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## Moral Perfectionism and Moral Values, Virtues, and Judgments:

### Further Investigations

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### Abstract

In a first psychological investigation of moral perfectionism, Yang, Stoeber, and Wang (2015) adapted items from the Frost Multidimensional Perfectionism Scale to differentiate perfectionistic personal moral standards and concern over moral mistakes. Examining a sample of Chinese students, Yang et al. found that personal moral standards showed unique positive relationships with moral values, virtues, and judgments, whereas concern over moral mistakes did not. The present study aimed to replicate Yang et al.'s findings in a sample of Western students ( $N = 243$ ), additionally including measures of moral identity and moral disengagement. Furthermore, the study examined whether moral perfectionism explained variance in moral attitudes beyond general perfectionism. Results largely replicated Yang et al.'s findings. Personal moral standards (but not concern over moral mistakes) showed unique positive relationships with moral values, virtues, and judgments and a unique negative relationship with moral disengagement. Furthermore, moral perfectionism explained significant variance in moral attitudes beyond general perfectionism. The present findings suggest that moral perfectionism is a personality characteristic that is relevant in both Asian and Western cultures and explains individual differences in moral attitudes beyond general perfectionism.

*Keywords:* moral perfectionism; personal standards; concern over mistakes; moral values; virtues; moral judgments; moral identity; moral disengagement

## 1. Introduction

### 1.1. Perfectionism dimensions and domains

Perfectionism is a multidimensional personality disposition characterized by exceedingly high standards accompanied by concerns over mistakes and other people's evaluations (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991). Factor analytic studies comparing different measures of multidimensional perfectionism consistently find two higher-order dimensions referred to as personal standards perfectionism and evaluative concerns perfectionism (Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000). Personal standards perfectionism captures the exceedingly high personal standards of perfectionistic people and their striving for perfection. In comparison, evaluative concerns perfectionism captures their concern over mistakes and fear of others' negative evaluations should they fail to live up to their perfectionistic standards (see Stoeber & Otto, 2006, for a review).

Multidimensional perfectionism is often domain-specific (Dunn, Gotwals, & Causgrove, 2005; McArdle, 2010). Few people high in perfectionism are perfectionistic in all domains of life (Stoeber & Stoeber, 2009). Consequently, perfectionism research has started to use domain-specific measures of perfectionism to capture individual differences in perfectionism in specific areas of life such as sports, parenting, sexuality, and physical appearance (see Yang, Stoeber, & Wang, 2015, for references). What is more, domain-specific measures of perfectionism have been found to be better predictors of domain-specific characteristics, processes, and outcomes than general measures of perfectionism (Dunn, Craft, Causgrove Dunn, & Gotwals, 2011; Stoeber & Yang, 2015) affirming that research on domain-specific forms of perfectionism is a worthwhile endeavor.

### 1.2. Moral perfectionism

Against this background, Yang et al. (2015) introduced the construct of moral perfectionism as a domain-specific form of perfectionism specifically related to morality. Moral perfectionism has a long tradition in philosophy, but has been largely neglected in psychological research (see Yang et al., 2015, for details). Consequently, Yang et al.'s study was the first psychological investigation of moral perfectionism and its relationships with moral values, virtues, and judgments.

To differentiate personal standards and evaluative concerns aspects of moral perfectionism, Yang et al. (2015) adapted items of the Frost Multidimensional Perfectionism Scale (Frost et al., 1990) to measure perfectionistic personal moral standards and concern over moral mistakes. Examining a large sample of Chinese university students, they found both dimensions of moral perfectionism to show positive correlations with moral values, virtues, and judgments. However, when partial correlations controlling for the overlap between the two dimensions were regarded, only personal moral standards continued to show positive relationships with moral values, virtues, and judgments (except for gratitude and indebtedness). In contrast, concern over moral mistakes ceased to show positive relationships (except with indebtedness), but showed a negative relationship with self-reliance (one of the virtues).

Yang et al.'s (2015) findings suggest that moral perfectionism is a domain-specific form of perfectionism that explains individual differences in moral values, virtues, and judgments. In this, the personal standards dimension of moral perfectionism seems to be of primary importance. The evaluative concerns dimensions—once its overlap with the personal standards dimension is

controlled for—shows few (if any) positive relationships with moral values, virtues, and judgments, or may even show negative relationships.

