

## ***What, If Anything, Most Memorable Personal Moral Dilemmas Can Tell Us About Women's and Men's Moral Competence?***



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**Abstract:** Most all popular moral reasoning or moral judgment tests are based on presenting subjects with two or more hypothetical moral dilemmas and asking them to make judgments on the moral quality of arguments supporting and questioning a protagonist's decision (e.g., the Moral Competence Test by G. Lind). Although these tests have been insightful by tapping some aspect of individuals' moral-cognitive schemas, moral maturity, or moral development, they also have limitations. Hypothetical moral dilemmas may be too abstract and impersonal, thus failing to create enough emotional salience. Learning more about real-life personally recalled moral dilemmas may reveal more about the individual's moral mind and experiences.

**Objective.** The current study was conducted to learn more about the personally experienced moral dilemmas, and how they relate to subjects' level of moral competence and gender.

**Method.** Subjects were asked to recall the most challenging personal moral dilemma; subjects completed the MCT test to measure moral competence.

**Results.** Among some of the findings was that for both, men and women, higher moral competence scores were positively correlated with recalling personal moral dilemmas where the choice had to be made between some altruistic (care for others) and selfish actions. For men, it was the risk of compromising one's status, whereas for women it was the risk of personal safety.

**Keywords:** moral competence; moral development; moral dilemmas of college students; sex-differences in moral judgement; MCT.

### **1. What, If Anything, Most Memorable Personal Moral Dilemmas Can Tell Us About Women's and Men's Moral Competence?**

Most all commonly used standardized moral judgment tests are based on the cognitive developmental view of morality which assumes that moral thinking develops in stages and in parallel with one's cognitive maturation. Specifically, according to Lawrence

Kohlberg, who is arguably the father of moral psychology and of the original theory of moral development, morality progresses through three main and universal stages: pre-conventional, conventional, and post-conventional. To determine the structure of the individual's moral reasoning or the level of individual's moral maturity, hypothetical moral dilemmas are used for easy scoring and methodological standardization of assessment. As part of the procedure, participants are typically faced with two competing moral choices and forced to make one. In many of these standardized tests, including the original Moral Judgment Interview (MJI, Kohlberg 1984), each choice is accompanied by an argument justifying it. The subjects are scored on the choices that they make and the justification that they choose to determine subjects' moral orientation. A hypothetical moral dilemma that was developed by Kohlberg is whether a man should steal an expensive drug to save his wife's life (i.e., Kohlbergian Heinz dilemma). Kohlberg claimed that the choice and the justification for it, both, reflect the individual's moral cognitive structure. It may remain the same or it may continue to develop, for example with biological maturation or education.

The Moral Competence Test (MCT), which was designed by Georg Lind as a so-called Experimental Questionnaire (Lind 1982) and was influenced by the original MJI, incorporates two hypothetical moral dilemmas, mercy killing and worker's dilemma. The subjects are first asked to rate the protagonists' decisions for the choices that they would make in the dilemmas, and then asked to rate each decision for or against making a decision based on the reasoning that accompanies each choice. Thus, the key to the moral competence, according to Lind, is the ability to judge moral choices based on the quality of the arguments rather than on simply one's personal opinion for or against a particular decision.

While the ultimate goal of morality research is to be able to predict people's moral behaviour, even Kohlberg (1975) wrote that "one can reason in terms of principles and not live up to these principles." More recent studies suggest that reason may not be the only important factor that drives people's moral decisions. A dual-process model of moral decision-making, for instance, suggests that the decision is dependent upon two, working in parallel or competing with each other systems, cognitive (rational) and emotional (intuitive) (see Craigie 2011; Greene, Nystrom, Engel, Darley, & Cohen 2004). The conflict of a moral dilemma is presumably caused by the fact that personal moral values must be overridden in favour of a more rational option or vice versa. However, an argument can be made that a hypothetical moral dilemma may not always be able to elicit enough of a conflict if it is based on such abstract scenarios that both systems are not activated to some degree. Alternatively, a question can be raised as to how successful solutions of hypothetical moral dilemmas, as indexed by the higher score on a moral judgement test, is related to the subjects' personal experiences with real life moral dilemmas. Addressing these questions will provide important insights that can help tailor moral judgements

tests by choosing more nuanced moral dilemmas. Thus, the first goal of the current study was to examine the relationship between participants' moral competence (measured by MCT) and the recalled most memorable personal moral dilemmas reported by the same participants.

