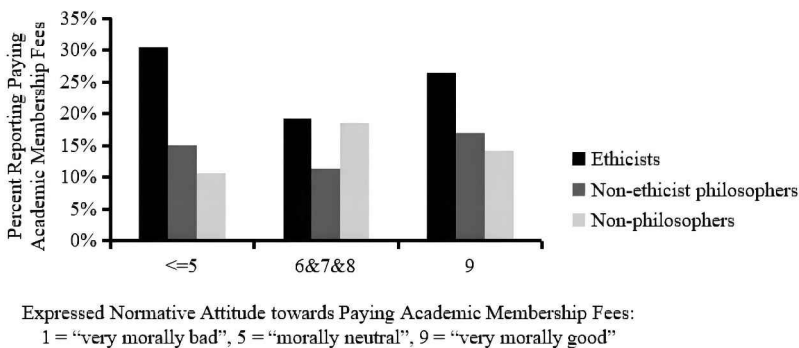
On the self-reported percentage of responding to student e-mails, a one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on "student e-mails responsiveness." The result failed to detect a statistically significant main effect ( $F(2, 365) = .291$ ,  $p = .747$ ) (see, Table 2), which is at odds with the replication study in German-speaking countries. Similarly, a one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on "percentage of annual income one had given to charity in 2019." The main effect was statistically significant ( $F(2, 365) = 5.403$ ,  $p = .005$ ,  $\eta^2 = .029$ ) (see, Table 2). By using the test method of Scheffé, we obtained the following statistically significant comparison: ethicists (6.99%) vs. non-ethicist philosophers (3.88%) ( $p = .007$ ). Unfortunately, we failed to detect significant differences in the self-reported behaviors of all the three Confucian virtues.

### 4.3. Attitude-behavior consistency

Basically following the former researches' procedure of calculating the attitude-behavior consistency, we first evaluated differences across groups in normative attitudes and self-reported behaviors, respectively. And then based on the resulted evaluation, we further measured within-group correlations of attitude and self-reported behavior on the issues wherein relevant group differences on both attitudes and self-reported behaviors obtained between ethicists and the other two groups.

In terms of group differences, we found considerable attitude-behavior consistency for ethicists on paying academic membership fees and vegetarianism. On paying academic membership fees, in comparison to non-philosophers, ethicists held a more stringent normative attitude and were more likely to pay academic membership fees. This result was not found in both the original study and the replication study in German-speaking countries. On vegetarianism, our study found that ethicists, rather than non-philosophers, had a more stringent normative attitude toward eating meat; correspondingly, ethicists, compared to non-philosophers, also did report less meat eating behaviors, which was largely consistent with results of the original study and the replication study in German-speaking countries.

Secondly, we looked at correlational measures for the above two issues wherein group differences existed. In terms of paying academic membership fees, we found a statistically significant correlation-based consistency between attitude and self-reported behavior within philosopher groups (ethicists,  $r = .257$ ,  $p = .004$ ; non-ethicist philosophers,  $r = .431$ ,  $p = .001$ ; non-philosophers,  $r = -.019$ ,  $p = .844$ ) (see, [Figure 1](#)).



**Figure 1.** Relationship of participants' expressed normative attitude toward "paying academic membership fees" and the percentage reporting having paid academic membership fees. It can be seen that the overall normative attitude and self-reported moral behavior of philosopher groups (ethicists and non-ethicist philosophers) are consistent on this issue, compared to non-philosophers.

On vegetarianism, we only found a statistically significant correlation-based consistency between attitudes and self-reported behaviors within the group of ethicists (ethicists,  $r = .281$ ,  $p < .001$ ; non-ethicist philosophers,  $r = .006$ ,  $p = .954$ ; non-philosophers,  $r = .096$ ,  $p = .314$ ) (see, [Figure 2](#)).

