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The Impact of Moral Action and Moral Values on Moral Judgment and Moral Behaviour

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University of Sussex

Thesis submitted for the degree of Doctor of Philosophy in Psychology
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Declaration

I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

SignatureMaedeh Mir.....

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University of Sussex

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Doctor of Philosophy in Psychology

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Summary

This thesis focuses on how recalling past behaviour affects attitudes, intentions and behaviour in the domain of moral decision-making. It extends the existing literature on moral licensing and moral cleansing by exploring whether different individual difference variables moderate such licensing and cleansing effects. Five empirical studies are reported.

Chapter 1 provides an overview of the moral licensing and moral cleansing literature and also outlines research into the predictive effects of moral norms on behavioural intentions within the structure of the TPB.

In chapter 2, the first study reveals evidence of moral cleansing effects: participants in an *immoral* condition were more likely to donate to charity than were participants in a *moral* condition or *control* group. Study 2 investigated whether self monitoring moderated licensing and cleansing effects.

Chapter 3 (study 3) investigated the mediation effect of emotion and the moderation effect of moral identity regarding licensing and cleansing effects on attitudes, intentions and moral norm and behaviour. A partial mediation of condition and behaviour by negative emotions was identified. The results also indicated evidence of a cleansing effect. Moreover, in studies 1, 2 and 3 mediation of the moral norms – intention relationship via attitudes was examined. Moral norms were identified as a strong predictor of charitable donation intentions.

In Chapter 4, environmental attitude was investigated as a moderator of the effect of individuals' past pro-environmental behaviour on TPB components. Internally motivated pro-environmental attitude was found to be a significant moderator.

Chapter 5 draws upon the idea that conception of morality differs in different cultures and examined how different moral foundation values and cultural orientations affect moral attitudes and intentions in the UK and Iran. Surprisingly, moral norms were a more useful predictor of intention than were attitudes in both national cultures.

Table of Contents

Declaration.....	2
Acknowledgements.....	3
Summary.....	4
Table of Contents.....	6
List of Figures.....	9
List of Tables.....	10
Chapter 1: An Introductory Overview.....	11
Overview.....	12
Moral Self	14
The Effect of Past Behaviour on Subsequent Behaviour.....	16
The Moral Self: Licensing Moral Behaviour and Cleansing Immoral Behaviour	17
Empirical Evidence of Moral Licensing and Moral Cleansing	18
The Effect of Prior Behaviour: Consistency or Licensing?.....	20
The moderating role of Moral Identity	21
The moderating role of Self Monitoring	22
The moderating role of Environmental Attitude.....	24
Theory of Planned Behaviour.....	25
Overview of the current research.....	29
Chapter 2: Moral licensing and moral cleansing: applying an extended Theory of Planned Behaviour model	
Introduction.....	32
Moral licensing and Moral cleansing.....	33
The theory of planned behaviour.....	33
Study 1	35
Method.....	35
<i>Participants</i>	35
<i>Materials</i>	35
<i>Procedure</i>	37
Results.....	38
Discussion.....	41
Study 2.....	41
Self monitoring.....	41
Overview of Study 2.....	43
Method.....	44
<i>Participants</i>	44
<i>Materials</i>	44
<i>Design and Procedure</i>	46
Results.....	47
Discussion.....	56
General discussion.....	57

Chapter 3: Moral licensing and moral cleansing: The effect of Moral Identity and Emotions on Ethical Intention and Behaviour.

Introduction.....	62
Moral Identity and Ethical Intention and Behaviour.....	63
Moral Emotion and Ethical Intention and Behaviour.....	65
Overview of the study.....	66
Method.....	68
<i>Participants</i>	68
<i>Materials</i>	68
<i>Design and Procedure</i>	71
Results.....	72
Discussion.....	83

Chapter 4: Moral licensing and pro-environmental intentions: The moderating role of pro-environmental attitude

Introduction.....	89
Priming individuals past pro-environmental behaviour.....	89
Moral licensing in environmental context.....	91
Environmental attitude and Theory of Planned Behaviour.....	93
Moral norm and pro-environment behaviour.....	95
Overview of the present study.....	96
Method.....	97
<i>Participants</i>	98
<i>Materials</i>	98
<i>Design and Procedure</i>	102
Results.....	102
Discussion.....	112

Chapter 5: The Effect of Moral Values and Cultural Orientations on Moral Attitudes and Intentions: Examination of UK and Iran

Introduction.....	119
Differences at the Individual Level of Analysis: Moral Foundation theory	119
Differences at the Cultural Level of Analysis: Individualism versus	121
Collectivism.....	
Cultural Orientations and helping Behaviour.....	123
The Current Study.....	123
Method.....	126
<i>Participants</i>	126
<i>Materials</i>	126
<i>Design and Procedure</i>	126
Results.....	131
Discussion.....	139

Chapter 6: Discussion

Overview of Current Thesis.....	143
Implications	145
Potential Limitations	149
Future Research Directions.....	151
Conclusion.....	155

References.....	156
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Appendices

Appendix 1 - Questionnaires referred to in Chapter 2.....	174
Appendix 2 - Questionnaires referred to in Chapter 3.....	184
Appendix 3 - Questionnaires referred to in Chapter 4.....	191
Appendix 4 - Questionnaires referred to in Chapter 5.....	199

List of Figures

Figure 1. A: Attitudes toward donation regressed onto Internalization scores by Moral condition compared to control group. B: Intentions toward donation regressed onto Internalization scores by Moral condition. C: Attitudes toward donation regressed onto Symbolization scores by Moral condition compared to control group.....	77
Figure 2. Unstandardized Regression Coefficient for the relationship between Condition and Donation as mediated by Negative Emotion.....	80
Figure 3. Information-seeking behaviour as a function of EAS for (a) stronger Green and Control Conditions and (b) Weaker Green and Control Conditions.....	107
Figure 4. Un-standardized Regression Coefficient for the relationship between Moral norm and Intention as mediated by Attitude.....	111

List of Tables

Table 1. Logistic regression analysis of donation behaviour.....	39
Table 2. Means and standard deviations for each dependent variable by condition....	49
Table 3. Means and standard deviations for each dependent variable by condition for high and low Self-Monitors.....	52
Table 4. Summary of ANOVAs examining the effects of Self-monitoring and conditions on TPB components and donation behaviour.....	53
Table 5. Summary of hierarchical multiple regression analysis predicting Intention....	54
Table 6. Summary of hierarchical multiple regression predicting donation behaviour	55
Table 7. Logistic regression analysis of donation behaviour	73
Table 8. Means and standard deviations for each dependent variable by condition..	74
Table 9. Means and standard deviation for Emotion by Condition.....	81
Table 10. Summary of hierarchical multiple regression analysis predicting Intention	82
Table 11. List of 19 environment-related actions used in the Pilot Study.....	97
Table 12. Logistic regression analysis of information-seeking behaviour.....	103
Table 13. Logistic regression analysis of actual behaviour.....	104
Table 14. Descriptive statistics and correlations among moderators and TPB variable	105
Table 15. Moderated logistic regression analysis of information-seeking behaviour...	106
Table 16. Moderated logistic regression analysis of actual behaviour	109
Table 17. Summary of hierarchical multiple regression analysis predicting Intention...	110
Table 18. Standardized means and deviations for individualism/collectivism by Country.....	132
Table 19. Standardized means and deviations for value types by country and gender...	134
Table 20. Correlations between cultural orientations and moral foundation by country	136
Table 21. Correlations between moral foundation values and TPB variables by country	137
Table 22. Summary of hierarchical multiple regression analysis predicting Intention...	139

CHAPTER 1

An Introductory Overview

The question of what motivates people to behave morally or to avoid behaving immorally has been investigated in psychology over many years (Hardy, 2006). In trying to answer this question, some scholars have adopted a cognitive-rationalistic approach based on Kohlberg's Cognitive Developmental Theory (1984) which emphasizes reasoning and reflection. Kohlberg modified and expanded Jean Piaget's (1977) previous work in cognitive reasoning and posited six stages of moral development that explain how children develop moral reasoning. In this theory, moral judgment develops in a series of constructive stages (three-levels, six stages) that occur throughout the lifespan.