Yang et al.'s (2015) study had a number of limitations. First, because it was the first psychological study investigating moral perfectionism, the study was largely exploratory, so the findings should be replicated. Second, Yang et al. (2015) examined Chinese students. Chinese students, however, may have different views of morality than Western students (e.g., Jackson et al., 2008). Moreover, multidimensional perfectionism may show different relationships in Asian and Western students (e.g., Chang, Chang, & Sanna, 2012; Stoeber, Kobori, & Tanno, 2013). Consequently, Yang et al.'s (2015) findings need to be reinvestigated with Western students. Finally, and perhaps most importantly, Yang et al. did not measure general perfectionism.<sup>1</sup> Consequently, it is unclear whether their findings are specific to moral perfectionism. To demonstrate the usefulness of moral perfectionism as a psychological construct, it would be important to show that moral perfectionism explains variance in moral values, virtues, and judgments beyond variance explained by general perfectionism.

### 1.3. The present study

Against this background, the present study had two aims. First, it sought to replicate Yang et al.'s (2015) findings in a sample of Western students, including moral identity and moral disengagement in addition to moral values, virtues, and judgments. Second, it examined whether moral perfectionism explained variance in moral attitudes (i.e., moral values, virtues, judgments, identity, and disengagement) beyond variance explained by general perfectionism. In line with Yang et al.'s (2015) findings, we expected personal moral standards and concern over moral mistakes to show different patterns of unique relationships with moral attitudes. Specifically, we expected personal moral standards to show positive relationships with moral values, virtues, judgments, and identity, and a negative relationship with moral disengagement. In contrast, we expected concern over moral mistakes to show nonsignificant or negative relationships with moral values, virtues, judgments, and identity, and a nonsignificant or positive relationship with moral disengagement.

## 2. Method

### 2.1. Participants

A sample of 243 students (41 men, 202 women) studying at the University of Kent was recruited via the School of Psychology's research participation scheme. Mean age of students

was 20.1 years ( $SD = 3.8$ ). Students volunteered to participate for extra course credit or a £50 raffle and completed all measures online using the School's Qualtrics® platform, which required to respond to all questions to prevent missing data.

## 2.2. Measures

### 2.2.1. Moral perfectionism

To measure moral perfectionism, we followed Yang et al. (2015) and adapted the 16 items from the Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990) capturing personal standards and concern over mistakes to measure moral perfectionism: the Personal Standards subscale items to capture personal moral standards (e.g., “I have extremely high moral standards”), and the Concern over Mistakes subscale items to capture concern over moral mistakes (“I should be upset if I make a moral mistake”). Participants were told that the items reflected moral standards and expectations, and responded on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). (See Supplementary Material, Section 1 for instructions and items.)

### 2.2.2. General perfectionism

To measure general perfectionism, we used the same 16 items from the FMPS in their original form: the Personal Standards items to capture general personal standards (“I have extremely high goals”), and the Concern over Mistakes items to capture general concern over mistakes (“I should be upset if I make a mistake”). Participants were told that the items reflected personal standards and expectations, and responded on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

### 2.2.3. Moral values

To measure moral values, we used the Moral Values subscale of the Adolescents' Value Scale (Chen, 2008; English translation: Yang et al., 2015). The subscale comprised 15 items describing moral values (e.g., honesty, kindness, respect for others). Participants indicated how important these values were to them on a scale from 1 (*very unimportant*) to 5 (*very important*).

### 2.2.4. Virtues

To measure virtues, we used the 48-items Virtues Scale (Cawley, Martin, & Johnson, 2000) capturing empathy (“I am able to sympathize with the feelings of others...”), order (“I keep my things cared for and well ordered...”), resourcefulness (“I have confidence in my skills and abilities...”), and serenity (“I am calm and unruffled...”). Participants were asked to indicate to what degree the items represented their real virtues on a scale from 1 (*least like you really are*) to

7 (*most like you really are*).

#### 2.2.5. *Forgiveness judgment*

To measure forgiveness, we used the forgiveness vignette from Girard and Mullet (1997, p. 212, “Marie-Noelle and Josiane...”). Following Yang et al. (2015), we replaced “sisters” with “classmates” and deleted the social-pressure element and the information that Josiane was promoted eventually. Furthermore, we changed the names to Alex and Sam (which, in Britain, are used for both men and women) to make the vignette gender-neutral (see Supplementary Material, Section 2 for details). Participants were asked whether they would forgive Alex if they were Sam, and responded on a scale from 0 (*sure – NO*) to 10 (*sure – YES*).