In addition, we also looked at the correlational consistency of charity, a topic that was selectively reported by Schönegger and Wagner (2019). The result can only detect a statistically significant attitude-behavior correlation for non-philosophers (ethicists,  $r = -.152$ ,  $p = .062$ ; non-ethicist philosophers,  $r = .172$ ,  $p = .079$ ; non-philosophers,  $r = -.206$ ,  $p = .029$ ) (see, [Figure 3](#)), which was oddly negative.

Following the replication study in German-speaking countries, in order to compare with what were reported in the original study, we also checked the correlational consistency of voting and not staying in touch with one's mother. The results failed to detect statistically significant attitude-behavior correlations within all three groups for both voting (ethicists,  $r = .128$ ,  $p = .134$ ; non-ethicist philosophers,  $r = -.095$ ,  $p = .371$ ; non-philosophers,  $r = -.026$ ,  $p = .798$ ) and not staying in touch with one's mother (ethicists,  $r = -.121$ ,  $p = .320$ ; non-ethicist philosophers,  $r = .006$ ,  $p = .954$ ; non-philosophers,  $r = -.099$ ,  $p = .298$ ).

We also measured the attitude-behavior correlation within groups on the rest of the issues. On the issue of breaking appointments without any good reason, all the 368 respondents of three groups chose the same answer: less than 2 times. On not responding to student e-mails (ethicists,  $r = .199$ ,  $p = .014$ ; non-ethicist philosophers,  $r = .306$ ,  $p = .001$ ; non-philosophers,  $r = .104$ ,  $p = .277$ ), we found statistically significant attitude-behavior correlation for ethicists and non-ethicist philosophers. On paying registration fees of academic conferences (ethicists,  $r = .152$ ,  $p = .063$ ; non-ethicist philosophers,  $r = .212$ ,  $p = .030$ ; non-philosophers,  $r = .155$ ,  $p = .103$ ) and impertinence at the national flag raising ceremony (ethicists,  $r = -.095$ ,  $p = .258$ ; non-ethicist philosophers,  $r = -.233$ ,  $p = .027$ ; non-philosophers,  $r = -.107$ ,  $p = .315$ ), we found statistically significant attitude-behavior correlation for non-ethicist philosophers, but the correlation is negative on the latter issue. Finally, on organ and blood donation, lying (excluding white lies), and survey response honesty, the results failed to detect any statistically significant attitude-behavior correlation-based consistency within all three groups.

#### 4.4. Extension results

To provide some possible explanations for the gap between normative attitudes and moral behaviors, following Schönegger and Wagner (2019), our study also included three different statements to inquire whether the respondents agreed or disagreed with them. The first claims that the belief

