# Is compassion the key?

# Gender differences in pro-environmental behaviour.

Name: Leo Rütgers

Student number: 2094657

Supervisor: Mirjam Radstaak

**Abstract**

There is a variety of environmental problems that endanger environmental sustainability which have human behaviour as their origin. The first step in prevention is the investigation of the factors that influence an individual's pro-environmental behaviour (PEB). Gender differences are one factor that has been investigated by present research, but with contrasting results, in some studies, more PEB was shown by women, in other studies only for specific behaviours, and in still others, there were no gender differences at all. These contrasting results could be the product of an underlying factor influencing the relation between gender and PEB. Based on literature, in this study the effect of compassion on the effect of gender on PEB was investigated with the research question: "To what extent are the variables gender, pro-environmental behaviour and compassion related?" To answer this question, a correlation study was conducted in which respondents (N=119) filled out an online survey, which was measuring the variables PEB, compassion, and gender. With these variables, a mediation analysis by Preacher and Hayes (2007) was conducted. The results showed that women scored higher in compassion but not in PEB. However, women did score higher in the specific pro-environmental behaviour food consumption. Moreover, the mediation analysis indicated a mediating effect of compassion on the relationship between gender and pro-environmental behaviour. In summation, women scored higher in compassion than men did and those participants who scored higher in compassion, had also more pro-environmental behaviours. The results of this study indicate that compassion training could increase pro-environmental behaviour. Furthermore, based on the findings that there are gender differences in compassion, it is recommended to have men as the target group for the compassion training.

*Keywords:* Pro-environmental behaviour, Compassion, Gender, Correlational study, Mediation

**Is compassion the key? Gender differences in pro-environmental behaviour.**

"Environmental pollution is an incurable disease: it can only be prevented" (Commoner, 1998, p.1).

Global warming, water shortage, urban air pollution, and loss of biodiversity are just a few of the variety of environmental problems that endanger environmental sustainability (Steg & Vlek, 2009). Most of these threats are based on human behaviour and as the introductory quote by the biologist Barry Commoner suggests, they can only be managed by prevention what demands a change in the individual's environmental behaviour. Therefore, there is a great need to investigate which factors influence an individual's pro-environmental behaviour.

**Pro-environmental behaviour**

The term pro-environmental behaviour can best be described as every behaviour that consciously tries to reduce the adverse impact of an individual's actions towards nature, for instance, the reduction of energy consumption, waste production, or the use of non-toxic substances (Kollmuss & Agyeman, 2002). The need for an increase in pro-environmental behaviour is crucial to maintain the status quo and, in the long run, for the survival of our species. Therefore, pro-environmental behaviour can be viewed as the combination of "self-interest and of concern for other people, the next generation, other species, or whole eco-system" (Bamberg & Möser, 2007, p.2).

The determinants for pro-environmental behaviour are a prominent topic in the scientific literature. This is the case because individual differences in pro-environmental behaviour are more difficult and complex to understand than previously thought (Gifford & Nilsson, 2014). However, one variable that is often present in the literature is gender. For example, a study by de Leeuw et al. (2014, p.1) showed that "women reported more favourable attitude, higher moral obligation, and stronger intentions toward buying fair trade products." Furthermore, another article states that women report stronger environmental attitudes, as well as stronger environmental behaviours (Zelezny et al., 2000). Moreover, in a cross-country study, the importance of gender variables in explaining pro-environmental behaviour was emphasised (Vicente-Molina et al., 2013). Nevertheless, there are also contrasting findings indicating that there are no universal gender differences in environmental behaviour (Davidson & Freudenburg, 1996). Similar results were found by another study which states

that there are not any significant gender differences in pro-environmental behaviour (Hadler & Haller, 2011). Conversely, another study about pro-environmental behaviours found that women showed more pro-environmental behaviour, but only for environmental behaviours inside their homes (e.g., recycling) and not outside the house (e.g., donating to environmental organisations) (Xiao & Hong, 2010). A similar study also found that women showed more household-oriented (inside their homes) pro-environmental behaviours than men (Hunter et al., 2004). However, in contrast to Xiao and Hong (2010), Hunter et al. (2004) also found that men showed more community/society-oriented (outside the house) pro-environment behaviours than women. Lastly, another study reported gender differences regarding the knowledge of scientific matters, but the knowledge had little to no influence on the participant's attitude toward the environment (Hayes, 2001). So, there is not a clear finding within present research regarding the influence of gender on pro-environmental behaviour.