#### 2.2.6. *Gratitude judgments*

To measure gratitude judgments, we used the gratitude vignette from Watkins, Scheer, Ovnicek, and Kolts (2006, p. 227, “You have met someone in one of your classes...”) describing the situation that a classmate notices that you miss a class, and the next week comes to class with a photocopy of their notes from last week’s class for you.<sup>2</sup> Participants were asked how they would feel in this situation with three items capturing gratitude (grateful, thankful, appreciatory) and three items indebtedness (indebted [feel like you owe], obligated, sense of duty). In addition, following Yang et al. (2015), we measured willingness to help. Participants were asked how they would react if, one day, the classmate has a problem and needs help, and were presented with two items (“I would help him/her as best as I can,” “I would help him/her again if he/she needs help in the future”). Participants responded to all items on a scale from 0 (*not at all*) to 6 (*very much*).

#### 2.2.7. *Wrong behavior judgments*

To measure wrong behavior judgments, we used the Moralization of Everyday Life Scale (Lovett, Jordan, & Wiltermuth, 2012). The scale comprises 30 items describing behaviors that may be considered morally wrong, forming six subscales with five items each: deception (“Lying about a test score when reporting performance to a teacher”), disregard for others (“Parking in a ‘handicapped’ parking spot when not handicapped”), failure to do good (“Ignoring a driver whose car is stuck in the snow”), laziness (“Feeling too tired to do laundry, so lying around in dirty clothes”), bodily violations comprising behaviors that involve the ingestion of foreign substances such as drugs, certain sexual behaviors, and willful bodily disfigurement (“Getting a large tattoo covering the face and neck”), and disgusting behaviors (“Defecating, not washing

one's hands, and then preparing dinner for oneself"). Participants indicated how much they considered the behaviors morally wrong on a scale from 0 (*not wrong at all; a perfectly ok action*) to 6 (*very wrong; an extremely immoral action*).

#### 2.2.8. Moral identity

To measure moral identity, we used the Moral Identity Scale (Aquino & Reed, 2002). Participants were presented with a list of moral traits (caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, kind). They were asked to vividly imagine the kind of person who has these traits and then respond to 13 items capturing internalization ("Being someone who has these characteristics is an important part of who I am") and symbolization of moral identity ("I am actively involved in activities that communicate to others that I have these characteristics") on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

#### 2.2.9. Moral disengagement

To measure moral disengagement, we used the eight marker items of the Propensity to Morally Disengage Scale (Moore, Detert, Treviño, Baker, & Mayer, 2012, Appendix A, bold-faced items) capturing various aspects of moral disengagement ("It is okay to spread rumors to defend those you care about"). Participants indicated their agreement with the items on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

### 2.3. Data Screening

Scale scores were computed by averaging responses across items. Because multivariate outliers distort the results of correlation and regression analyses, we excluded five participants with a Mahalanobis distance larger than  $\chi^2(22) = 48.27, p < .001$ , so the final sample comprised 238 participants. Next, we examined whether the variance-covariance matrices of male and female participants differed by computing a Box's *M* test. Because Box's *M* is highly sensitive to even minor differences, it is tested against a  $p < .001$  significance level (Tabachnick & Fidell, 2007). Box's *M* was nonsignificant with  $p = .052$ . Consequently, all analyses were collapsed across gender. Finally, we examined the reliabilities of the scale scores by computing Cronbach's alphas. All scores showed satisfactory alphas  $> .70$  except disregard for others which showed an acceptable alpha (.68; see Tables 1 and 2).

## 3. Results

### 3.1. Moral perfectionism and general perfectionism

First, we examined the bivariate correlations between the perfectionism dimensions (see

Table 1). In line with previous findings (Yang et al., 2015), personal moral standards and concern over mistakes were most strongly correlated ( $r = .70$ ), but also showed medium- to large-sized correlations with the respective dimensions of general perfectionism ( $.35 \leq r_s \leq .64$ ) confirming that moral perfectionism and general perfectionism show significant overlap. Consequently, we examined the partial correlations between each of the dimensions controlling for the other dimensions. As expected, the partial correlation showed a pattern in which corresponding dimensions (e.g., personal moral standards, personal standards) showed positive correlations across domains (moral perfectionism, general perfectionism) whereas non-corresponding dimensions (e.g., personal moral standards, concern over mistakes) showed negative correlations (see again Table 1).