## **2. Personal vs. Impersonal/Hypothetical Moral Dilemmas**

Studies with fMRI have found differences in the neural processing of hypothetical vs. real-life (personal) moral dilemmas. Personal dilemmas seem to be processed by the brain areas that are associated with emotion, and social cognition (e.g., medial frontal gyrus, posterior cingulate gyrus, and angular gyrus), suggesting that decisions of personal moral dilemmas are driven by socio-emotional factors; whereas hypothetical or impersonal moral dilemmas are processed by the cognitive areas of the brain (e.g., middle frontal gyrus, right and parietal lobe, bilateral), which points to higher-order processes and conscious deliberation during the decision of hypothetical moral dilemmas (Greene, Sommerville, Nystrom, Darley, & Cohen 2001). Furthermore, Greene *et al.* (2001) found that processing of impersonal moral dilemmas resembled the processing of non-moral dilemmas, for example, where one must choose between taking a train or a plane. Taken together, some hypothetical moral dilemmas may fail to evoke the emotional system of the brain for being less emotionally salient. There are potentially other differences between personal and impersonal moral dilemmas. These differences were examined in the present study as part of the second goal.

## **3. Difficult vs. Easy Moral Dilemmas**

Typically, a moral dilemma is a situation where one must decide between at least two competing moral values. Such dilemmas are challenging because moral values cannot always be objectively placed in the order of superiority (Trainer 1982). Greene and colleagues (2004) argued that some of the tensions come from needing to suppress a potent negative emotional response, when one knows he/she may potentially violate one's personal value(s), in order to make a decision that will benefit more people in the long run, or vice versa. These two different approaches to moral dilemma solutions are known as utilitarian, when an individual chooses to maximize benefits and minimizes the costs, and deontological, choosing to follow one's moral intuition. Greene *et al.* (2004) further argued that more difficult moral dilemmas are the ones where the emotional and the cognitive decisions are at greater odds. An example that was used in their study was the so-called crying baby dilemma, where the participants had to decide whether to smother one's own baby who is crying loudly and will attract enemy soldiers. If one does, that person will save herself/himself and the others, but if one chooses not to smother her own baby, everyone will die, including the baby.

The study found that, unlike deciding on a simpler moral dilemma, a decision on the difficult (crying baby) dilemma was associated with activity bilaterally in both the anterior dorsolateral prefrontal cortex (DLPFC) and inferior parietal lobes, which are known for cognitive processing. There was also more activity in the anterior cingulate cortex ACC, known for processing conflict (Greene *et al.* 2004). Greene *et al.* (2004) referred to such emotionally salient dilemmas as personal, however, one can still argue that they are still hypothetical as subjects may not personally relate to the presented situations. Furthermore, emotional salience may still differ across the subjects when they are presented with the crying baby dilemma. It remains unknown what individuals' enduring memories of certain personally experienced dilemmas may reveal about their moral maturity.

From the non-neuroscience perspective, the degree of difficulty or the tension between the competing moral values can be evaluated by considering the motivations behind the moral decisions (e.g., Lewis & Mitchell 2014). Specifically, two pitted moral values can be both driven by altruistic motivations, as in the crying baby dilemma, where two conflicting values can be both driven by care (care for well-being of one's baby or care for well-being of innocent people). A moral dilemma where an individual is deciding on whether to cheat on taxes (to save money) or not to cheat (to avoid getting caught) is driven by two selfish motivations. Finally, a moral dilemma may entail an altruistic and a selfish motivation, as in contemplating to donate money (to help another person) or not (to keep money for yourself). These categorizations of moral dilemmas allow placing them in the order of moral superiority, from most morally conflicting (i.e., difficult to solve) to the least morally conflicting (easy to solve), where a dilemma entailing two altruistic motivations reflects the highest level (most difficult to resolve for a highly moral individual) and a moral dilemma driven by two selfish motivations to be the lowest (the easiest to resolve for a highly moral individual). The second question that the present study addressed was what type of moral dilemmas would predict higher moral competence. It was hypothesized that subjects who would recall a moral dilemma involving two altruistic moral motivations as most memorable (i.e., most difficult based on the motivation categorization) or involving an altruistic and selfish motivations (i.e., high emotional salience) would have the highest level of moral competence; whereas the subjects, who would report a moral dilemma entailing two selfish motivations to be most memorable, would have the lowest moral competence.