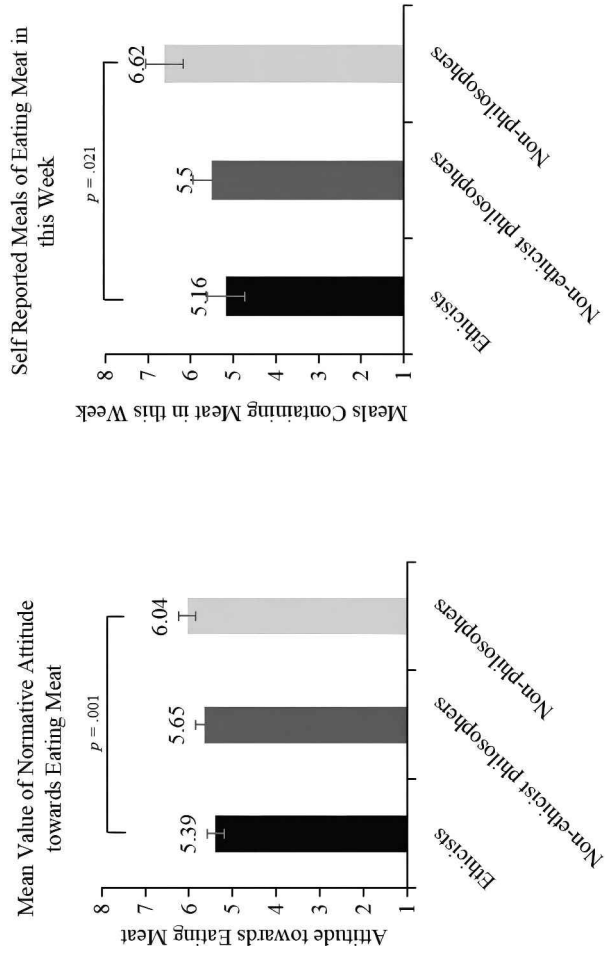
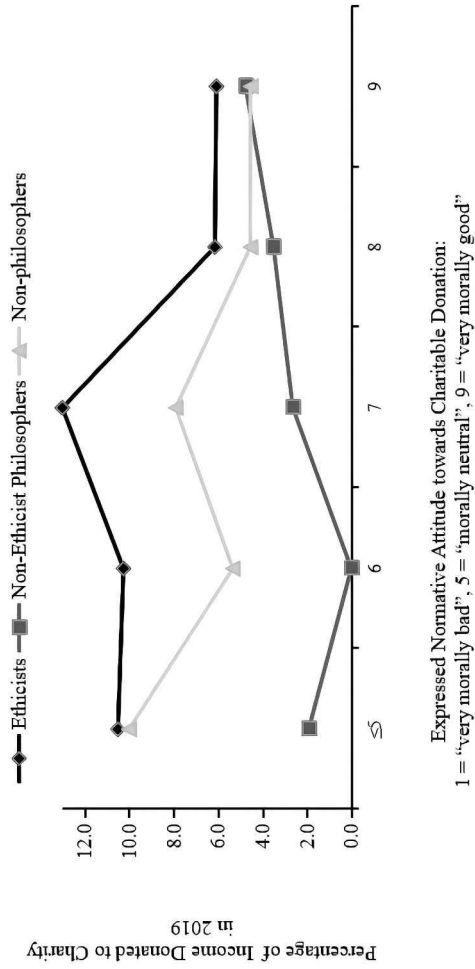


Figure 2. Relationship of normative attitudes toward eating meat and frequency of meals containing meat in this week.



**Figure 3.** Relationship of expressed normative attitude toward “charitable donation” and the self-reported percentage of income donated to charity in 2019. Since a majority of the three groups rated “8” or “9” (25.8% rated “8” and 56.2% rated “9”) in their expressed normative attitude on this issue, with the growth of the rating scores from left to right, the self-reported percentages of the respondents’ income donated to charity will be gradually regressed to the overall mean value, which is 5.51.

that an action is wrong is a sufficient motivation to act according to this belief; the second claims that philosophical moral reflection leads to the realization of moral truths; the third claims that philosophical moral reflection improves moral behavior.

A one-way ANOVA was conducted to test the effect of ethical reflection (ethicists vs. non-ethicist philosophers vs. non-philosophers) on “agreement with motivation internalism,” “realization of moral truth,” and “moral behavior.” The results did not detect any statistically significant group difference of ethical reflection on “agreement with motivation internalism” ( $F(2, 365) = 1.295, p = .275$ ) and “realization of moral truth” ( $F(2, 365) = 1.301, p = .274$ ). However, all three groups were slightly inclined to agree, on average, that a judgment about whether an act is right or wrong gives sufficient reason for action: Sample mean = 5.95, compared to value: 5 (neutral). A one sample t-test produced this result:  $t = 51.362, p < .001$ . Similarly, all three groups were slightly inclined to agree, on average, that ethical reflection yields moral truths: Sample mean = 5.65, compared to value: 5 (neutral). A one sample t-test produced this result:  $t = 50.241, p < .001$ .

As for the third statement, we found that ethicists ( $M = 7.64, SD = 1.67$ ) were more inclined to agree that philosophical moral reflection leads to improved moral behavior ( $F(2, 365) = 3.423, p = .034, \eta^2 = .018$ ), compared to non-ethicist philosophers ( $M = 7.14, SD = 1.61$ ) and non-philosophers ( $M = 7.35, SD = 1.228$ ). By using the test method of Scheffé, we obtained the following statistically significant comparison: ethicists vs. non-ethicist philosophers ( $p = .038$ ). Furthermore, the mean value of all three groups’ agreement with this statement was above 7 and the overall mean value was 7.41, compared to value: 5 (neutral). Therefore, respondents in our study can be considered in general as holding the Booster view.