### *3.2. Moral perfectionism and moral attitudes*

Next, we examined the bivariate correlations between the two dimensions of moral perfectionism and the moral attitudes (see Table 2). Personal moral standards showed positive correlations with moral values, all virtues, all gratitude judgments, three of the wrong behavior judgments (deception, disregard for others, failure to do good), and both aspects of moral identity. In contrast, concern over moral mistakes also showed positive correlations with moral values and both aspects of moral identity, but only with three of the virtues (empathy, order, serenity), one of the gratitude judgments (indebtedness), and two of the wrong behavior judgments (deception, disregard for others).

To examine the unique relationships of the two dimensions, we computed multiple regressions and inspected the dimensions' semipartial correlations (see again Table 2). In line with Yang et al.'s (2015) findings, personal moral standards continued to show the same pattern of significant correlations as in the bivariate correlations, with three exceptions: The positive correlations with indebtedness and disregard for others became nonsignificant, whereas the negative correlation with moral disengagement became significant. In contrast, all positive correlations of concern over moral mistakes became nonsignificant once the overlap with personal moral standards was controlled for (with the exception of symbolization of moral identity). Moreover, three correlations changed signs and were now significant negative (resourcefulness, gratitude, willingness to help). In addition, concern over moral mistakes now showed a significant positive correlation with moral disengagement.

### *3.3. Moral perfectionism versus general perfectionism and moral attitudes*



Finally, we examined whether moral perfectionism explained variance in moral attitudes beyond general perfectionism, we conducted a series of hierarchical regression analyses with two steps. In Step 1, we simultaneously entered the two dimensions of general perfectionism as predictors. In Step 2, we simultaneously entered the two dimensions of moral perfectionism as further predictors. Then we inspected the semipartial correlations (see Table 3).

Results showed that moral perfectionism explained variance beyond general perfectionism regarding all moral attitudes, with only four exceptions: the virtue of resourcefulness and the wrong behavior judgments regarding laziness, bodily violations, and disgusting behaviors. To examine how much variance the two dimensions of moral perfectionism explained in moral attitudes compared to the two dimensions of general perfectionism, we compared the  $\Delta R^2$  values in Table 2 with those of Step 1 in Table 3. Moral perfectionism explained on average of 7.6% variance in moral attitudes, whereas general perfectionism explained on average of 4.5%. What is more, an inspection of the  $\Delta R^2$  values of Step 2 in Table 3 showed that moral perfectionism explained on average an additional 5.3% variance in moral attitudes beyond general perfectionism.

#### 4. Discussion

##### 4.1. The present findings

The aim of the present study was to replicate Yang et al.'s (2015) findings in a sample of Western students and to examine whether moral perfectionism explained variance in moral attitudes beyond general perfectionism. Results showed that the present findings by and large replicated Yang et al.'s findings. Moreover, moral perfectionism explained a significant percentage of variance in moral attitudes beyond general perfectionism.

Comparing the semipartial correlations from the multiple regressions of our study (see Table 2) with the partial correlations of Yang et al.'s (2015) study, our study confirmed the general pattern of Yang et al.'s findings: Once the overlap between the two dimensions of moral perfectionism was controlled for, only personal moral standards showed positive correlations with moral values, virtues, and judgments. There were, however, some notable differences between the studies. In Yang et al.'s study, personal moral standards showed a nonsignificant correlation with gratitude, whereas in our study it showed a positive correlation. In Yang et al.'s study, personal moral standards showed positive correlations with all wrong behavior judgments, whereas in our study it showed positive correlations with only two of the five wrong behavior

judgments: deception and failure to do good (but not disregard for others, laziness, and bodily violations). Note, however, that whereas personal moral standards alone was unrelated to disregard for others, personal moral standards and concern over moral mistakes combined explained significant variance in disregard for others (see Table 2,  $\Delta R^2$ ). Furthermore, concern over moral mistakes showed some notable differences. In Yang et al.'s study, concern over moral mistakes showed a positive correlation with indebtedness, but not in our study. In Yang et al.'s study, concern over moral mistakes showed a nonsignificant correlation with resourcefulness. In our study, it showed a significant negative correlation.