#### **4. Sex Differences in Reported Moral Dilemmas and Moral Competence**

On one hand, there seems to be no strong empirical evidence from past research using various standardized moral reasoning tests that sex-related differences exist in moral reasoning. For example, a meta-analysis by Walker (1984) found no significant differences between young children, adolescents, and adults in moral reasoning attributed

to sex. In a longitudinal study, Walker (1989) examined moral reasoning of participants, ranging in age between 5 and 63, over a two-year period. All participants discussed hypothetical moral dilemmas and a personal moral dilemma. The study found virtually no significant differences between female and male subjects in their moral orientation or reasoning using hypothetical moral dilemmas. However, differences in moral reasoning did emerge when personal moral dilemmas were evaluated. In other words, significant differences in moral reasoning were only attributed to the types of moral dilemmas that were used for assessment.

In a more recent study, Capraro and Sippel (2017) examined sex differences in judging three different moral dilemmas, one where utilitarian and deontological moralities are at the greatest odds, due to greater emotional salience and greater violation of practical imperative, a concept coined by Immanuel Kant who defined morality as “... act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means” (Kant 1785, 4:429). This type of moral dilemmas was categorized in the study as personal. The second moral dilemma was referred to as impersonal, because it didn’t introduce to the same degree a moral conflict between utilitarian and deontological courses of action. The third dilemma was categorized as intermediate. It had a conflict that violated practical imperative as the personal dilemma but was emotionally less salient. The results showed that women were more likely to take deontological moral approach when judging the personal moral dilemma; no differences were found in judging the intermediate moral dilemma, suggesting that the sex differences were driven by the emotional salience rather than by the violation of practical imperative. Therefore, it is possible that differences between female and male respondents will emerge if personal, presumably emotionally more salient, moral dilemmas are probed.

## 5. Methods

### 5.1 Sample

A total of 339 participants were recruited for the study in exchange for extra credit from four Psychology classes, which were all taught by the author. The majority were first- and second-year students; 274 were female students. In class #1, students completed Moral Competence Test (MCT) (Lind 2014) at the beginning and the end of the semester; in three other classes students completed the MCT test at the end of the semester only. For all subsequent analyses, only the scores on the MCT test, which was administered at the end of the semester, were used for all participants. In addition, at the end of the semester, all participants were asked to recall one most memorable (i.e., challenging) moral dilemma that they had to face. There was a slight difference in the prompt that was

given to participants in class #1 and the rest of the participants. Specifically, the students in the former were not explicitly told that they could report an impersonal moral dilemma if they could not recall a personal moral dilemma. Despite the difference in the prompts, some respondents reported a hypothetical or an impersonal moral dilemma (a moral dilemma that somebody they knew had to face) in all four classes.

## 5.2 Coding scheme

All moral dilemmas were coded based on

- (1) Whether they were personal or not personal,
- (2) The time of its occurrence (i.e., before college or during college/ongoing), and
- (3) The competing moral motivations that created the conflict.

The latter was based on the coding scheme by Lewis and Mitchell (2014), which categorized moral conflicts in terms of motivational drives behind choosing one or another act. These motivations were categorized as altruistic or egoistic motivations, each of 5 subcategories (see Lewis & Mitchell 2014 for details of the coding scheme). Specifically, the five possible altruistic motivations were: care, fairness, in-group loyalty, authority, and purity. The five possible egoistic motivations were: immediate physiological needs, safety, affiliation, status, and mating.

A second coder independently coded 15 % of all moral dilemmas. Cohen's kappa of inter-rater reliability was .423 for altruistic motivations and .494 for egoistic motivations, both considered fair in terms of reliability. Cohen's kappa for personal/impersonal codes was 1.00, which is a perfect agreement.