For decades, psychological research in morality and moral development has been exclusively dominated by this approach. However, the cognitive approach to explain moral development has been criticized for overlooking the role of emotion and affect by social psychologists such as Martin L. Hoffman (Hoffman, 1984) and Jonathan Haidt (Haidt, 2003) who have emphasized emotion as the basis of moral behaviour. Hoffman has focused on social and emotional development and emphasized empathy as a motivation of moral behaviour in children. Haidt (2003) has stressed the importance of moral emotion for moral judgment and defined moral emotion as those "that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent" (p. 276). In addition, critics have pointed out the gap between moral judgment and moral behaviour, known as the "judgment-action gap" (Walker, 2004). Moreover, Bergman (2002) has also argued that "developmental psychology has paid less attention to issues of moral motivation than of moral cognition" (p. 104). In order to address these limitations, Augusto Blasi (1984) developed the theory of *moral identity* which he defined as the extent to which one regards moral values and goals as core or essential aspects of the self. Blasi considered the unity of self and morality¹ as an important factor in moral judgment and moral

¹ Morality and ethics will be used synonymously throughout this dissertation.

action (Lourenço, 2003). Accordingly, a more recent focus in moral psychology has moved beyond moral reasoning and emphasizes the role of moral motivation and pays more attention to the moral self and identity in motivating moral behaviour (Monin & Jordan, 2009). Monin & Jordan (2009) posited that moral psychology can be enriched by adding the moral self to its models. In line with this, Young and his colleagues (Young, Chakroff, & Tom, 2012) noted the importance of a moral self-concept on moral behaviour and argued that people are motivated by the way they see themselves. According to Nisan's (1991) moral balance model, when individuals decide to engage in moral behaviour, they consider their past moral and immoral actions and try to "make balance on the basis of their own moral self".

Indeed, research has shown that performing a moral behaviour does not always increase people's inclination to adopt more ethical behaviours. Research (Monin & Miller, 2001; Sachdeva, Iliev, & Medin, 2009) has suggested that past moral behaviour might inhibit future behaviour, leading to "*moral licensing*" effects where the adoption of a particular ethical behaviour decreases the likelihood of other ethical behaviours.

However, until now, a great deal of research has focused on different factors that influence the nature of individuals' moral judgements and moral reasoning, although little research has been carried out on the moral motivation and behavioural consequences of those motivations.

This dissertation aims to broaden the understanding of moral behaviour by looking at moral motivation. This dissertation also extends moral licensing research by exploring whether different individual difference variables moderate such licensing effects. It also investigates the predictive effect of moral norms on behavioural intention within the structure of theory of planned behaviour.

Although moral developmental theories (i.e. Kohlberg's Cognitive Developmental Theory) have emphasized universal principles, both recently developed theories in psychology such as Moral Foundations Theory (Haidt, 2003) as well as research findings have demonstrated that morality diverges between cultures. Therefore, this dissertation focuses also on how different moral

values and cultural orientations affect moral attitudes and intentions, using an extended Theory of Planned Behaviour framework.

Moral self

As mentioned above, the psychology of morality has been focused mostly on moral reasoning for decades, although there has been a shift of focus in moral psychology (Sachdeva, Singh, & Medin, 2011) where recent models emphasize the central role of the moral self and moral identity. Augusto Blasi (1984) in a review of empirical research on moral cognition and moral action introduced his “self model” and posited that moral judgment does not predict moral action very strongly. Blasi highlighted the role of the self in moral action and proposed that moral identity enhances the relation between moral judgment and moral behaviour. Moral identity holds that moral judgment will predict moral action when moral considerations are deeply linked to one’s personal identity. To date, the role of the self in moral behaviour has gained considerable attention among psychologists (Aquino, Freeman, Reed, Lim, & Felps, 2009; Aquino & Reed, 2002; Hardy, 2006; Narvaez & Lapsley, 2009). A growing body of research has shown that the moral self motivates different ethical intentions and behaviours, such as cooperative behaviour (Sachdeva et al., 2009), donation intentions (Aquino & Reed, 2002; Reed & Aquino, 2003; Sachdeva et al., 2009), ethical intentions (Aquino, McFerran, & Laven, 2011; Stets & Carter, 2012), and volunteering (Aquino & Reed, 2002). The moral self has been also taken into account as an important key to address the judgment–action gap of moral functioning (Jennings, Mitchell, & Hannah, 2015).

However, definition of the moral self varies greatly among scholars where different approaches to moral self have been proposed. For instance, Monin & Jordan (2009) distinguished between two personological and social psychological approaches. They grouped the personological approaches, based on individual differences, into two main categories of moral personality and moral centrality. Moral personality focuses on the general personality structure shared by

individuals and moral centrality focuses on the degree to which people think of themselves or generally the world in moral terms (Monin & Jordan, 2009). Moral centrality discusses how central morality and being a moral person are to one's self-concept (Jennings et al., 2015).

In contrast to the personological approaches, from social psychological point of view, Monin & Jordan (2009) proposed a view of the self that is sensitive to situational cues and called it moral self-regard. Moral self-regard involves "incorporating a view of the self-concept as dynamic, and part of a global sense of self-worth (including non-moral sources) that individuals are strongly motivated to preserve" (p.352).

Recently, Jennings and his colleagues (2015) conducted a review of empirical work related to the moral self to clarify the functioning of the moral self and advance understanding of moral judgment and moral behaviour. They indicated that moral self research focused on exploring who a person is and how a person acts, and distinguished between two sides of the moral self: "having" and "doing". In the "having" side of the moral self morality is internalized into a person's sense of self and the "doing" side of the moral self is devoted to find out how internalized morality influences decisions and behaviour. Based on this they defined the moral self "as a complex system of self-defining moral attributes involving moral beliefs, orientations, dispositions, and cognitive and affective capacities that engage regulatory focus toward moral behaviour" (p.106).

In this thesis, moral self is used as a source of motivation for moral action and the "doing" side of the moral self is mainly considered. In particular both personological and social psychological approaches are applied; moral centrality is the main focus in this thesis and, from a social psychological point of view, priming past behaviour is considered as an important situational factor.

The Effect of Past Behaviour on Subsequent Behaviour

Thinking of past moral actions may either increase or decrease subsequent moral behaviour. On the one hand, recalling past moral actions might activate moral identity. Moral identity is defined as a “self-conception organized around a set of moral traits” that motivates moral behaviour (Aquino & Reed, 2002, p. 1424). According to this theory, individuals who view themselves as moral are more likely to act pro-socially since when the identity is deeply linked to a person’s self-conception, it will be stable over time. Aquino & Reed (2002) argued that people with a strong moral identity are more likely to maintain consistency between conceptions of their moral self and their actions. There is empirical evidence showing that moral identity predicts moral behaviour. For example, moral identity has predicted volunteering and donation (Aquino & Reed, 2002), donations to out-group charities (Reed & Aquino, 2003), and willingness to donate time instead of money to charity (Reed, Aquino, & Levy, 2007).

Indeed, there is a considerable body of research in social psychology suggesting that people are motivated to act consistently e.g. (Freedman & Fraser, 1966). For example, the striving for consistent self-perceptions in moral identity theory is in line with classic foot-in-the-door phenomenon. The foot in the door technique (Freedman & Fraser, 1966) assumes that agreeing to perform a small helpful act increases the likelihood of agreeing to engage in substantial larger helping behaviour. It has been argued that the foot-in-the-door technique works on the principle of consistency (Petrova, Cialdini, & Sills, 2007); that is, as long as the request is consistent with the nature of the original small request, the foot-in-the-door technique will work.

Moreover, the centrality of consistency in moral identity theory seems to be compatible with the theory of self-consistency (Lecky, 1945). According to this theory, people have a strong motivation for consistency (Swann, Griffin, Predmore, & Gaines, 1987) since self-consistency is argued to be a primary motivating force in human behaviour. As a result, priming individuals’ past

behaviour lead them to act consistently with their past behaviour rather than to free them to engage in inconsistent behaviour (Miller & Effron, 2010).

Alternatively, reminding people of their past moral behaviour might also reduce subsequent ethical behaviour. Therefore, people may be less likely to act morally after recalling their past moral behaviour because acting morally has already validated their morality and they feel that they don't need to prove themselves further. According to the licensing effect, one's past behaviour will liberate rather than constrain future behaviours (Miller & Effron, 2010). That is, based on previous moral behaviour people might *license* themselves, a "perception that they are permitted to take an action or express a thought without fear of discrediting themselves" (Miller & Effron, 2010, p. 116).

The Moral Self: Licensing Moral Behaviour and Cleansing Immoral Behaviour

Even though people value possessing a moral self-image and want to see themselves as moral actors, we also, at least occasionally, engage in immoral behaviour (Jordan, Mullen, & Murnighan, 2011). That is, when we have behaved morally or in some other way established a moral image that frees us to subsequently not engage in ethical behaviour and we still feel as though we are moral individuals. Moral self-licensing attempts to explain this phenomenon. Moral licensing occurs when past moral behaviour licences people to engage in a behaviour that might otherwise discredit the self (Miller & Effron, 2010).