How can we explain these differences? One possible explanation is that Yang et al. (2015) examined Chinese students whereas our study examined Western students. Therefore, the differences may reflect cultural differences. In particular, indebtedness is seen as negative in the Chinese culture (e.g., Zhao, 2010) which may explain the positive relationships with concern over moral mistakes in Yang et al.'s study. Another possible explanation is that—with the exception of moral values—the two studies used different measures. As regards resourcefulness, Yang et al. measured virtues with an adjective rating scale based on Cawley et al.'s (2000) Virtues Scale, whereas we used Cawley et al.'s (2000) scale. Moreover, the adjective rating scale measured resourcefulness with 17 items, whereas Cawley et al.'s scale measured it with 11 items. Hence, resourcefulness in Yang et al.'s study may have been a different/broader concept than resourcefulness in our study. As regards the gratitude judgments (gratitude, indebtedness, willingness to help), Yang et al. used an adapted version of Watkins et al.'s (2006) vignette in which a friendly student provides copies of previous exam papers and course notes and thereby helps the protagonist get into a prestigious university. We used the original version of the vignette in which a friendly student merely provides course notes from one class the protagonist missed. Accordingly, the favor the protagonist received in Yang et al.'s study was by far greater than the favor in our study. As regards the wrong behavior judgments, Yang et al. used a scale differentiating acts violating social norms, others' rights, and family ethics, whereas we used a scale differentiating deception, disregard for others, failure to do good, laziness, bodily violations, and disgusting behaviors. Consequently, the wrong behavior judgments of the two studies are not directly comparable. Furthermore, note that neither moral perfectionism nor general perfectionism explained significant variance in laziness and bodily violations, which puts the relevance of these judgments for our study in question.

#### 4.2. Limitations and future studies

Our study had further limitations. First, it was the first psychological study to examine moral perfectionism in Western students, and not all relationships that Yang et al. (2015) found in Chinese students were replicated. In addition, the study included two variables—moral identity and moral disengagement—that Yang et al. (2015) did not examine. Consequently, future studies need to replicate our findings before firm conclusions can be drawn. Second, our sample was predominantly female (83%), so future studies should reinvestigate our findings with samples showing more equal proportions of men and women. Finally, the study solely relied on self-report. Whereas self-reports provide invaluable information (Baldwin, 2000), they introduce common method biases inflating the relationships between variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). While partial correlations and multiple regressions may control for common method variance, future studies should profit from including additional information (e.g., observer reports, behavior samples) to provide a more comprehensive assessment of the correlates of moral perfectionism.

#### 4.3. Conclusions

The present findings make a significant novel contribution to the perfectionism literature. First, they indicate that moral perfectionism is a relevant personality characteristic explaining individual differences in moral attitudes not only in Asian, but also in Western samples. Second, they indicate that moral perfectionism explains individual differences in moral attitudes beyond general perfectionism. Furthermore, this effect does not seem to be limited to a few specific attitudes but encompasses a wide range of moral attitudes including moral values, virtues, judgments, identity, and disengagement. Although further research is needed to better understand the construct and the differences between the two dimensions of moral perfectionism, the present findings suggest that moral perfectionism is a useful construct that can explain why some people show greater morality in their everyday lives than others.

#### Footnotes

<sup>1</sup>Not to be confused with “overall perfectionism” or “total perfectionism” obtained when summing across different dimensions of perfectionism (e.g., Frost et al., 1990).

<sup>2</sup>We deleted the “and like (dislike) them” part that Watkins et al. used to manipulate the valence of the benefactor.

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Table 1

*Moral Perfectionism and General Perfectionism: Bivariate and Partial Correlations*

	<i>M</i> ± <i>SD</i>	$\alpha$	Correlation			
			1	2	3	4
Moral perfectionism						
1. Personal moral standards	3.22±0.74	.86		.67***	.43***	-.29***
2. Concern over moral mistakes	2.95±0.74	.87	.70***		-.29***	.60***
General perfectionism						
3. Personal standards	3.32±0.76	.85	.47***	.35***		.52***
4. Concern over mistakes	2.78±0.75	.87	.40***	.64***	.55***	

*Note.*  $N = 238$ .  $\alpha$  = Cronbach's alpha. Bivariate correlations are displayed below the diagonal, partial correlations (controlling for the other dimensions of perfectionism) above the diagonal.