#### **4.5. Abstractness of ethical interest and normative ethical theory**

When asked which best reflects the level of abstraction at which they tend to consider ethical issues (check all that apply), among 256 philosophers, 57 chose metaethics, 95 chose normative ethics, 154 chose applied ethics, and 47 chose no ethics-related area among their specializations. When asked about the most appealing normative ethical view, philosophers in our study showed a distribution that was close to that of the original study and the replication study in German-speaking countries. 26.76% of philosophers chose virtue ethics, and 16.9% preferred deontology, with only 7.04% deciding for utilitarianism. Moreover, 14.08% of philosophers claimed to adhere to skepticism, with the remaining 35.21% reporting having no settled position.

## 5. Discussion

First of all, we have to hereby clarify an important methodological issue. As we have mentioned earlier, we have a different classification method of the sample compared to the original study. At the request of one anonymous reviewer, we subjected a subset of our most central significant findings to a robustness check. It is shown in [Table A1](#) that the results are a little sensitive to the reclassification, particularly in the normative attitude on “honesty in voting” and the self-reported “percentage of income donated to charity in 2019.” So, it is necessary for us to further explain why we adopted such a reclassification. Notably, we find that of the 187 “ethicists” in the sense of the original study, 37 self-classify themselves as non-ethicist philosophers, and 21 self-classify themselves as non-philosophers. We further find that of the 21 “ethicists” who self-classify themselves as non-philosophers, only 6 have doctoral degrees in philosophy. Based on the information of their affiliations and the institutional differences between philosophy disciplines in the US and in Chinese mainland, we attempt to explain this phenomenon as follows.

As we have reported in the Method section ([Section 3](#)), we generally recruited potential respondents according to the information available on their academic websites. We realized that it was necessary to reclassify the respondents according to their own judgments for the following reasons. Firstly, when investigating peer opinions of the moral behavior of ethicists, Schwitzgebel and Rust (2009) asked respondents to compare the moral behavior of ethicists, non-ethicist philosophers (specialists in metaphysics and epistemology), non-philosopher academics, and non-academics. This classification seems to be more applicable and reasonable, because two of the present authors are actually experiencing perplexities similar to some of our respondents: for one of us, although she has published in ethics, she is rather more an epistemologist, i.e., a non-ethicist philosopher; for another one of us, although he also has published in ethics and philosophy, he is mainly a psychologist, i.e., a non-philosopher. Secondly, in Chinese mainland, philosophy is divided into eight secondary disciplines: Marxist philosophy, Chinese philosophy, foreign philosophy, logic, ethics, philosophy of science and technology, aesthetics, and religion. Marxist philosophy sometimes belongs to philosophy department and sometimes belongs to school of Marxism or political education. Therefore, as we can see from the results, some professors working on secondary disciplines other than ethics may have some research related to ethics but consider themselves as non-ethicists overall, while some professors working on Marxist philosophy may regard themselves as non-philosophers. Finally, for the 21 “ethicists” who self-classify themselves as non-philosophers, most of them are from community colleges which have no graduate programs in philosophy and



only 6 of them have doctoral degrees in philosophy, so we further infer that they may just teach Marxist philosophy or political education courses without actually doing any philosophical research.

### 5.1. Results

Both the original US research and the replication study in German-speaking countries have concluded that there is overall discrepancy between professionalized ethical reflection and moral behavior, which is at odds with the fact that across groups there is an agreement that ethical reflection indeed leads to better moral behavior both in the replication study in German-speaking countries (ethicists,  $M = 5.5$ ,  $SD = 2.0$ ; non-ethicist philosophers,  $M = 5.2$ ,  $SD = 2.2$ ; non-philosophers,  $M = 5.6$ ,  $SD = 2.1$ ) and in our study (ethicists,  $M = 7.64$ ,  $SD = 1.671$ ; non-ethicist philosophers,  $M = 7.14$ ,  $SD = 1.614$ ; non-philosophers,  $M = 7.35$ ,  $SD = 1.228$ ), compared to value: 5 (neutral).