**Compassion rather than empathy**

The lack of consensus requires more research that examines the underlying processes that could explain differences in pro-environmental behaviours between men and women. Past research shows gender differences in the level of empathy which is also seen as a key aspect in conservation efforts (Tam, 2013). Empathy can be defined as a conglomerate of different dimensions: "empathy can be considered to be a more general construct, including perspective taking, emotional sharing, and a concern for suffering others" (Pfattheicher et al., 2015, p.931).

Regarding the gender differences, a study about gender differences in empathy showed that women had a higher level of empathy than men did (Toussaint & Webb, 2005). Moreover, in another study that investigated the brain activity of men and women when confronted with pictures of human suffering, showed that women had more activation in areas that are involved in empathic processes than men (Mercadillo et al. (2011). Considering the gender differences regarding the feeling for the suffering of others, it can be assumed that there might also be gender differences in the feeling for the suffering of the environment.

As the last study, research on gender differences in empathy often focuses on the empathy dimension feeling for the suffering of others. The feeling for the suffering of others is the core of compassion. Therefore, compassion could be of special interest when examining gender differences,

instead of the whole concept empathy. Compassion can be defined as "an interpersonal process involving the noticing, feeling, sensemaking, and acting that alleviates the suffering of another person" (Dutton et al., 2014, p.1). The clearest difference between empathy and compassion is, that "compassion is feeling *for* and not feeling *with* the other" (Singer & Klimecki, 2014, p.1).

Research on compassion showed a variety of beneficial effects for oneself and others. For instance, compassion was found to be a predictor of psychological health and well-being and it also increased altruistic behaviours and generosity (Jazaieri et al., 2013). Additionally, there is evidence that compassion increases pro-environmental behaviour. A study about the relation between the shopping of clothes and sensitivity to the suffering of others showed a positive effect from compassion towards sustainable fashion consumption (Geiger & Keller, 2018). Furthermore, another study suggested that compassion is positively related towards pro-environmental tendencies (Pfattheicher et al., 2015).

A topic that is less investigated by present research, are gender differences in compassion. Most of the research on gender differences in compassion is limited to the concept of self-compassion. Self-compassion differs from compassion since it focuses on being caring and compassionate towards oneself, rather than towards others. Interestingly, the gender differences found in self-compassion are contrary to the gender differences in studies about empathy and the feeling for the suffering of others. In fact, in one study men scored slightly higher in self-compassion than women (by Yarnell et al., 2015). These results are contrary to the previously found results, in which women had more activation in empathic brain regions when confronted with human suffering than men did (Mercadillo et al., 2011). These results indicate that gender differences in self-compassion cannot be compared with gender differences in compassion. However, based on the research about the gender differences in empathy and the study by Mercadillo et al. (2011), the assumption can be made that gender influences compassion in such a way, that women have higher levels of compassion than men.

In conclusion, it can be stated that research regarding the impact of gender on pro-environmental behaviour has led to contradicting results while there is a lack of research investigating gender differences in compassion. This study aims to contribute to the knowledge by examining the research question: "To what extent are the variables gender, pro-environmental behaviour and

compassion related?" Furthermore, based on the assumption that women might score higher on compassion than men and the previous found relations between compassion and pro-environmental behaviour, the hypothesis is: Women are more tended to behave compassionately than men and therefore, behave more pro-environmental (Figure 1).