\*\*\* $p < .001$

Table 2

*Moral Perfectionism and Moral Attitudes: Personal Moral Standards (PMS) vs. Concern over Moral Mistakes (CMM)*

Moral attitudes	<i>M</i> ± <i>SD</i>	$\alpha$	Bivariate correlations		Multiple regressions <sup>a</sup>		
			PMS	CMM	PMS	CMM	$\Delta R^2$
Moral values	4.09±0.54	.89	.40***	.21***	.35***	-.09	.17***
Virtues							
Empathy	5.34±0.93	.93	.43***	.22***	.38***	-.11	.19***
Order	4.23±0.91	.89	.35***	.26***	.25***	.01	.13***
Resourcefulness	4.55±0.87	.85	.15*	-.08	.29***	-.26***	.09***
Serenity	4.06±1.21	.87	.30***	.13*	.29***	-.11	.10***
Forgiveness judgment	4.92±2.19	n/a	.20**	.10	.18**	-.05	.04**
Gratitude judgments							
Gratitude	5.41±0.98	.96	.17**	.00	.23***	-.16*	.05**
Indebtedness	3.97±1.27	.85	.22***	.21**	.09	.08	.05**
Willingness to help	5.35±0.97	.94	.19**	.02	.25***	-.16*	.06***

Wrong behavior judgments							
Deception	3.49±1.06	.75	.29***	.23***	.17**	.05	.08***
Disregard for others	4.24±0.94	.68	.20**	.16*	.13	.03	.04**
Failure to do good	3.40±1.13	.82	.23***	.12	.20**	-.05	.05**
Laziness	1.83±1.19	.81	.05	.09	-.02	.08	.01
Bodily violations <sup>b</sup>	2.49±1.27	.72	.08	.07	.04	.02	.01
Disgusting behaviors	3.68±1.20	.74	.01	.00	.01	-.01	.00
Moral identity							
Internalization	4.12±0.69	.88	.33***	.17**	.30***	-.09	.12***
Symbolization	2.91±0.88	.88	.31***	.32***	.13*	.14*	.12***
Moral disengagement	2.77±0.98	.85	-.09	.08	-.20**	.20**	.05**

*Note.*  $N = 238$ .  $\alpha$  = Cronbach's alpha. n/a = not applicable (single item).

<sup>a</sup>PMS, CMM = semipartial correlations;  $\Delta R^2 \times 100 = \%$  of variance explained

<sup>b</sup>behaviors that involve the ingestion of foreign substances (e.g., drugs), certain sexual behaviors, and willful bodily disfigurement

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



Table 3

*General Perfectionism and Moral Perfectionism Predicting Moral Attitudes: Personal Standards (PS) and Concern over Mistakes (CM) vs. Personal Moral Standards (PMS) and Concern over Moral Mistakes (CMM)*

	Hierarchical multiple regressions <sup>a</sup>									
	Bivariate correlations		Step 1: General perfectionism			Step 2: Moral perfectionism				
	PS	CM	PS	CM	$\Delta R^2$	PS	CM	PMS	CMM	$\Delta R^2$
Moral attitudes										
Moral values	.27***	.12	.24***	-.03	.07***	.10	-.05	.27***	-.04	.10***
Virtues										
Empathy	.15*	.00	.18**	-.10	.03*	.03	-.14*	.32***	.00	.19***
Order	.30***	.14*	.26***	-.02	.09***	.18**	-.10	.14*	.06	.07***
Resourcefulness	.34***	-.05	.44***	-.29***	.20***	.35***	-.16**	.11	-.11*	.02
Serenity	.09	-.03	.13*	-.10	.02	.02	-.12	.25***	-.02	.10***
Forgiveness judgment	.05	.02	.05	-.02	.00	-.02	-.03	.17**	-.02	.04**
Gratitude judgments										
Gratitude	.12	-.09	.20**	-.18**	.05**	.12	-.14*	.15*	-.04	.03*
Indebtedness	.11	.13*	.04	.09	.02	.00	.00	.08	.07	.03*