On the other hand, research on moral cleansing suggest that recalling past unethical behaviour threaten individuals' moral self and that makes people more likely to engage in subsequent moral behaviour; to recover their moral self-worth. According to Sachdeva et al. (2009), behaving immorally has a negative influence on perceptions of self-worth, and people engage in moral behaviour in order to regain some of that lost worth.

Evidence for moral licensing and moral cleansing has been found in various domains including racism (Effron, Cameron, & Monin, 2009; Merritt et al., 2012; Monin & Miller, 2001), job hiring (Monin & Miller, 2001), donations to charity (Sachdeva et al., 2009), sexism (Monin & Miller, 2001), ambiguous racial attitudes (Effron et al., 2009), consumer purchases (Khan & Dhar, 2006), and dishonest behaviour (Jordan et al., 2011). Details are presented in following.

Empirical Evidence of Moral Licensing and Moral Cleansing

Monin and Miller (2001), in the case of expression of prejudice, found that individuals who established their egalitarianism by disagreeing with sexist statements or hiring someone from an ethnic minority were subsequently more likely to choose a male candidate for a stereotypically masculine job (a prejudiced choice). Monin and Miller (2001) argued that people are more willing to express a prejudiced attitude when their past behaviour has established their credentials as a non-prejudiced person.

Khan and Dhar (2006), in terms of consumer choice, asked participants to imagine doing something altruistic like volunteering for community service or donating to charity and then asking them to make a hypothetical choice between purchasing a luxury item (e.g., designer jeans) or a utilitarian item (e.g., a vacuum cleaner). They found that participants who imagined volunteering or donating to charity were more likely to purchase of a luxury item than were participants who had not. Khan and Dhar (2006) argued that participants who imagined doing altruistic act were able to establish their morality, and this reduces the negative self-attributions associated with the purchase of a luxury.

Sachdeva, Iliev, and Medin (2009), examined the moral licensing effect in the case of altruism and charity donation. They asked participants to write a short story about themselves or someone they knew using nine morally positive trait words (e.g., caring, generous) and nine morally negative traits words (e.g., greedy, disloyal). At the end of the study, participants were

given a chance to make a small donation to a charity of their choice. They reported that students who described themselves with positive words gave the least to charity compare to students who described themselves with negative words. They discussed that reminding people of their good deeds reduced charitable giving. Sachdeva and her colleagues (2009) also used a cooperative decision making task to examine the moral licensing effect in an environmental context. They found that participants who wrote about the positive traits (about themselves) were the least cooperative in the environmental decision making task. Moreover, participants did not displayed moral licensing effects when they wrote about other people.

In related study, Mazar and Zhong (2010), in a series of laboratory experiments in the field of environment, found that purchasing green products affirmed individuals' values of social responsibility and led them to act less altruistically subsequently. They reported that participants were more likely to cheat and steal after purchasing green products.

Similarly, Jordan et al. (2011) found that participants reported greater participation in moral activities, stronger pro-social intentions, and showed less cheating behaviour after they recalled their immoral behaviour than participants who recalled their moral behaviour. They applied "self-completion theory to predict (and show) that recalling one's own (im)moral behaviour leads to compensatory rather than consistent moral action as a way of completing the moral self" (Jordan et al., 2011, p.701).

Kouchaki (2011), in five experimental studies, examined others (participants' in-group members) prior non-prejudiced behaviour effect on participants future behaviour and called it "vicarious moral licensing". Kouchaki reported that people are more likely to display prejudiced attitudes when their group members' past behaviour has established non-prejudiced credentials. She found the mediation effect of moral self-concept between vicarious moral licensing and prejudiced behaviour and also examined the moderating role of identification with the credentialing group.

A recent study by Conway and Peetz (2012) investigated how recalling participants' recent (concrete behaviour) and distant action (an abstract manner) affect their subsequent pro-social behaviour. They found that participants who recalled recent immoral behaviour were more likely to help than participants who recalled moral actions (demonstrating compensatory behaviour). In contrast, when participants recalled distant immoral actions, were less likely to help than participants who recalled moral actions (demonstrated consistency behaviour).

Regarding to moral cleansing effect, Zhong and Liljenquist (2006) reported that priming peoples' past unethical behaviour increase the likelihood of taking a cleansing product (e.g., cleansing wipe) over a neutral products (e.g., pens), presumably – the authors argued - because the cleansing products could wash away their moral stains and restored their moral self: “physical cleansing behaviours alleviates the upsetting consequences of unethical behaviour and reduces threats to one’s moral self-image” (p.1451)

More recently, Jordan et al. (2011) demonstrated the impact of recalling one’s own (versus others’) immoral behaviour on subsequent moral identity, intentions, and behaviour. They found that recalling immoral behaviour increases pro-social intention whereas recalling moral behaviour reduces pro-social intentions.

The Effect of Prior Behaviour: Consistency or Licensing?

Taken together, the question here is when does past moral action increase or decrease subsequent moral behaviour? To answer this question, Miller & Effron (2010) suggested three different possibilities. First, they argued, one’s behavioural history will liberate future behaviours when one’s past behaviours are interpreted in terms of progress rather than commitment to a goal (e.g., Fishbach & Dhar, 2005). Fishbach and Dhar reported that actions that are framed as a goal progress increase the likelihood of pursuing incongruent actions and to pursue inconsistent goals, whereas the same actions framed as a goal commitment elicit a tendency to subsequently maintain the

pursuit of the focal goal. Secondly, one's behavioural history could prevent one from acting inconsistently since behaving inconsistently would present them as a hypocritical person, defined as "saying one thing in public and doing another in private" (Barden, Rucker, & Petty, 2005, p. 1463). Moreover, people might avoid inconsistency since future behaviour is morally ambiguous, or past and future behaviours are in not in the same domains.

Thirdly, Miller & Effron (2010) considered individual differences factors and claimed that past moral action will free one to act inconsistently when one acts in domains that are relatively unimportant to one's identity.

However, scholars have recently started testing moderators to explain when past behaviour produces consistency versus licensing (see Mullen & Monin, 2016). For example, Conway and Peetz (2012) posited that recalling recent behaviour leads to licensing, whereas recalling more distant behaviour leads to consistency; Cornelissen et al. (2013) proposed that focusing on consequences leads to licensing, whereas focusing on rules leads to consistency. To the best of the author's knowledge, research to date has not systematically explored the role of potential individual difference as moderators of the effect of priming past behaviour on subsequent moral behaviour. In line with this, three different individual difference variables that previous research has shown to be effective on behaviour are taken into account in this programme of research, namely moral identity, self-monitoring and Environmental Attitude. The main reason for focusing on these individual differences variables as moderators was that the importance of these variables in the motivation of moral behaviour has been already suggested.

The Moderating role of Moral Identity

As mentioned above, past moral action will free one to act inconsistently when one acts in domains that are relatively unimportant to one's identity. In this regard, moral identity theory represents that

individuals who place a high value on morality are more likely to display consistency over time than others do (Aquino & Reed, 2002).

Augusto Blasi (Blasi, 2004), in his review of empirical research posits that relations between moral judgment and moral behaviour might be enriched by moral identity. Followed by Blasi, Aquino and Reed (2002) developed a self-report measure of moral identity that concerns the degree to which morality is a central part of one's identity. According to Aquino and Reed (2002), moral identity is one of possible identities that people use as a basis to construct their self-definition. Recent research has demonstrated that moral identity dimensions effectively predict various morally relevant behaviours (e.g., Aquino & Reed, 2002; Hardy, 2006; Reed & Aquino, 2003), moral emotions (Aquino et al., 2009; Aquino, Reed, Thau, & Freeman, 2007), and concern for out-group members (Aquino & Reed, 2002; Hardy, Bhattacharjee, Reed, & Aquino, 2010).

Although the importance of moral identity in the motivation of moral behaviour has been suggested (Damon & Hart, 1992), no published studies have explored the potential moderating impact of moral identity on future behaviour. In the licensing and cleansing literature, moral identity has been applied only as a dependent variable in the study by Jordan et al. (2011) and this seems to be a notable omission to the research in this field.