**Figure 1**

*Theoretical model of the effect of gender (1=Female/ 0=Male) toward pro-environmental behaviour (PEB) with the mediator compassion.*
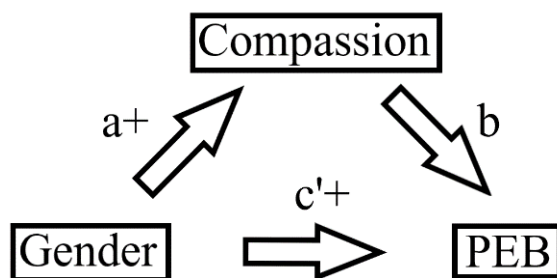


**Methods**

**Design and Procedure**

For this research, a correlation study was conducted. An online survey was used as the data collection method to measure the variables among the sample. Ethical approval was given by the ethical committee of the University of Twente and at the beginning of the online questionnaire, participants were asked for Informed Consent. Aiming for a large sample, the only inclusion criteria were a written command of the English language to conduct the survey and an age of 18 or above. The survey was presented on a website and accessible through an invitation link. Participants were recruited via the researchers' personal networks, social media profiles, snowball sampling and the Sona System software, which is a cloud-based research and participant management solution for universities. The data collection period was 26 days from 7.4.2021 till 3.5.2021.

**Participants**

Before any data cleaning, the total number of participants accounted for 171 people. Firstly, all participants who did not fill out the compassion scale, the pro-environmental behaviour scale or did not indicate their gender, were sorted out. After the data cleaning, there were 119 respondents left. The mean age was 27.35 (SD=13.22) and, as seen in Table 1, most respondents were German females with High School Degree as their highest education.

**Table 1**

*Frequencies of the participants' demographics*

| Questions | Answer | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 38 | 31.9 |
| | Female | 81 | 68.1 |
| | Diverse | 0 | 0 |
| Nationality | Dutch | 13 | 10.9 |
| | German | 98 | 82.4 |
| | Other | 8 | 6.7 |
| Highest education | High School Degree | 81 | 68.1 |
| | Vocational Training | 6 | 5 |
| | Bachelor's Degree | 15 | 12.6 |
| | Master's Degree | 14 | 11.8 |
| | Doctorate | 2 | 1.7 |
| | Other | 1 | 0.8 |

**Measures**

To get the largest possible sample, the survey was developed and published in cooperation with other researchers who also investigated topics related to either compassion or pro-environmental behaviour. Therefore, the survey contained a variety of different measures. However, only the

measurements for the variables gender, compassion, and pro-environmental behaviour are relevant for this paper.

*Demographics*

At the beginning of the online questionnaire, participants indicated demographic information about their age, sex, nationality, and their highest level of education.

*Compassion*

To measure the variable Compassion, the 16 item Compassion Scale (CS; Pommier et al., 2019) was used. The scale was assessed with the mean score of a 5-Point Likert Scale from 1 (almost never) to 5 (almost always) which measured the components kindness, common humanity, mindfulness, indifference, separation, and disengagement. A higher score indicates a higher level of compassion, but some items were reverse coded. An example of a non-reversed item is the question: "I pay careful attention when other people talk to me about their troubles." In previous research, the reliability of the questionnaire was assessed in five studies with a Cronbach's Alpha ranging from acceptable (0.77) to excellent (0.9). Furthermore, the findings showed "construct validity of scores on the CS, including divergent and convergent validity" (Pommier et al., 2019, p.35). The reliability was also assessed in this study, the Cronbach's Alpha of the CS was 0.79, which can be categorised as acceptable.