Willingness to help	.15*	-.05	.22***	-.16*	.05**	.12*	-.12	.16**	-.05	.03*
Wrong behavior judgments										
Deception	.06	.06	.03	.04	.00	-.04	-.06	.16**	.07	.09***
Disregard for others	.12	.05	.11	-.02	.01	.07	-.09	.08	.08	.04*
Failure to do good	.08	.08	.04	.04	.01	-.05	.04	.20**	-.06	.05**
Laziness	.03	.15*	-.07	.16*	.03*	-.07	.13*	.02	-.01	.00
Bodily violations <sup>b</sup>	.05	.12	-.03	.11	.02	-.05	.11	.07	-.05	.00
Disgusting behaviors	.14*	.06	.13*	-.03	.02	.13*	-.01	-.04	-.01	.00
Moral identity										
Internalization	.14*	.00	.16*	-.09	.03*	.05	-.12	.24***	.00	.11***
Symbolization	.23**	.36***	.04	.28***	.13***	-.02	.19**	.14*	-.01	.03*
Moral disengagement	.00	.14*	-.08	.16*	.03*	-.01	.09	-.17**	.10	.03*

Note.  $N = 238$ . Step 1, Step 2: See Section 3.3 for details. See Table 2 for the bivariate correlations of PMS and CMM.

<sup>a</sup>PS, CM, PMS, CMM = semipartial correlations;  $\Delta R^2 \times 100 = \%$  of variance explained in Step 1 and additional variance in Step 2

<sup>b</sup>see Table 2

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Supplementary Material

### 1. Moral Perfectionism

#### 1.1. Instructions

Listed below are statements concerning moral standards and expectations. Please read each statement and decide whether you agree or disagree and to what extent. If you strongly disagree, choose 1; if you strongly agree, choose 5; if you feel somewhere in between, choose any one of the numbers between 1 and 5. If you feel neutral or undecided the midpoint is 3.

#### 1.2. Items

##### *1.2.1. Personal moral standards*

I have extremely high moral standards.

It is important to me that I be thoroughly moral in everything I do.

I set higher moral standards than most people.

I am very good at focusing my efforts on attaining high moral standards.

Other people seem to accept lower moral standards from themselves than I do.

I expect to adhere to higher moral standards in my daily tasks than most people.

If I do not set the highest moral standards for myself, I am likely to end up a second-rate person.

##### *1.2.2. Concern over moral mistakes*

I should be upset if I make a moral mistake.

If I fail to adhere to my moral principles, I am a failure as a person.

If someone shows behavior that is morally superior to mine, then I feel like I failed completely.

If I fail to adhere to my moral standards partly, it is as bad as being a complete moral failure.

I hate not adhering to the highest moral standards.

People will probably think less of me if I make a moral mistake.

If I am not as moral as other people, it means I am a morally inferior human being.

If I do not behave morally all the time, people will not respect me.

The fewer moral mistakes I make, the more people will like me.

### 2. Forgiveness Judgement

#### 2.1. Vignette used in the present study

Alex and Sam are classmates. They both worked in the same firm. Sam, who had been

working in the firm for several years, asked for a promotion. Alex, who was very talkative but not mean, disclosed some information about Sam's professional life. Sam's section head heard about this information and began to doubt the working qualities of Sam so they refused her/his promotion. Alex, remorseful, felt really sorry about what happened and asks Sam to forgive him/her. Right now, do you think that you would forgive Alex, if you were Sam?

## 2.2. Original vignette (Girard & Mullet, 1997, p. 212)

Marie-Noelle and Josiane are sisters. They both worked in the same firm. Josiane, who had been working in the firm for several years, asked for a promotion. Marie-Noelle, who was very talkative but not mean, disclosed some information about Josiane's professional life. Josiane's section head heard about this information and began to doubt the working qualities of Josiane so he refused her promotion. Marie-Noelle, remorseful, felt really sorry about what happened and asked Josiane to forgive her. Josiane's best friend, who knows Marie-Noelle well, also asked her to forgive her sister. Josiane asked another section head for a promotion, again, which she has got at the present time. Right now, do you think that you would forgive Marie-Noelle, if you were Josiane?

## References

Girard, M., & Mullet, E. (1997). Forgiveness in adolescents, young, middle-aged, and older adults. *Journal of Adult Development, 4*, 209-220.