Three broad types of moral motivations were created based on the two competing motivations. These could be of three types:

(1) Moral dilemmas with two competing altruistic motivations (e.g., to help a group of unknown people or to help a best friend);

(2) Moral dilemmas with one altruistic and one egoistic competing motivations (e.g., to avoid personal danger or to help a friend), and

(3) Moral dilemmas with two competing egoistic motivations (e.g., to report a stolen wallet to avoid being judged or to keep the wallet and spend the money) (see Lewis & Mitchell 2014 for more details).

For the follow-up analyses, 25 moral dilemma combinations were created as separate variables (dummy coded) to examine each dilemma combination associations with the subjects' sex and moral competence scores.

## 6. Results

There were no differences in the number of recalled personal or impersonal moral dilemmas between the four classes ( $\chi^2(3, N = 335) = 5.17, p = .160$ ). However, more students ( $N = 222$ ) recalled a personal moral dilemma, as prompted by the instructions,

$\chi^2 (1, N = 335) = 35.4, p = .000$ . Significantly more dilemmas were recalled from the time of being in high school than from either earlier or more recent times ( $\chi^2 (4, N = 177) = 97.0, p = .000$ ).

### 6.1 Reported moral dilemmas

The majority of moral dilemmas where the decision had to be made between choosing an altruistic and an egoistic act (37%,  $N = 186$ ), or two altruistic acts (25%,  $N = 127$ ); the least commonly reported dilemmas involved two egoistic actions (5%,  $N = 25$ ). These differences were statistically significant,  $\chi^2 (2, N = 338) = 117.0, p = .000$ .

As far as what motivational domains were overrepresented in the moral dilemmas, a goodness of fit test indicated significant differences between the domains,  $\chi^2 (9, N = 678) = 794, p = .000$ . The residuals suggest that concerns of care were the most overrepresented (i.e., the most reported) altruistic motivations, while concerns for affiliation were the most overrepresented (i.e., the most reported) egoistic motivations. Purity and mating were the most underrepresented (i.e., the least reported) altruistic and egoistic motivations (see Table 1 for details).

Motivations	Observed N	Expected N	Residual
Care	264 (39%)	67.8	196.2
Fairness	28 (4%)	67.8	-39.8
Ingroup	34 (5%)	67.8	-33.8
Authority	112 (16%)	67.8	44.2
Purity	5 (0.7%)	67.8	-62.8
physiological needs	59 (9%)	67.8	-8.8
Safety	28 (4%)	67.8	-39.8
Affiliation	95 (14%)	67.8	27.2
Status	48 (7%)	67.8	-19.8
Mating	5 (0.7%)	67.8	-62.8
Total	678 (100%)		

Table 1: Individual Motivational Domains.

### 6.2 Personal vs. hypothetical/impersonal moral dilemmas

To examine the differences between personal and impersonal moral dilemmas, a chi-square test was computed. This test revealed a significant difference,  $\chi^2 (2, N = 334) = 24.9, p = .000$ . Specifically, more personal moral dilemmas (61%) were about choosing between an altruistic and an egoistic act; whereas more impersonal dilemmas (55%) were about choosing two altruistic actions.

### 6.3 Sex differences and the link between personally recalled moral dilemmas and moral competence

Next, potential sex differences in the reported dilemmas and the level of moral competence were explored. First, an independent samples t-test was computed with sex and moral competence scores. A significant difference was found, with male students having a higher moral competence level ( $M=17.9, SD=11.8$ ) than the female students

( $M=13.9$ ,  $SD=10.3$ ),  $t(385) = 2.1$ ,  $p = .00$ . To examine potential differences in the reported types of moral dilemmas between female and male students, a chi-square test was computed. The test revealed that about 55% of female students reported moral dilemmas that involved an altruistic and an egoistic act, whereas 53% of male students reported moral dilemmas that involved two altruistic acts. These differences were approaching a statistical significance,  $X^2(2, N = 323) = 5.25$ ,  $p = .07$ . However, for both sexes, moral dilemmas that involved two egoistic choices were rare.