The moderating role of Self-Monitoring

Self-monitoring has been considered as a potential moderator of the relationship between personality and behaviour (Gangestad & Snyder, 2000). Self-monitoring refers to a tendency that individuals apply to adjust their behaviour to social situations. According to Snyder (1974), there are important individual differences in the extent to which they monitor their self-presentation, expressive behaviour, and affective displays. In this respect, self-monitoring is categorized into low and high self-monitoring groups. High self-monitors are flexible and vary their behaviour from

situation to situation to fit the particular situation. In contrast, low self-monitors change little from situation to situation. They are inner-directed and are focussed more on self than on situation.

Since its inception, the self-monitoring construct has been the focus of a large and a growing amount of research. In general, the moderating effect of self-monitoring on individuals' attitudes, beliefs, and their behaviour has been examined in various research domains including consumer attitudes (Kavak, Gürel, Eryigit, & Tektas, 2009), drinking behaviour (Jang, 2012) and appraisal behaviour (Jawahar, 2001).

According to Jawahar (2001), self-monitoring, as a potential individual difference variable, is related to an individual's tendency to act in line with his or her attitudes. Self-monitoring has been used to examine substantial consistency between attitudes, intentions and behaviour (Snyder & Kendzierski, 1982). Ajzen et al. (1982) reported that low self-monitors showed a stronger intention-behaviour link than did high self-monitors and low self-monitors also tended to exhibit stronger attitude-behaviour correlations than did high self-monitors.

Since the present research is focussed upon moral behaviour, the role of self-monitoring in this context is of interest. Flynn et al. (2006) argued that high self-monitors pay more attention to their social context and are more sensitive to the status dynamics of exchange. Since they are more aware of the thoughts and feelings of their partners than low self-monitors therefore are more inclined to provide help when they are asked for it (Flynn, Reagans, Amanatullah, & Ames, 2006). In this regard, Ehrhart and Naumann (2004) also found that high self-monitors are more influenced by descriptive helping norms than are low self-monitors.

Though there is some primary evidence of a relationship between self-monitoring and helping behaviours i.e. (Flynn et al., 2006; Narvaez & Lapsley, 2009), a moderating role of self-monitoring on helping behaviour has not been investigated empirically.

The moderating role of Environmental Attitude

Theory and empirical work in the field of moral licensing suggests that licensing effect depends on whether the moral and immoral behaviours occur in the same or in a different domain (Merritt, Effron, & Monin, 2010). Blanken and his colleagues (Blanken et al., 2015) argued that licensing effects are larger when the moral and immoral behaviours are measured in the same domain.

On the other hand, the relationship between attitudes and behaviour has been a matter of debate for decades (e.g., Armitage & Conner, 2001). Although attitudes have been assumed to be predictive of behaviour, existing literature have also reported that attitudes does not necessary predict specific behaviours (e.g., Wicker, 1969). In order to enhance the relationship between attitude and behaviour, potential moderators have been taking into account. Kraus (1995), in his meta-analysis, found that the attitude behaviour relationship was moderated by attitudinal variables (of attitude stability, certainty, affective-cognitive consistency, direct experience, and accessibility), self-monitoring, and situational variables. Moreover, it was suggested that attitudes and behaviour must be measured at the same levels of specificity (i.e., Ajzen & Fishbein, 1977). Consistent with this, Kraus (1995) also reported that when attitudes and behaviour were measured at corresponding levels of specificity, they were highly correlated.

Thus, to study licensing effects, the research in this thesis examines moral action that is in the same domain as prior moral behaviour. Considering moderation effects, environmental attitude is considered as a moderator for effect of priming individuals past pro-environmental behaviour on their environmental attitudes, intention and behaviour.

To date, different forms of conceptual and theoretical frameworks can be found in environmental attitudes studies. Scholars have considered environmental attitudes from different perspectives; from anthropocentric view (Chandler & Dreger, 1993) and ecocentric view (Thompson & Barton, 1994) to social psychological view (Schultz, 2001). From a social psychological point of view, environmental attitudes emphasis on beliefs concerning what

consequences environmental concern may have for oneself, for other human beings, or for the biosphere (Schultz, 2001; Stern & Dietz, 1994). Stern and Dietz (1994) argued that environmental concern are based on the relative importance that a person places on themselves, other people, or plants and animals labelled as “egoistic, social-altruistic, and biospheric”. Schultz (2001) argues that attitudes of environmental concern are rooted in a person’s concept of self, and the degree to which an individual perceives herself to be part of the natural environment. Schultz defined environmental attitudes as ‘‘the collection of beliefs, affect, and behavioural intentions a person holds regarding environmentally related activities or issues’ (Schultz, Shriver, Tabanico, & Khazian, 2004, p. 31).

The Theory of Planned Behaviour

In order to assess individuals’ attitudes and intentions, the measurement method from the Theory of Planned Behaviour is used in this thesis. The Theory of Planned Behaviour (TPB) is essentially an extension of the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) which suggests that behavioural intentions are determined by attitudes (positive/negative evaluations of behaviour) and the perceived social pressure from significant others, subjective norms. Although the theory of reasoned action accounted for a large proportion of the variance in behaviour (Cohen, 1992), researchers noticed that the theory of reasoned action was only an effective predictor of volitional behaviour (Ajzen, 1991). In order to address this issue, Ajzen (1991) proposed the theory of planned behaviour (Ajzen, 1991) which is one of the most influential theories for the prediction of behaviour. This theory provides a framework to study attitudes toward behaviour and holds that the most important proximal determinant of a person’s behaviour is the individual’s intention to perform the behaviour.

According to this theory, behaviour is influenced by three major factors: attitude towards the behaviour (positive or negative evaluation of self-performance of the particular behaviour),

subjective norm (perceived social pressure to perform or not perform the behaviour), and perceived behavioural control (degree of control a person believes he or she has over performing behaviour). All these three factors together lead to the formation of a behavioural intention which is the ultimate predictor of behaviour. Generally, positive attitudes toward a behaviour, positive subjective norms, and high perceived behavioural control should lead to a strong intention to perform the behaviour in question. The Theory of Planned Behaviour has been used successfully as an important tool for understanding and predicting human behaviour (Armitage & Conner, 2001). Different meta-analytic reviews support the theory's predictions. For example, Armitage and Conner (2001) found behavioural control and intention jointly explained 27% of variance in behaviour.

However, the TPB has been criticized for neglecting other factors that might influence behaviour, one example being moral norm. In fact, moral norm has been seen as a useful additional predictor of intention within the TPB (Ajzen & Fishbein, 2005; Conner & Armitage, 1998; Manstead, 2000; Sparks & Shepherd, 2002). Moral norm refers to "individuals' conviction that some forms of behaviour are inherently right or wrong, regardless of their personal or social consequences" (Manstead, 2000, p.12). According to Ajzen (1991), moral norm takes into account "personal feelings of . . . responsibility to perform, or refusal to perform, a certain behaviour" (p. 199).

To date, the role of moral norm as a predictor of intentions has been supported in different domains; from health behaviour (Abraham & Sheeran, 2004; Conner & Abraham, 2001; Sparks, Shepherd, & Frewer, 1995) to pro-environmental behaviour (Harland, Staats, & Wilke, 1999; Oyserman, Coon, & Kimmelmeier, 2002) and pro-social behaviour (Armitage & Conner, 2001; Randall & Gibson, 1991). For example, Smith and Mc Sweeney (2007) extended the Theory of Planned Behaviour to determine the influence of attitudes, social and moral norms, perceived behavioural control, and past behaviour on donating intentions and behaviour. They found that

attitude, subjective norm and perceived behavioural control significantly predicted intention to donate money, and intention significantly predicted donation behaviour. The results of their study revealed that past donating behaviour was found to significantly predict donating intentions but not donating behaviour. Additionally, Smith and Mc Sweeney questioned the validity of social norms and indicated that moral norm serve as an important additional predictor within TPB in the context of charitable giving.

Based on Smith and Mc Sweeney (2007) work, Van der Linden (2011) hypothesized that moral norms rather than social norms can be regarded as a significant predictor of charitable intentions. The results of his study supported this hypothesis; social norms did not explain any of the variance in intention but the variance in charitable intention was explained by 7% by moral norm. Moreover, Godin et al. (2005) showed that intention aligned with moral norms better predict behaviour compared with intention aligned with attitude.

Moreover, Ravis et al. (2009), in their meta-analysis, examined 47 empirical tests of the moral-norm/intention relationship to determine the predictive validity of moral norms in the theory of planned behaviour. They revealed that moral norms increased the variance explained in intentions by 3%, after controlling other TPB variables.