We draw four general observations from the results. Firstly, similar to the original study, our results also show that on the issues where differences across groups do obtain, ethicists exhibit higher stringency in their normative attitudes. On the issues of paying academic membership fees, honesty in voting, and vegetarianism, group differences are statistically significant, although the results do not detect statistically significant differences between ethicists and non-ethicist philosophers.

Among these three issues, vegetarianism is special, which will be discussed separately later. For the other two issues, non-philosophers expressed more lenient attitudes, compared to philosophers. On paying academic membership fees, philosophical and non-philosophical academic societies in Chinese mainland sometimes have different rules and conventions. As for honesty in voting, according to a non-ethicist philosopher, when the consequence of the voting is unfavorable to the voter, then honesty in the voting is morally good; but when it is beneficial or irrelevant to the voter, honesty in the voting is morally neutral. Besides, different from the replication study in German-speaking countries, our study find that ethicists and non-ethicist philosophers show a concurring pattern in their normative attitudes on some issues, in both the directions of stringency and leniency. However, we fail to find such pattern between ethicists and non-philosophers.

Secondly, on the self-reported behavior of paying academic membership fees, there is a statistically significant difference across groups, with ethicists being more likely to pay than the other two groups. We also find a statistically significant correlation-based consistency between normative attitude and self-reported moral behavior within philosopher groups, especially for the ethicists. The reason may lie in Chinese collectivism culture in the sense that Chinese people have a stronger sense of identification and

belonging to their groups or communities (Yu et al., 2016; Zhang & Yu, 2018), so that they may be more willing to pay the membership fees. Besides, this finding explicitly verifies the Booster view that professional ethical reflection can indeed result in more and better moral behaviors (Schwitzgebel & Rust, 2014, p. 295).

Thirdly, in the validation of the four theoretical models of the relationship between ethical reflection and moral behavior, i.e., Booster view, Rationalization view, Inert discovery view, and Epiphenomenalist view (Schwitzgebel & Rust, 2014, pp. 295–6), we find that most respondents in our study tend to hold the Booster view, especially the ethicists. Furthermore, our respondents also tend to believe that ethical reflection yields moral truths, and that normative attitudes are consistent with moral behaviors. This result is different from that of the replication study in German-speaking countries. Chinese philosophers generally have an agreement on these issues, and are more optimistic of the effect of ethical reflection on “agreement with motivation internalism,” “realization of moral truth,” and “moral behavior.”

The final observation is the difference on the issue of vegetarianism between East and West. The word “vegetarian,” once proposed, has attracted widespread discussion and investigation in the West, specifically reflected in the great influence of “Peter Singer’s *Animal Liberation*, Tom Regan’s *The Case For Animal Rights*, Albert Schweitzer’s *Reverence for Life*, Paul W. Taylor’s theory of Biocentrism, Aldo Leopold’s *Land Ethic* and so on” (Leopold, 1949; Ni, 2014; Regan, 1983; Schweitzer, 1947; Singer, 1975; Taylor, 1986). The Chinese people are more inclined to consider the issue of “eating meat” from the perspective of the Land Ethic: as an important part of the ecosystem, human beings are not superior to other species, and as carnivores, human beings will naturally and normally pursue more nutritious and delicious food such as meat of other mammals. Thus, in Chinese mainland, it is often believed that “eating meat” is not morally bad, which explains why the vast majority (75.5%) of our respondents express morally neutral attitudes on this issue. This result is quite different from that of the previous studies (Schönegger & Wagner, 2019; Schwitzgebel & Rust, 2014), in which most respondents perceived eating meat as morally bad.