Given that there were clear sex-related differences in the reported moral dilemmas and the moral competence measures, a two-way ANOVA was computed first with sex and the types of moral dilemmas as fixed factors and moral competence scores as the dependent variable. The results showed that neither the types of moral dilemmas ( $F(2, 296) = 1.99$ ,  $p = .138$ ) nor the sex of the respondents ( $F(1, 296) = .533$ ,  $p = .466$ ) were significant predictors of moral competence. When the test was rerun without the sex as a one-way ANOVA, the model was statistically significant ( $F(2, 310) = 4.64$ ,  $p = .010$ ). A Tukey post hoc test revealed that moral competence of those reported a moral dilemma with two egoistic motivations was statistically significantly lower ( $M=8.51$ ) than those who reported a moral dilemma that entails an egoistic and an altruistic motivation ( $M=15.6$ ,  $p = .008$ ) or two altruistic motivations ( $M=14.1$ ,  $p = .053$ ). No other statistically significant differences were found.

Next, to find out if sex and specific kinds of moral motivations would predict the level of moral competence, a series of two-way ANOVAs were computed with each possible combination of altruistic-altruistic and altruistic-egoistic motivations (since these types of moral dilemma were associated with higher moral competence, and they were the most frequently reported dilemmas). In each model, sex and each moral dilemma combination were entered as fixed factors, and moral competence as the dependent variable. For parsimony, care domain was combined with fairness domain as the coders viewed them very similar. Purity and mating domains were not included in the analyses since they were very infrequent. Moral dilemma types reported by less than 20 people were not considered for these analyses either (see in Table 2).

Moral Dilemma Combinations	Total Number of Reported
<b>Altruistic-Altruistic Motivations</b>	
Care-Care (choosing between caring for the well-being of one or more people)	57
Care and In-group (choosing between caring for well-being of a person vs. staying loyal to one's group)	6
Care-Authority (choosing between caring for well-being of a person vs. choosing the authority/rules/laws)	41

## What, If Anything, Most Memorable Personal Moral Dilemmas Can Tell Us

In-Group and In-Group (choosing between staying loyal to one or another group)	4
In-Group and Authority (choosing between staying loyal to one's group or following the authority/rules/laws)	8
Authority and Authority (choosing between two different authority/rules/laws)	0
<b>Altruistic-Egoistic Motivations</b>	
Care-Physiological needs (choosing between caring for well-being of a person or personal physiological needs)	36
Care-Safety (choosing between caring for well-being of a person or personal safety)	22
Care-Affiliation (choosing between caring for well-being of a person or personal belonging/being affiliated with a group/friendship)	35
Care-Status (choosing between caring for well-being of a person or personal status)	22
In-group and Physiological needs (choosing between staying loyal to one's group or personal physiological need)	1
In-group and Safety (choosing between staying loyal to one's group or personal safety)	1
In-group and Affiliation (choosing between staying loyal to one's group or personal affiliation)	6
In-group and Status (choosing between staying loyal to one's group or personal status)	2
Authority-Physiological needs (choosing between following authority/rules/laws or personal physiological needs)	10
Authority-Safety (choosing between following authority/rules/laws or personal safety)	3
Authority-Affiliation (choosing between following authority/rules/laws or personal affiliation)	27
Authority and Status (choosing between following authority/rules/laws or personal status)	13

*Table 2: Number of moral dilemma types reported.*

Only two models were found significant in predicting moral competence.

Specifically, in the model with the dilemmas that involved choosing between care (an altruistic motivation) and personal status (an egoistic motivation) there was a statistically significant effect of sex ( $F(1, 299) = 5.38, p = .02$ ), and the interaction between the sex and the care/status moral dilemma interaction was approaching statistical significance,  $F(1, 299) = 2.61, p = .10$ . Specifically, male students who reported this type of moral dilemma had a higher moral competence ( $M=24.3, SD=9.4$ ) than who reported having a different type of moral dilemma ( $M=16.8, SD=10.3$ ) and higher than the female who reported having the same ( $M=11.2, SD=8.1$ ) or a different type of a moral dilemma, compared to their female counterparts ( $M=14.5, SD=10.5$ ). However, these findings must

be interpreted with caution, as only 3 out of 46 male respondents responded having this type of dilemma.