*Pro-Environmental Behaviour*

The variable Pro-Environmental Behaviour was measured with the 19 items Pro-Environmental Behaviour Scale (PEBS; Markle, 2013). The scale measures pro-environmental behaviours in four dimensions, namely conservation, environmental citizenship, food, and transportation. The scale was assessed with 2-point to 5-point Likert scales with different answer categories. Higher scores indicated higher levels of pro-environmental behaviour, but some items were reverse coded. Firstly, an example for an item of the subscale conservation (Cons) is the question: "How often do you turn off the lights when leaving a room?" Secondly, an example item of the subscale environmental citizenship (EnvCit) is the question: "How often do you talk to others about

environmental behaviour?" Thirdly, an example for an item of the food subscale is: "During the past year have you decreased the amount of beef you consume?" Lastly, an example item for the subscale transportation (Trans) is the question: "During the past year how often have you car-pooled?" The reliability of the PEBS was assessed in a previous study and showed to have good reliability with a Cronbach's Alpha of 0.8 and also the construct validity was supported. Due to a mistake made by the researchers, not all 19-items from the PEBS were taken into the survey from the beginning. After two weeks this mistake was corrected, with the result that 43 participants only answered 10 out of the 19-items, and 76 participants filled out the complete PEBS. To assess whether there were differences in score between participants who filled out the complete PEBS and the incomplete PEBS, the variable pro-environmental behaviour (PEB) was assessed with both samples of the PEBS, the 76 complete responses and the 43 incomplete responses. The PEBS with the 76 complete responses and the variable PEB with all responses (n=119) showed a significant high positive correlation ($r_s$=.87). Therefore, the variable PEB was further used for the analyses. However, the reliability of the PEB was poor with a Cronbach's Alpha of 0.53. Due to the low reliability, the reliability of the subscales was also assessed. It was found that the reliability of the subscales EnvCit and Trans was unacceptable since both had a Cronbach's Alpha of 0.37. The reliability of the subscale Cons was questionable with a Cronbach's of 0.63 and the reliability of the subscale food was excellent with a Cronbach's Alpha of 0.94.

**Data-Analysis**

To conduct the data analysis, the statistic program IBM SPSS 25 was used. First, the descriptives of the scales and demographics were calculated. Since the variable gender is a nominal variable, the assumptions of correlation were not met, and the Spearman correlation was used. Thirdly, a correlation analysis was conducted with the study variables (Gender, Compassion, PEB) to find possible relationships between them. Furthermore, to answer the research question with the hypothesis "Women are more tended to behave compassionately than men and therefore, behave more pro-environmental", Preacher and Hayes (2007) mediation method was used, with gender as the independent variable, compassion as the mediator and pro-environmental behaviour as the dependent variable. Due to the low reliability of the PEB measurement, the analysis was also conducted with the

four subscales of the measurement. The indirect effect was tested using non-parametric bootstrapping with PROCESS.

# Results

## Descriptives

The descriptives for the compassion measurement showed a mean of 3.29 (SD=0.47) with a minimum of 2.13 and a maximum of 4.5. The mean score of PEB was 4.07 (SD=0.42) with a minimum of 3 and a maximum of 5. An independent-samples t-test was conducted to compare compassion and PEB scores in females and males. There was a significant difference in the compassion scores for females (M=4.13, SD=0.42) and males (M=3.95, SD=0.37); t(117)=-2.29, p=.02. For the PEB scores there was no significant differences for females (M=3.31, SD=0.48) and males (M=3.25, SD=0.45); t(117)=-0.68, p=.51. However, there was a significant difference in the PEB-food scores for females (M=2.16, SD=0.69) and males (M=1.64, SD=0.12). (Table 2)

## Table 2

*Total scores and scores for females and males of Compassion, PEB, and PEB subscales*

| Variables | M total | SD total | M female | SD female | M male | SD male |
|-----------|---------|----------|----------|-----------|--------|---------|
| Compassion | 3.96 | 0.47 | 4.13* | 0.42 | 3.95* | 0.37 |
| PEB | 3.29 | 0.47 | 3.31 | 0.48 | 3.25 | 0.45 |
| PEB-Cons | 3.61 | 0.47 | 3.62 | 0.51 | 3.58 | 0.08 |
| PEB-Food | 2.01 | 0.7 | 2.16* | 0.69 | 1.64* | 0.12 |

*Significant difference in scores for females and males

## Correlations

As seen in Table 3, a significant low positive correlation between gender and compassion ($r_s$=.26) was found. This means that in this sample the female participants scored higher in compassion than the male participants did. Furthermore, another significant low correlation was found between

compassion and PEB ($r_s$=.21). The subscale PEB-Food correlated significantly with gender ($r_s$=.35), indicating that women scored higher in this subscale than men did.