Although, an extensive body of research has showed the direct impact of moral norms on intention (e.g. Harland et al., 1999), to date there have been few attempts to examine the moral norm and intention relationship within the context of the TPB (Ravis, Sheeran, & Armitage, 2009). In a meta-analysis reviewed by Conner and Armitage (1998) moral norm was a significant predictor of intention, adding an average 4% of the variance, after controlling for the impact of other TPB variables. Ravis and her colleagues (2009), in their meta-analysis work, assessed the predictive validity of moral norm and reported that intention mediated the influence of moral norm on behaviour. They argued that Conner and Armitage (1998) did not examine the potential effects

of moral norm on behaviour and also did not examine the effect of moral norm on intention after a related attitudinal factor has been taken into account.

On the other hand, there is evidence that moral considerations affect people's intention indirectly where morality constructs are considered as an antecedent of people's attitudes (Raats et al., 1995; Sparks et al., 1995). In this regard, Kaiser & Scheuthle (2003) considered a sizeable overlap between attitude and moral norms which resulted in a suppressor effect. Kaiser (2006) examined moral norms as a predictor of attitude and as a substitute to attitude in the context of conservation behaviour and reported that moral norms are already represented in people's environmental attitude, either as its powerful antecedent or as its evaluative essence. Kaiser discussed that people's environmental attitude seems to either consist of, or be determined by, moral norms and concluded that moral norm effects on intentions are mediated by people's attitudes. This line of research therefore suggests that moral norms can present a powerful antecedent of conservation attitudes.

Consequently, one of the main aims of the present research programme was to quantify the strength of the moral norm and intention relationships and to determine the predictive validity of moral norms in the theory of planned behaviour.

Moreover, it has been suggested that the predictive capacity of moral norm is likely to vary, depending on the type of behaviour (Godin et al., 2005; Manstead, 2000). In particular, moral norms should be more strongly correlated with intentions for behaviours with a moral dimension. Thus, a modified model of TPB is applied to examine whether moral norm – intention effects are mediated by people's attitudes in the domains of charity donation and environmentally-friendly behaviour.

Overview of the Current Research

The current research programme was designed into two parts to explore moral attitudes, intentions and behaviour. First, as mentioned in the introductory overview, this dissertation aimed to broaden the understanding of moral behaviour by looking at moral motivation. In particular, the purpose of the current thesis was to explore the independent predictive effect of moral licensing and moral cleansing on behaviour within context of the structure of the TPB. The studies in the current thesis focused mainly on charitable giving and examined the impact of past behaviour manipulation on the components of theory of planned behaviour: attitudes, intentions, perceived behavioural control and moral norm (as an additional variable) to improve the explanatory power of the model. In all studies, dependent measures from the theory of planned behaviour were selected since, as previous literature suggests, there has been little research on charitable giving using the TPB (Smith & McSweeney, 2007). Moreover, the main purpose of the current research programme was to examine the moderating role of different individual difference variables on recalling past behaviour to promote moral behaviour (Chapters 2, 3 and 4).

The target behaviour was varied between the studies reported in this thesis partly in order to assess possible effects across different behaviours. Sometimes, however, the particular study design lent itself better to one kind of behaviour than to another. At the same time, I obviously constrain the target behaviours to pro-social / moral behaviours in order to be able to assess the existence of moral licensing effects. Sometimes the focus of this assessment was on behavioural effects, sometimes on (non-behavioural) motivational effects; given that participants' responses on one outcome measure might well influence their responses on a subsequent outcome measure, the order of presentation of different outcome measures was varied, depending on which was seen as the focus in any particular study.

Second, this dissertation focused on how different moral values and cultural orientations affect moral attitudes and intentions, using an extended Theory of Planned Behaviour framework (Chapter 5).

The studies presented in Chapter 2 examined the effects of moral licensing on intention to donation money to charity and also explored the potential moderating role of self-monitoring on the effect of priming past behaviour effect on charity giving.

The experimental study presented in Chapter 3 examined whether moral identity would moderate the effect of a manipulation of moral licensing and moral cleansing on promoting charity donation. Additionally, in this study, the potential mediating role of emotions on the association between priming past behaviour and attitudes, intentions and moral norm and behaviour was examined.

The study reported in Chapter 4 investigated the potential moderating roles of environmental attitude on moral licensing and moral cleansing effects on pro-environmental behaviour.

The study presented in Chapter 5 investigated and compared the associations between cultural orientations, moral values and behavioural intentions toward charitable giving in the UK and Iran using an extended Theory of Planned Behaviour model.

Finally, in Chapter 6, the findings of the studies presented in this thesis are summarised, the programme of research evaluated, limitations discussed and possible directions for future research outlined.

CHAPTER 2

Moral Licensing and Moral Cleansing:

Applying an

Extended Theory of Planned Behaviour Model

Introduction

Are people always more inclined to act morally after recalling their past moral behaviour? Over the last decade, extensive behavioural research has been devoted to answer this question. Among the key issues at stake, *Moral Licensing and Moral Cleansing* have become the focus of an increasing amount of research to show how recalling past moral behaviour may either decrease or increase subsequent moral motivation and behaviour.

Priming people's past moral behaviour might highlight their self-conception as a moral individual and motivate them to act in line with their moral self (Conway & Peetz, 2012), but engaging in moral behaviour can also liberate people to act inconsistently with their prior moral action and act in a more morally questionable way (Miller & Effron, 2010). This latter view is characterised as *Moral Licensing*, whereas *Moral Cleansing* suggests that acting immorally can threaten individuals' moral self and lead people to engage in actions that cleanse themselves of their past immoral behaviour and regain their moral selves.

The research reported in this paper investigated the phenomena of *Moral Licensing and Moral Cleansing* using the structure of the TPB to assess how recalling prior behaviour might affect people's attitudes, intentions and behaviour. The effect of priming past behaviour on participants' donating motivation and behaviour to charity were examined in two studies. Previous research has suggested that several factors, such as demographic and socioeconomic variables and psychological characteristics, can impact on charitable contributions. From a social-psychological perspective, self-monitoring, as a personality trait, is a central concept in the analysis of social interaction (Anderson, 1987) and has been conceptualized as a potential moderator of the relationship between personality and behaviour (Gangestad & Snyder, 2000). Accordingly, the purpose of second study reported here was to investigate whether self-monitoring moderates the relationship between priming past moral behaviour and donation behaviour.

Moral Licensing and Moral Cleansing

Moral licensing occurs when past moral behaviour licences people to engage in a behaviour that might otherwise discredit the self (Miller & Effron, 2010): that is, when someone has behaved morally or in some other way established a moral image that permits the person to subsequently not engage in further ethical behaviour. Sachdeva and her colleagues (Sachdeva et al., 2009) found that reminding people of their good deeds reduced charitable donations and environmentally-friendly actions. They asked participants to write a short story about themselves using nine morally positive and nine morally negative trait words. They reported that students who described themselves with positive words gave the least to charity and were the least cooperative in an environmental decision making task compare to students who described themselves with negative words.

On the other hand, research on moral cleansing suggest that recalling past unethical behaviour can threaten individuals' moral self and may make people more likely to engage in subsequent moral behaviour in order to recover their moral self-worth. According to Sachdeva et al. (2009), behaving immorally has a negative influence on perceptions of self-worth, leading people engage in moral behaviour in order to regain some of that lost worth.

Taken together, these studies suggest that recalling past moral behaviour may either increase or decrease subsequent moral behaviour. It is interesting to investigate whether some people are more prone than are others to engage in moral licensing and moral cleansing behaviour and also how recalling prior behaviour affect people attitudes and intentions, as well as their behaviour.

The Theory of Planned Behaviour

According to the theory of planned behaviour, behaviour is influenced by three major factors: *attitude towards the behaviour* (positive or negative evaluation of self-performance of the particular behaviour), *subjective norm* (perceived social pressure to perform or not perform the behaviour),

and *perceived behavioural control* (degree of control a person believes he or she has over performing behaviour). These three factors together lead to the formation of a behavioural intention which is the ultimate predictor of behaviour. Generally, positive attitudes toward a behaviour, positive subjective norms, and high perceived behavioural control might lead to a strong intention to perform the behaviour in question.