## 5.2. Limitations

Although we have done almost everything we can to perfect our study, we acknowledge that there are limitations as well. On one hand, we have to admit the absence of measuring the behaviors directly due to the difficulty in collecting observational data, which is in the same situation with the replication study in German-speaking countries (Schönegger & Wagner, 2019, p. 537). Although we expect that the respondents report their behaviors honestly in our research,

there is still a gap between their self-reported and actual behaviors. Due to self-presentation concerns, survey respondents tend to underreport socially undesirable activities and overreport socially desirable ones (Krumpal, 2013). According to the notion of moral hypocrisy, not only do people try to appear moral to others, but also they desire to appear moral to themselves even when they fail to act morally by misperceiving their behaviors as moral or avoiding comparing their behaviors with moral standards (Batson et al., 1997, 1999). Therefore, we should always take a very cautious and prudent approach when interpreting results based on these self-reported behaviors.

On the other hand, as an anonymous reviewer has correctly pointed out, although our study is aiming ultimately to address the role of ethical reflection by comparing the responses of ethicists to non-ethicists, we have to admit that it is contributing to answering this question indirectly by testing the effect of being an ethicist. While serious ethical reflection hardly seems to be experimentally inducible, ethicists are supposed to engage with well-above-average intensity and quality in ethical reflection in virtue of their professional occupation (Schönegger & Wagner, 2019, p. 533). Schwitzgebel and Rust (2011, pp. 6–7) also acknowledged that their empirical research on the moral behavior of ethicists was based on the following two plausible but empirically open assumptions: first, professional ethicists tend to engage in ethical reflection more often or more skillfully than do socially similar non-ethicists; second, ethicists are similar to non-ethicists professors in all dimensions relevant to moral behavior except for their higher rates of ethical reflection. These two background assumptions are central to build the case that a different intensity of ethical reflection is, in fact, the main factor in potential group differences between ethicists and non-ethicists professors (Schönegger & Wagner, 2019, p. 534).

However, what if these assumptions go wrong? Then this attempt to operationalize ethical reflection would fail. In fact, the intended test for the effect of ethical reflection is instead a test for the effect of being an ethicist. Both the original US study and the replication study in German-speaking countries have not taken this question serious. In order to keep as close to the original research as possible, we followed their research formats and did not add any manipulation check questions. But we need to always keep in mind that the aforementioned presuppositions are actually questionable and need to be further testified. Simply being an ethicist does not necessarily mean that one engages in more intense ethical reflection than non-ethicists. Even non-academics also engage in plenty of ethical reflection, though perhaps of a different sort than ethicists. We do not really know how much more ethical reflection ethicists engage in compared to other academics or the general public. More accurate measure of ethical reflection would be needed in future research.

### 5.3. Future research

To acquire a better understanding of the gap between normative attitude and moral behavior, the future research should distinguish further among different normative reasons for action: epistemic norms, moral norms, prudential norms, etc. Prudential norms are associated with furthering personal self-interest, while epistemic norms are concerned with guiding us in reaching epistemic goals such as truth and knowledge (Simion, 2018, p. 233). Since the survey in our research and in the previous two researches asked the participants to rate the moral goodness of concerning behaviors, strictly speaking, the so-called “normative attitude” that we have discussed so far actually refers to moral norms, without particularly considering the epistemic and prudential ones. Apparently, norms of morality and prudence can diverge (Cowie, 2020). Therefore, it is possible that the gap between normative attitude and moral behavior comes from the respondents’ prudential consideration of the situation when reflecting on whether it is useful, beneficial, or practical for them to do something. It is probable that when the moral norm leads to behavior  $\phi$ , the prudential norm results in behavior not- $\phi$ , and the divergence could well explain the inconsistency between normative attitude and moral behavior.

Notably, Wolf (1982, p. 438) calls into question the metamoral assumption that it is always better to be morally better. After all, ordinary people are not moral saints, so the dictates of rational self-interest and the dictates of morality do not always coincide (Wolf, 1982, p. 436). Most people aim to be morally mediocre, to be about as morally good as their peers – not especially better, not especially worse (Schwitzgebel, 2019, p. 347). Therefore, it’s common that although people may think that it is morally best for them to do X, there are other reasons for them not to do X, which then lead to the dissonance between normative attitude and moral behavior.