**Table 3**

*Correlation matrix*

| Variable | N | Gender [a] | Compassion | PEB | PEB-Cons | PEB-Food |
|---|---|---|---|---|---|---|
| Gender [a] | 119 | - | | | | |
| Compassion | 119 | .26* | - | | | |
| PEB | 119 | .08 | .21* | - | | |
| PEB-Cons | 78 | .08 | .08 | .56* | - | |
| PEB-Food | 78 | .35* | .05 | .49* | .17 | - |

[a] 1=Female/ 0=Male

*p<0.05

**Mediation**

To investigate if the effect of gender on PEB is mediated by compassion, three simple mediation analyses were performed using PROCESS. In the first analysis with gender as the independent variable, PEB as the dependent variable and compassion as the moderating variable. In the other two analyses, the dependent variable was PEB-Cons and PEB-Food (see table 3).

The mediation analysis showed an insignificant total effect of the independent variable gender on the dependent variable PEB. This indicates that gender does not predict PEB. The indirect effect of gender on PEB with the mediator variable compassion was found to be statistically significant. These results indicate a mediating effect of compassion on the relationship of gender on PEB. This suggests that women, in general, scored higher in compassion and participants scoring higher in compassion, scored higher in PEB. Therefore, gender predicts compassion, and compassion predicts PEB.

The mediation analyses with the subscales PEB-Cons showed an insignificant total effect of the independent variable gender on the dependent variable PEB-Cons. This shows that gender does not

predict PEB-Cons. The subscale PEB-food showed a significant total effect of gender on PEB-Food. Therefore, gender predicts PEB-Food, in other words, women scored higher in the subscale PEB-Food than men did. Furthermore, both PEB subscales showed no significant indirect effect of gender on PEB with the mediator variable compassion. These results indicate that there is no mediating effect of compassion on the relation of gender on both PEB subscale. This suggests that compassion does not predict PEB-Cons nor PEB-Food.

**Table 3**

*Mediation results of the five analyses.*

| Associations | PEB | PEB-Cons[a] | PEB-Food[a] |
|---|---|---|---|
| Gender on PEB[b] | b=0.01, t(116)=0.14, p=.89 | b=0.01, t(75)=0.05, p=.96 | b=.54, t(75)=3.18, p=.00 |
| Gender on Compassion | b=0.18, t(117)=2.29, p=.02 | b=0.24, t(76)=2.29, p=.02 | b=0.24, t(76)=2.29, p=.02 |
| Compassion on PEB (Subscale) | b=0.27, t(116)=2.56, p=.01 | b=0.12, (75)=0.89, p=.37 | b=-0.08, t(75)=-0.43, p=.67 |
| Total effect | 0.06, p=.51 | 0.01, p=.96 | 0.54, p=.00 |
| Indirect effect (CI) | 0.05 [.03, .12] | 0.03 [-.04, .11] | -.02 [-.14, .07] |

[a] Subscale of the Pro-environmental behaviour measurement

[b] Regarding columns three to six: Gender on PEB-subscale

**Discussion**

In this study, the relations between the variables gender, pro-environmental behaviour, and compassion were investigated. The aim of this study was to build on previous research and to further evaluate the underlying processes behind pro-environmental behaviour.