However, the TPB has been criticized for neglecting other factors that might influence behaviour, one example being moral norm. In fact, moral norm has been seen as a useful additional predictor of intention within TPB (Ajzen & Fishbein, 2005; Conner & Armitage, 1998; Manstead, 2000; Sparks & Shepherd, 2002). It has been suggested that Moral norm refers to “individuals’ conviction that some forms of behaviour are inherently right or wrong, regardless of their personal or social consequences” (Manstead, 2000, p. 12). To date, the role of moral norm as a predictor of intentions has been supported in different domains: from health behaviour (Abraham & Sheeran, 2004; Conner & Abraham, 2001) to pro-environmental behaviour (Harland, Staats, & Wilke, 1999; Heath & Gifford, 2002) and pro-social behaviour (Armitage & Conner, 2001). For example, Smith and McSweeney (2007) showed that moral norm serve as an important additional predictor within TPB in the context of charitable giving. Similarly, Van der Linden (2011) reported that 7% of the variance in charitable intentions was explained by moral norm. Moreover, Godin et al. (2005) showed that intention aligned with moral norms better predicted behaviour compared with intention aligned with attitudes. Kaiser (2006) also showed that moral norm effects on intentions were mediated by people’s pro-environmental attitudes.

There is an extensive body of research that has shown the impact of moral norms on intentions, but there have been few attempts to examine the effect of moral norm on actual behaviour. In addition, to date no research has tested the idea that attitudes mediate the effect of moral norms on people’s pro-social motivation and intention.

Study 1

This study investigated the independent predictive effect of recalling past behaviour on subsequent behaviour within the structure of TPB in an assessment of the relationship between moral norms, attitudes and intentions. Specifically, the objectives of this study were to assess: Firstly, whether recalling past behaviour would lead to moral licensing and moral cleansing effects. Secondly, to assess how recalling past behaviour influence attitudes, intentions and behaviour. Thirdly, the mediation effect of attitude on the relationship between moral norms and intention was also studied.

Method

Participants

One hundred and fifty-seven students (133 females, 24 males; $M_{age} = 21.15$ years) from 7 different universities in the UK took part in an online survey. Participants were asked to login to the study website and were instructed that they would be completing three short questionnaires. They were informed that they would be entered into a prize draw (with two £50 prizes) in return for their participation.

Materials

Moral Credit manipulation: To assess moral licensing and moral cleansing effect, participants were randomly assigned to one of three conditions: *Moral*, *Immoral* and *Control*. In the *Moral* condition, participants were asked to recall and write few statements about “a time when you did something that helped another person in a personal or work setting”. They were then asked to copy a list of nine words, comprising a set of positive traits: (*caring, generous, fair, kind, compassionate, friendly, helpful, hardworking* and *honest*) and to write a brief story about themselves that included all nine words.

In the *Immoral* condition, participants were asked to recall and write few statements about “a time when you used others to get something they wanted in a personal or work setting”. They were then asked to copy a list of nine negative traits (*disloyal, greedy, mean, selfish, cruel, jealous, dishonest, spiteful, and unfriendly*) and to write a brief story about themselves that included all nine words.

In the *Control* condition, participants were asked to write few statements about their typical Tuesday and then copy a list of nine neutral words: (*book, house, keys, computer, TV, phone, pen, car, and desk*) and to write a brief story about themselves that included all nine words. These materials were adapted from Jordan et al. (2011) and Sachdeva et al. (2009).

Dependent measures: All participants subsequently completed dependent measures representing some variables from the theory of planned behaviour.

Behaviour. Participants’ behavioural reactions were assessed by asking them if they would like to make a small donation to a charity of their choice. They were informed that the researcher conducting the study usually give the opportunity to participants to pledge a donation. Then they were asked “do you pledge to donate a sum of money to a charity of your choice”. There were two response options: “Yes” and “No”. Participants were told that they could write down the name of the charity and an amount that they would pay upon receiving an e-mail from the experimenter.

Motivational variables: All participants then completed some dependent measures taken from an extended Theory of Planned Behaviour. Participants were informed that this part of questionnaire concern about their views about donating money to a charity. They were asked to write down the name of a charity that they generally felt positively towards and to keep in mind the idea of donating to this charity within the next month as they answered the subsequent questions. The variables listed below were assessed. All questions were answered on 7-point scales; response

options are indicated in parenthesis; scales were constructed from the means of the individual items.

Attitudes. Attitudes were measured with seven items ($\alpha = .84$). Participants were asked to respond to the following statements: “My attitude towards donating money to this charity is ...” (*extremely negative to extremely positive, and extremely unfavourable to extremely favourable*), and “For me, donating money to this charity would be...” (*extremely bad to extremely good, extremely harmful to extremely beneficial, extremely foolish to extremely wise, extremely unpleasant to extremely pleasant, and extremely unenjoyable to extremely enjoyable*).

Behavioural intentions. Behavioural intentions were measured with three questions ($\alpha = .96$): “I intend to donate money to this charity within the next month” (*definitely do not to definitely do*), “I shall donate money to this charity within the next month” (*definitely shall not to definitely shall*), and “I shall make an effort to donate money to this charity within the next month” (*definitely false to definitely true*).

Moral Norms. To assess Moral Norms, participants were asked: “I would feel guilty if I did not donate money to this charity” (*strongly disagree to strongly agree*), “It would be morally right for me to donate money to this charity” (*strongly disagree to strongly agree*), “I have a moral obligation to donate money to this charity” (*strongly disagree to strongly agree*), “donating money to this charity would fit in with my ethical principles” (*strongly disagree to strongly agree*). The four items were summed ($\alpha = .72$) to form the measure of Moral Norms.

Design and Procedure

Participants were recruited opportunistically via an email message that was sent out to mailing lists of several UK universities. The message contained information about the study alongside the web link to the questionnaire. Participants were recruited topic blind. As an incentive to participate, two cash prize draws of £50 were as offered and participants were informed that their

participation was entirely voluntary and their email address was requested only so that we were able to contact the winners of the prize draws. Participants were told that the study will take about 20 minutes on average. Participants were not aware that charity donation was part of the study. At the end, two of the participants were selected at random and each won £50. The money was donated to charity on behalf of students. Participants were initially sequentially assigned to one of the three conditions and then completed the various dependent measures.

Results

Preliminary analyses

There was no significant relationship between gender and condition, $\chi^2 (1, N = 157) = 0.46, p > .05$, or between age and condition, $F (2,156) = 0.55, p > .05$. We were thus confident of an unbiased allocation to different experimental conditions.

Moral licensing and moral cleansing effects: behaviour measure

In line with the first objective of this study, a logistic regression analysis was performed to predict donation behaviour using condition as predictor. First, before performing the analyses, the condition variable was dummy coded (moral condition vs. control group, and immoral condition vs. control group). A test of the full model against a constant only model was statistically marginally significant (chi square = 5.615, $p = .060$ with $df = 2$). Nagelkerke's R^2 of .054 indicated a moderate relationship between prediction and donation. Prediction success overall was 78%. The Wald criterion demonstrated that *moral condition* made a significant contribution to donation ($\beta = -0.96$, $\exp(b) = 0.38$, Wald = 3.59, $SE = 0.51, p = .058$). Immoral Condition ($\beta = -1.07$, $\exp(b) = 0.34$, Wald = 4.41, $SE = 0.51, p = .036$) was also a significant predictor. Exp (B) value indicates that the

possibility of donation is .38 times smaller for any one-unit increase in moral condition. The results of the logistic regression of donating behaviour on Condition are summarized in Table 1.

Table 1:

Logistic Regression Analysis of donation behaviour

	B	S.E.	Wald	<i>p</i>	Exp(B)
Moral condition	-0.96	0.51	3.59	0.058	0.38
Immoral Condition	-1.07	0.51	4.41	0.036	0.34

Effect of Condition on Attitudes, Intentions and Moral norm

In line with the second objective of this study, a one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of conditions (moral, immoral and control) on the TPB components (attitude, intention, and moral norm). A non-significant Box's M indicated that the homogeneity of variance-covariance matrix assumption was not violated. No significant differences were found among the three conditions on the dependent measures, Wilks' $\Delta = .95$, $F(2,154) = 1.25$, $p = .27$. Analyses of variance (ANOVA) for each dependent variable were conducted as follow-up tests to the MANOVA. There was no statistically significant effect of condition on attitudes $F(2,156) = .271$, $p = .763$, intentions $F(2,156) = 0.561$, $p = .572$ and moral norm $F(2,156) = 2.06$, $p = .130$.

Mediation Effect of Moral Norms on Intention via Attitudes

In line with the third objective of this study, to test for mediation effect of moral norms on intention via attitudes, Baron & Kenny's (1986) causal steps strategy were examined. First, two simple regression analyses were separately conducted to test the relationship of moral norms to attitudes (the proposed mediator), and the direct relationship of Moral norms to intentions. It was established

that Moral norm was associated with Attitudes and Intention: Moral norms accounted for significant variance in Attitudes, $R^2 = .12$, $F(1,155) = 22.70$, $p < .001$. The coefficient for Moral norms was significant, $\beta = .35$, $p < .001$.