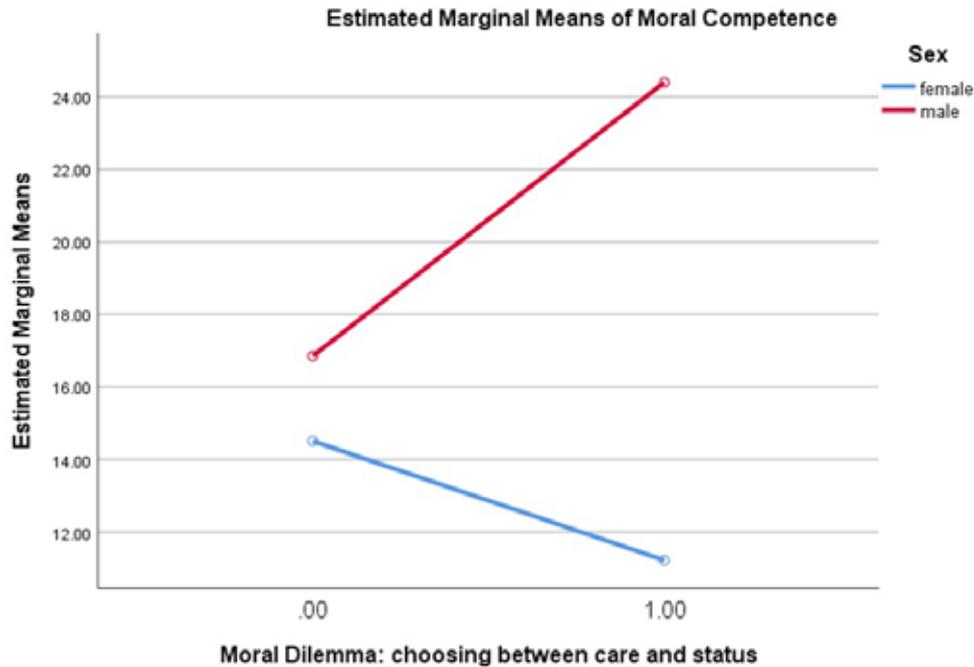


Figure 1: Interaction between sex and care/status moral dilemma.

For a model with care (an altruistic) vs. personal safety (an egoistic), both, reporting this type of moral dilemma ( $F(1, 300) = 9.08, p = .00$ ), and sex,  $F(1, 300) = 4.79, p = .02$ , were significant predictors of moral competence. Specifically, students who reported this type of moral dilemma had a higher moral competence ( $M=21.1, SD=14.1$ ). Furthermore, they were all female respondents.

## 7. Ad hoc Analysis of Sex Differences Between Reported Personal and Hypothetical Moral Dilemmas

In light of the findings that more men than women reported more moral dilemmas that involved two altruistic decisions, two additional chi-square tests were performed with two specific types of moral dilemmas and sex as the predictors: care vs. care and care vs. authority. These were, by far the most frequently reported dilemma in the altruistic/altruistic category. The test revealed a significant sex difference but only for care vs. care moral dilemmas,  $\chi^2(1, N = 275) = 4.80, p = .03$ . Specifically, 28% of male subjects reported this type moral dilemma as compared to 15% of the female subjects. Next, another chi-square test was performed, between care/care moral dilemma variable and personal/hypothetical category variable (both dummy coded variables). The results revealed a significant difference,  $\chi^2(1, N = 335) = 26.3, p = .00$ . Specifically, 63% of care/care dilemmas were hypothetical.

## 8. Discussion

A moral dilemma is only a dilemma if the one debating it perceives it to have a conflict between two or more values. For example, choosing between donating money to a charity or spending it on yourself is only a moral dilemma if one is contemplating both actions; it is not a dilemma if a person is not even considering donating money or if a person feels strongly about donating money that he/she doesn't feel it to be a hard decision. In any of these cases, it reveals something about a person's moral character. Typical standardized moral judgement tests use hypothetical moral dilemmas to assess people's level of moral maturity. Whether and how moral standardized scores are actually related to people's personal moral dilemmas had not been researched enough or at all, to my knowledge. Thus, the current study was the first of its kind to examine the potential connection between the measure of moral competence (MCT, Lind 1982; 2014) and people's perception of a difficult personal moral dilemma that they had to face with. First, the study found that, at least for college students, most challenging moral dilemmas were the ones where they had to choose between either two different morally competing but altruistic actions or between choosing an action driven by a personal gain or an altruistic motivation. Very few college students reported having difficulty with deciding between two selfishly motivated actions; and thus, few reported such moral dilemmas. This confirms prior evidence that education fosters higher level of moral development. It is also possible that more individuals with higher level of moral maturity choose to and/or get accepted to higher education. Finally, this may be a function of age – i.e., young adults may all tend to consider moral dilemmas as those that require to decide between two or more altruistic actions or between an altruistic and a selfish one.