**Main findings**

Regarding the research question, there were five main findings. Firstly, the mediation analysis suggested a mediating effect of compassion on the relationship between gender and compassion since the total effect can be explained by the indirect effect. These results show, that in this study, women did not score higher for pro-environmental behaviour in general. It rather showed that women, in general, had higher levels of compassion than men and participants who had a higher level of compassion, indicated also to behave more pro-environmental. Therefore, the hypothesis can be accepted. However, no mediation effect could be found for any of the four subscales of the PEB. These results in addition to the low reliability of the PEB question the findings of the mediation analysis. However, it could also be that the mediating effect of compassion is only present when measuring the whole construct PEB and not only one of the subscales.

Secondly, the gender differences in pro-environmental behaviour were investigated. In this study, gender did not predict pro-environmental behaviour. This result is coherent with present literature that also found no relation between gender and pro-environmental attitudes (Hayes, 2001) or did not find gender differences in pro-environmental behaviour (Hadler & Haller, 2011). A possible explanation for these results could be the findings of Xiao and Hong (2010) and Hunter et al. (2004). In both studies, gender differences were only found for pro-environmental behaviours inside the house (e.g., recycling) but not outside the house (e.g., donating environmental organisations). Since the PEB measurement of this study measured both behaviours inside and outside the house, no gender differences could be found.

Thirdly, contrasting to the finding that gender did not predict PEB, gender differences were found for one subscale of PEB. It was found that gender predicted PEB-Food. This subscale is assessing an individual's meat consumption. Therefore, women indicated to consume less beef, pork,

and poultry than men. This behaviour can be categorized as pro-environmental behaviour inside the house, which also confirms previous findings from Xiao and Hong (2010) and Hunter et al. (2004). Moreover, previous studies also found that men tend to consume more meat than women did (Prättälä et al., 2007; Mertens et al., 2020).

Fourthly, gender differences were found in the compassion scores, namely, women scored higher in compassion than men did. This is the first study that investigates gender differences in compassion so the results cannot be directly compared with previous literature. However, there is literature about gender differences in self-compassion, but these findings are contrary to the results of this study. For instance, research found that men scored higher on self-compassion than women did (Yarnell et al., 2015). This indicates that the concept of self-compassion cannot be compared with the concept of compassion. Since compassion is one dimension of the concept of empathy, the results may be comparable to the findings of gender differences in empathy. In fact, it was found that women had more activity in brain regions related to empathic processes when confronted with the suffering of others (Mercadillo et al., 2011). Therefore, women might feel more compassion for others whereas men showed a higher self-compassion.

The last finding of this study was, that compassion and PEB were positively related. This result confirms the findings of a study investigating pro-environmental values. In this study, a significant low positive correlation between compassion and pro-environmental values (PEV) as well as between compassion and pro-environmental intentions (PEI) were found (Pfattheicher et al., 2015). Furthermore, even the correlation scores of this study were similar to the results of this study. They found a small effect between compassion and PEV and between compassion and PEI. In comparison, in this study, also a small effect was found between compassion and PEB.

**Implications and Strengths**

There are two main implications of this study. First, the finding that gender has no direct influence on pro-environmental behaviour, but rather through compassion, opens new possibilities for the reinforcement of pro-environmental behaviour. For instance, there is promising literature that shows that compassion can be enhanced by training (Weng et al., 2013; Jazaieri et al., 2013). In conclusion, this would mean that compassion training could increase pro-environmental behaviour.

Furthermore, based on the findings that there are gender differences in compassion, the target group for compassion training can be scaled down. Second, the finding that gender predicts pro-environmental food consumption presents important information for product marketing. The PEB-Food scale emphasized the meat consumption of an individual. Therefore, the finding that men had less pro-environmental food consumption than women did, may be due to the attractiveness of meat alternatives. In fact, a study investigating the meat-masculinity link found that a combination of a traditional view on masculinity and a western food environment in which meat is easily affordable is responsible for this gender difference (Schösler et al., 2015). Therefore, another implication would be, to either increase prices for meat products, or present meet free alternatives in a more traditionally masculine way.