A hierarchical multiple regression with the IV (moral norms) and Mediator (attitudes) predicting DV (intentions) was then conducted. Moral norms ($\beta = .36$, $p < .001$) accounted for significant variance in Intentions, $R^2 = .13$, $F(1,155) = 23.89$, $p < .001$. Moreover, attitudes ($\beta = .30$, $p < .001$) added significantly to the variance accounted for in Intentions, $R^2 = .21$, $F(2,154) = 21.07$, $p < .001$. When the mediator (attitudes) was controlled, the direct effect of Moral norms (IV) decreased to $\beta = .25$, $p < .001$. Since the correlation between the IV and the DV was not reduced to a non-significant level, partial mediation had been identified. A Sobel test revealed that the indirect path from Moral norms to Intentions via Attitudes was significant, $z = 3.07$, $p < .001$.

Predicting donation using TPB variables

A logistic regression analysis was conducted to predict donation behaviour using attitudes, intentions and moral norms as predictors. A test of the full model against a constant only model was statistically significant (chi square = 10.187, $p < .001$ with $df = 3$). Nagelkerke's R^2 of .09 indicated a moderate relationship between prediction and donation. Prediction success overall was 79%. The Wald criterion demonstrated that only Intention made a significant contribution to donation ($\beta = -0.37$, $\exp(b) = 0.68$, Wald = 6.98, $SE = 0.14$, $p < .001$). Attitudes ($\exp(b) = 1.08$, Wald = 0.05, $SE = 0.32$, $p = .81$) and Moral norm ($\exp(b) = 0.89$, Wald = 0.33, $SE = 0.18$, $p = .58$) were not significant predictors. Exp (B) value indicates that the possibility of donation is .68 times smaller for any one-unit increase in intention.

Discussion

One of the aims of Study 1 was to examine whether recalling past behaviour would lead to moral licensing and moral cleansing effects. The differences between the conditions on donation behaviour were significant. Participants in the immoral condition were more likely to donate to a charity of their choice than were participants in the control group which shows a cleansing effect. Moreover, a moderate licensing effect was found in this study (moral Condition was marginally significant). Activating participants past behaviour, affected their donation behaviour but not their intentions, attitudes and moral norm.

However, participants' intentions were a strong predictor of their donation behaviour. Once again, findings of this study provide evidence for the explanatory power of the TPB. Behaviour intention explained 78% of people's donation behaviour and attitude accounted for 16% of people's proportion of intention's variance. Consistent to our expectation, the proportion of explained variance was improved by including moral norms as a predictor of intention; the proportion of intention's determined variance increased to 22%. Moreover, in line with Kaiser (2006) findings, the results of this study also confirmed that moral norms were mediated by people's attitude before they affect intention.

Study 2

As mentioned above, in a second study we were interested to examine whether some people are more prone to engage in moral licensing and moral cleansing behaviour than are others. To answer this question, an individual difference variable, self-monitoring, was used.

Self-Monitoring

Self-monitoring is a personality characteristic that refers to an ability that individuals apply to adjust their behaviour to the social situations. In particular, self-monitoring is about self-

presentation and self-control and refers “to the extent to which an individual looks internally or externally for cues to appropriate behaviours in a given situation” (Snyder, 1974). Snyder (1974) categorized the self-monitoring into low and high self-monitoring groups.

High self-monitors are flexible and vary their behaviour from situation to situation to fit the particular situation. High self-monitors tend to be the centre of attention and seek cues from the situation to act accordingly. In social contexts, these individuals are sensitive to the expression and self-presentation of others and tend to adapt their behaviour to different people’s expectations. High self-monitors are concerned about how they are perceived by others and are able to very quickly change their behaviour, intention and emotion in different situations and with different people to present themselves positively in social situations.

In contrast, low self-monitors change little from situation to situation. They are inner-directed and are focussed more on self than on situation. Therefore, their expressive behaviour reflects their own inner attitudes, emotions, and dispositions (Gangestad & Snyder, 2000; Snyder, 1974). Low self-monitors pay less attention to the expression of others and has little concern for other’s reaction. In social contexts, they are more likely to act consistently, because their attitude and beliefs depend on internal information not on social expectation (Gailiene, 2012). While high self-monitors adjust their behaviour to create desirable images of themselves, low self-monitors are less concerned with how other people perceive them.

There is some evidence of a relationship between self-monitoring and helping behaviour. For instance, Toegel and his colleagues (2007) found that while low self-monitors provided less emotional help to others, individuals who provided higher levels of emotional help to others in the workplace had combination of managerial responsibility and a high self-monitoring or a high positive affectivity disposition. Nauman (2010) reported that individuals’ levels of self-monitoring were positively associated with intentions to perform helping behaviour. While in these studies, a

link between self-monitoring and helping intention was assessed, actual helping behaviour is not examined.

Overview of Study 2

The objectives of this study were similar to the study one: firstly, whether recalling past behaviour would lead to moral licensing and moral cleansing effects. Secondly, how reminding of past un/ethical behaviour influences attitudes, intentions and behaviour. Thirdly, based on the theory of planned behaviour, the mediation effect of attitude on the relationship between moral norms and intention was also studied. Moreover, it is predicted that attitudes, subjective norms, and PBC will predict intentions to donate money to charity and intentions to donate will predict actual donating behaviour.

In addition to the objectives of first study, the second study -examined the moderating effect of self-monitoring on individual's attitude, intention and behaviour to assess when to expect licensing effect and when to expect consistent behaviour. It was expected that after recalling their past moral behaviour, high self-monitors might not credit themselves to behave unethically since they are more sensitive to others' need for help. It was expected that high self-monitors are more likely to show consistent behaviour after recalling their past ethical behaviour.

In contrast, after recalling their past immoral behaviour, high self-monitors will be more likely to cleanse their past by involving in moral behaviour to present themselves positively in social situations. In light of the above the current study tested the following competing hypotheses:

Hypothesis 1: Self-monitoring will moderate the relationship between experimental condition and donation such that high self-monitors will show less indication of moral licensing and more cleansing effects.

Hypothesis 2: Self-monitoring will moderate the relationship between experimental condition and donation such that low self-monitors will credit themselves to act immorally after recalling their past moral behaviour.

Method

Participants

One hundred and fifty Psychology students (129 females, 21 males; $M_{\text{age}} = 20.47$ years) at the University of Sussex took part in an online survey. Participants were asked to log in to the study website and were instructed that they would be completing three short questionnaires. They were informed that they would gain both research participation credit and entry into a £50 prize draw in return for their participation.

Materials

Self-monitoring: All participants completed Snyder's (1974) 25-item self-monitoring scale. The scale comprises 25 statements which are rated by participants as true or false. Statements include items such as: "My behaviour is usually an expression of my true inner feelings, attitudes, and beliefs" and "In groups of people, I am rarely the centre of attention". Following Snyder's (1974) work, participants are divided into two categories of low and high self-monitors. The scale range is from 0 to 25, with high scores (score 14 to 25) indicating high self-monitoring and low scores (score 0 to 12) low self-monitoring. Responses were reverse-coded as necessary and summed to create a measure of self-monitoring.

Moral credit manipulation: To assess moral licensing and moral cleansing effects, participants were randomly assigned to one of three conditions. The conditions were exactly the same as those reported in study 1.

Dependent measures: Subsequent to the experimental manipulation all participants completed a Theory of Planned Behaviour questionnaire addressing donating money to the British Red Cross. The variables listed below were assessed. With the exception of the behaviour measure,

all questions were answered on 7-point scales; response options are indicated in parenthesis; scales were constructed from the means of the individual items.

Attitudes. Attitudes were measured with seven items ($\alpha = .88$). Participants were asked to respond to the following statements: “My attitude towards donating at least £25 to the British Red Cross if I win the £50 is ...” (*extremely negative to extremely positive, and extremely unfavourable to extremely favourable*), and “For me, donating at least £25 to the British Red Cross (if I win the £50) would be...” (*extremely bad to extremely good, extremely harmful to extremely beneficial, extremely foolish to extremely wise, extremely unpleasant to extremely pleasant, and extremely unenjoyable to extremely enjoyable*).

Subjective norm. Subjective norm was measured with two items ($r = .54$): “Most people who are important to me probably think that I should donate at least £25 to the British Red Cross if I win the £50” (*strongly disagree to strongly agree*) and “If I were to donate at least £25 to the British Red Cross if I win the £50, most people who are important to me would probably...” (*disapprove strongly to approve strongly*).