Second, more college students recalled moral dilemmas that occurred in high-school rather than more recently. This highlights the emotional salience of the adolescent stage and the issues that may arise during this time of development. Another notable finding was that *difficult* personal dilemmas were mainly about choosing between self-interests and altruism. Relinquishing personal interests must be emotionally salient and therefore, creates a memorable moral dilemma for many individuals. On the other hand, *difficult* hypothetical or impersonal moral dilemmas were mainly about choosing between two altruistic actions. These types of moral dilemmas maybe emotionally salient because they are designed to have no correct solution, and thus, virtually unsolvable. In any case, both types of moral dilemmas were positively correlated with higher moral competence.

The results of the study also revealed some interesting sex differences. Specifically, female subjects reported more personal rather than impersonal moral dilemmas whereas male subjects were more likely to report an impersonal or a hypothetical moral dilemma. There are two potential explanations for this. First, this may be related to known sex differences in self-disclosure, defined as “intentional and voluntary verbal utterance that conveys personal information to another within a specific social context” (Papini, Farmer,

Clark, Micka, & Barnett 1990). Research on self-disclosure suggests that females tend to share their feelings and to self-disclose more than their male counterparts in person and, possibly, on social media (e.g., Bond 2009; Papini *et al.* 1990). Therefore, female subjects may feel more comfortable reporting sensitive information such as personally experienced moral dilemma than men. A second explanation may be related to what Carol Gilligan theorized to be sex-related differences in the modes of thinking and feeling about moral and other social issues, which stem from the differences in social experiences between men and women (e.g., Gilligan 1986). As Gilligan claimed, men tend to think of morality in terms of justice orientation, which more likely to take on a depersonalized approach to moral reasoning; whereas women reason through the lenses of relationships and care for others.

Hypothetical moral dilemmas may evoke justice oriented moral mode of thinking which male respondents find more fitting their moral mode of thinking; whereas personal dilemmas maybe more grounded in viewing morality through the self, others and interpersonal relationships and thus may be more memorable to female subjects. Alternatively, men with higher moral competence may find hypothetical moral dilemmas particularly challenging and memorable because they tend to have no good rational solution. For example, a study by Fumagalli *et al.* (2010) found that more men gave utilitarian (rational) solutions to emotionally more salient moral dilemmas than women, suggesting that men tend to take a more rational approach to solution of a moral dilemma.

Still, another important finding of the current study was that both, men and women, who reported a personal moral dilemma that required to choose between personal self-interests (i.e., egoistic motivation) and altruistic action of care, had the highest level of moral competence than the rest of the subjects. Where they differed was in what they were willing to or could potentially compromise when choosing the act of care. For men, it was the risk of losing one's status (e.g., not to win a scholarship or not to go to a prestigious university), whereas for women it was the risk of personal safety (e.g., giving a ride to a stranger).

These findings are insightful for a couple of reasons. First, the similarity between men and women in that, for both sexes, care for others was one of the most frequent moral motivations that created a memorable moral dilemma is noteworthy and supports Kohlberg's view that women and men are more similar than different in their mode of moral thinking. It also supports the notion that that caring for human life is one of the rudimentary human moral values (e.g., Haidt & Joseph 2007). This finding also adds more insight to the findings of the study by Capraro and Sippel (2017), where the key difference in the moral judgment between men and women was the emotional salience, and not the Kantian practical imperative, of the personal moral dilemma. The current study suggests that emotional salience may be equally important for men and women; it may just be evoked by different moral dilemmas. For men, it appears to involve risking one's status, whereas for women, this maybe the risk of losing personal safety. Therefore, a conclusion

can be made that emotional engagement is the key to promoting higher moral reasoning and judgement (e.g., Greene *et al.* 2001).

The study is not without limitations. The main one is the homogeneity of the sample. The subjects were mainly college age students, at a major US university. Furthermore, the majority of the participants were females. More follow up research is necessary with older and more diverse subjects (different educational and cultural backgrounds) to be able to generalize the results of the findings to broader population.

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