The biggest strength of this study is its novelty for the investigation of gender differences in compassion. Even though gender differences are a prominent topic in the existing literature, the focus was only on empathy but not on the less complex construct of compassion. This focus on compassion is important to understand gender differences in empathy. Another strength of the study is its implications. The findings give concrete evidence of how pro-environmental behaviour could be enhanced through compassion training or a change in the advertisement of meat alternatives.

**Limitations and future research**

However, the findings of this study must also be put in the light of their limitations. The main limitation of this study is, that the PEBS was not included completely from the beginning. This may have resulted in the poor reliability of the measurement. Another explanation could be that the PEB is too broad, however, since the reliability between the subscales ranged from unacceptable to excellent, the data collection mistake was most likely responsible for this limitation. This is the case because the PEB-Food scale for example had an excellent Cronbach's Alpha. After all, the items which were added later, were similar to the items that were already there (e.g. "During the past year have you decreased the amount of beef you consume?"/ "During the past year have you decreased the amount of pork you consume?"). In contrast, the items of the PEB-EnvCit subscale that were added, differed from the items that were already there ("How often do you talk to others about their environmental behaviour?"/ "During the past year have you increased the amount of organically grown fruits and

vegetables you consume?), which may have resulted in the unacceptable reliability. Furthermore, another limitation was the sample. Even though the sample size was acceptable, the diversity was poor. Firstly, since the main recruiting method was the Sona System software, which is a university intern software for the distribution of surveys and experiments, most respondents have been psychology students at the University of Twente. Past research showed that especially in university students the voluntary participation in environmental education is high. This interest in environmental education may have differed in a diverse sample (Zsóka et al., 2013). Secondly, because the independent variable in this study was gender, it would have been ideal if there would have been an equally distributed sample. However, nearly two-thirds of the participants have been female. This resulted in an over-representation of females in the sample, making their scores more reliable than the males' scores.

Additionally, based on the results, there are four pieces of advice for further research on this topic. Firstly, in this study, there were no gender differences for pro-environmental behaviour. As stated by Xiao and Hong (2010) and Hunter et al. (2004) there are only gender differences for the pro-environmental behaviour inside the house. This distinction was partly found in this study since there were gender differences for the subscale PEB-Food. Therefore, the first advice is to further evaluate gender differences in specific pro-environmental behaviour and also include this differentiation when replicating the meditation analysis. Secondly, compassion is just one of many components of empathy. Since gender differences were found in both, the whole construct empathy (Toussaint & Webb, 2005) and the component compassion, it may also be of interest to investigate other components of empathy for gender differences. For instance, emotional sharing is a component of empathy for which research suggests that women are more engaged than men (Aukett et al., 1988). Thereby, the concept of empathy can be understood better in the context of gender differences to increase certain aspects in a target group. Thirdly, future research should further investigate and test the assumption that compassion training increases pro-environmental behaviour. Moreover, since this study found gender differences in compassion, the compassion training should be aimed at a male target group to increase their compassion and therefore, their pro-environmental behaviour. Fourthly, the gender differences in pro-environmental food consumption should be further evaluated. This study added to past research

that men consumed more meat and therefore had less pro-environmental food consumption. Based on previous findings, an experimental study could be conducted, in which meatless alternatives could be presented in a way that is attractive to the traditional framing of masculinity. The findings of an experimental finding like this could have important implications for the food marketing industry.

**Conclusion**

To conclude, this study added further evidence for the positive relationship between compassion and pro-environmental behaviour and additional evidence that there are no gender differences in pro-environmental behaviour in general, but for specific pro-environmental behaviours like food consumption. Furthermore, for the first time, gender differences were investigated and found in compassion. Moreover, through the result that the relation between gender and pro-environmental behaviour is mediated by compassion, a new possibility is offered to increase pro-environmental behaviour through compassion training aimed at a male target group.

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