## 6. Conclusions

Following Schönegger and Wagner (2019), we did a replication-extension research aiming to validate the results of Schwitzgebel and Rust (2014) in Chinese mainland by surveying 368 professors. We managed to replicate some essential findings of the original research and obtain mixed results: while ethicists showed more stringent normative attitudes on certain issues, generally, they did not differ in their self-reported behavior or attitude-behavior consistency from both non-ethicist philosophers and non-philosophers, with the exception of academic membership fees payment and vegetarianism. Nevertheless, most respondents in our study tend to hold the Booster view that professional ethical reflection can indeed bring about more and better moral behaviors.

## Acknowledgments

We wish to first of all thank Eric Schwitzgebel for the advice on the survey translation and the encouragement on this replication research. We would like to thank all the participants for their active engagement and helpful feedback. We would like to especially thank the anonymous reviewers for their detailed comments and inspiring suggestions, which have refreshed and improved our paper remarkably. We are also grateful for beneficial comments and generous support from Tianqun Pan, Aihui Ding, Yusheng Han, Jianhua Han, Jianhua Mei, Shenlong Yang, Liang Zhao, Liying Xu, Yufang Han, Junfeng Liu, Xiaoyang Wang, Yue Liu, and Hui ren Bai. The research reported in this paper was presented at the 6<sup>th</sup> Annual Conference of Chinese Society of Epistemology, during June 18-20, 2021. We need to thank the audience for their brilliant suggestions, especially Jiaming Chen, Jing Zhu, Jianbo Cao, Weiping Zheng, Xiaofei Liu, Xiao Tan, and Qiqi Wang. We also want to thank “Key Concepts in Chinese Thought and Culture - Translation and Communication Project” (<https://www.chinesethought.cn/EN/>), from which some of our English translations of Chinese philosophy classics were adapted.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This research has been supported by the MOE (Ministry of Education in China) Project of Humanities and Social Sciences “Research on epistemic norms of rational actions” (Grant No. 19YJC720006), the National Social Science Funds “Research on the model of philosophical counseling based on analytic philosophy” (Grant No. 20FZX047) and “Research on the moral responsibility attribution of anthropomorphic AI” (Grant No. 20CZX059).

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## Appendix A

**Table A1.** Robustness check.

*Robustness check of normative attitudes and self-reported moral behaviors between the sample classification of the original research and our research.*

	Normative attitudes							
	The sample classification of our research			The sample classification of the original research				
	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers	Philosophers	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers	Non-Philosophers
2. Paying academic membership fees	.006	6.70 <sup>a</sup>	6.53 <sup>b</sup>	7.28 <sup>ab</sup>	.003	6.59 <sup>a</sup>	6.76	7.37 <sup>a</sup>
4. Honesty in voting	.011	7.52 <sup>a</sup>	7.47 <sup>b</sup>	8.02 <sup>ab</sup>	.090	7.45	7.04	7.61
7. Regularly eating meat of mammals	.001	5.39 <sup>a</sup>	5.65	6.04 <sup>a</sup>	.016	5.54 <sup>a</sup>	5.56	6.02 <sup>a</sup>
		Self-reported moral behaviors						
		The sample classification of our research			The sample classification of the original research			
	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers	Philosophers	ANOVA p (sig.)	Ethicists	Non-Ethicist Philosophers	Non-Philosophers
2. Number of meals containing meat per week	.021	5.16 <sup>a</sup>	5.50	6.62 <sup>a</sup>	.012	5.08 <sup>a</sup>	6.04	6.64 <sup>a</sup>
4. Percentage of income donated to charity in 2019	.005	6.99 <sup>a</sup>	3.88 <sup>a</sup>	5.04	.062	6.42	4.22	4.91

For the item 2 of the self-reported moral behaviors, higher values indicate less self-reported moral behaviors. abc indicating sig. (p < .05) group differences (Scheffé).