Perceived behavioural control. Perceived behavioural control (PBC) was measured with three items: “How much control do you have over whether you do or do not donate at least £25 to the British Red Cross if you win the £50” (*no control to complete control*), “It is mostly up to me whether or not I donate at least £25 to the British Red Cross if I win the £50” (*strongly disagree to strongly agree*) and “for me, donating at least £25 to the British Red Cross if I win the £50 would be...” (*extremely difficult to extremely easy*). Because the inter-item reliability was poor ($\alpha = .55$), the third item was removed so that the measure of PBC was constructed from the first two items only ($r = .73$).

Behavioural intentions. Behavioural intentions were measured with three questions ($\alpha = .95$): “I intend to donate at least £25 to the British Red Cross if I win the £50” (*definitely do not to definitely do*), “I shall donate at least £25 to the British Red Cross if I win the £50” (*definitely shall*

not to *definitely shall*), and “I shall make an effort to donate at least £25 to the British Red Cross if I win the £50” (*definitely false to definitely true*).

Moral Norms. To assess Moral Norms, participants were asked: “It would be morally right for me to donate at least £25 to the British Red Cross if I win the £50”, “I would feel guilty if I did not donate at least £25 to the British Red Cross if I won the £50”. *Moral obligation* were measured with “I have a moral obligation to donate at least £25 to the British Red Cross if I win the £50” and for *moral discretion* participant were asked: “ If I win the £50, donating at least £25 to the British Red Cross would fit in with my ethical principles” (*strongly disagree to strongly agree*). The four items were summed ($\alpha = .75$).

Behaviour. To assess *participants’ actual behaviour*, at the beginning of questionnaire they were informed about a prize draw and the option of donating some of this money to the British Red Cross (BRC) if they wished. They had been told that we would allocate money to them and the BRC in line with their wishes and that they would receive a receipt from the BRC for any money that they donated. Participants’ behavioural reactions were assessed by asking them “If you win the £50, how much money you would like to keep for yourself” and “If you win the £50, how much would you like to donate to the British Red Cross”. They were informed that their answer to two above questions needed to add up to £50 in order for their questionnaires to be valid. A measure of behaviour was constructed by subtracting the second rating from the first rating (such that higher scores reflected a willingness to donate more to the BRC).

Design and Procedure

Participants were recruited opportunistically via an email message that was sent out to mailing lists of several UK universities. The message contained information about the study alongside the web link to the questionnaire. Participants were recruited topic blind. As an incentive to participate, two cash prize draws of £50 were as offered and participants were informed that their

participation was entirely voluntary and their email address was requested only so that we were able to contact the winners of the prize draws. Participants were told that the study will take about 20 minutes on average. Participants were not aware that charity donation was part of the study. At the end, two of the participants were selected at random and each won £50. The money was donated to charity on behalf of students. Participants were initially sequentially assigned to one of the three conditions and then completed the various dependent measures.

Participants completed the self-monitoring scale first, were then exposed to the experimental manipulation and then completed the various dependent measures: TPB questionnaire first then behaviour measure question.

Results

Preliminary analyses

There was no significant relationship between gender and condition, $\chi^2 (2, N = 150) = 1.75$, $p > .05$, or between age and condition, $F (2, 149) = 0.926$, $p > .05$. We were thus confident of an unbiased allocation to different experimental conditions.

Moral licensing and moral cleansing effects

Regarding the first objective, in order to test for licensing and cleansing effects, a one-way between subjects ANOVA was conducted to compare the effect of experimental condition on donation. There was marginally significant effect of condition on donation to charity, $F (1, 146) = 4.29$, $p = .045$, $\eta^2 = 0.03$. Planned contrasts revealed that participants in the moral condition ($M = -14.28$; $SD = 29.20$) pledged marginally significant higher donations than did participants in the control group ($M = -24.36$; $SD =$

25.09), $t(95.26) = 1.87$, $p = .064$, indicating that reminding participants of past ethical behaviour significantly increased donations compared to control group, not leading to licensing effect but a consistent behaviour. Moreover, participants in the immoral condition did not pledge significant higher donations than did participants in the control group, $t(96.59) = 0.084$, $p = .933$: thus there was no evidence of a cleansing effect.

Effect of Condition on TPB Variables

In line with the second objective of this study, a one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of conditions (moral, immoral and control) on the TPB components (attitude, intention, and moral norm). A non-significant Box's M indicated that the homogeneity of variance-covariance matrix assumption was not violated. No significant differences were found among the three conditions on the dependent measures, Wilks' $\Delta = .93$, $F(2,147) = 1.72$, $p = .11$. It should be noted that the MANOVA approached marginal significance. However, analyses of variance (ANOVA) for each dependent variable were conducted as follow-up tests to the MANOVA. There was a significant effect of condition on Attitudes; $F(2, 147) = 3.65$, $p = .028$, $\eta^2 = 0.04$. Planned contrasts revealed that participants in the moral condition ($M = 5.12$; $SD = 1.16$) pledged significant higher Attitude toward donation than did participants in the control group ($M = 4.56$; $SD = 1.13$), $t(147) = 2.57$, $p = .011$. Moreover, participants in the immoral condition ($M = 4.99$; $SD = 0.99$) expressed more positive Attitudes toward donation than did participants in the control group ($M = 4.56$; $SD = 1.13$), $t(147) = 1.91$, $p = .057$, indicating that reminding participants of past unethical behaviour significantly increased Attitudes toward donation compared to control group: evidence of cleansing effect.

There was a significant effect of conditions on Intentions; $F(2, 147) = 4.95, p = .008, \eta^2 = 0.06$. Planned contrasts revealed that participants in the moral condition ($M = 4.32; SD = 1.67$) pledged significant higher intention to donation than did participants in the control group ($M = 3.40; SD = 1.59$), $t(147) = 2.91, p = .004$. Moreover, participants in the immoral condition ($M = 4.17; SD = 1.58$) pledged significant higher intention to donation than did participants in the control group ($M = 3.40; SD = 1.59$), $t(147) = 2.38, p = .018$.

There was a significant effect of conditions on Moral norm; $F(2, 147) = 2.64, p = .074, \eta^2 = 0.03$. Planned contrasts revealed that that participants in the moral condition ($M = 4.86; SD = 1.31$) pledged significant higher moral concerns than did participants in the control group ($M = 4.31; SD = 1.22$), $t(147) = 2.23, p = .027$. However, participants in the immoral condition did not pledged significant higher donations than did participants in the control group, $t(147) = 1.49, p = .137$.

There was not a significant effect of conditions on subjective norm, $F(2, 147) = 0.34, p = .70$ and PBC, $F(2, 147) = 1.14, p = .32$. Table 2 presented Means and Standard Deviations.

Table 2:
Means and Standard Deviations for each Dependent Variable by Condition

<i>Condition</i>	Attitudes		Intentions		Moral norm	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Moral	5.13	0.16	4.33	0.23	4.87	0.18
Immoral	5.00	0.17	4.18	0.24	4.69	0.19
Control	4.57	0.15	3.41	0.22	4.32	0.17

Mediation Effect of Moral Norms on Intention via Attitudes

Regarding to the third objective, to test the mediation effect, in Step 1 of the mediation model, the regression of Intention on Moral norm, ignoring the mediator, was significant, $b = .74$, $t(148) = 8.37$, $p < .001$. Step 2 showed that the regression of the Intention on the mediator, Attitude, was also significant, $b = 1.10$, $t(148) = 13.78$, $p < .001$. Step 3 of the mediation process showed that the regression of mediator (Attitude) on Moral norm, was significant, $b = .53$, $t(148) = 9.10$, $p < .001$. Step 4 of the analyses revealed that, controlling for the mediator (Attitude) $b = .95$, $t(148) = 9.62$, $p < .001$, Moral norm were still a significant predictor of Intention, $b = .24$, $t(148) = 2.76$, $p < .001$. Since the correlation between the IV and the DV was not reduced to a non-significant level, partial mediation had been identified. However, a Sobel test revealed that the indirect path from Moral norms to Intentions via Attitudes was significant, $z = 6.63$, $p < .001$.

Assessing the effects of Self-monitoring and conditions on TPB components

To test the fourth objective, a 3 (Conditions: Moral vs. Immoral vs. Control) x 2 (Self-Monitoring: low self-monitors vs. high self-monitors) ANOVA was conducted to evaluate the effects of these factors on participants' Attitudes toward donation to British Red Cross. There was a marginally significant main effect of Condition, $F(2,110) = 2.99$, $p = .054$, $\eta^2 = 0.05$, with participants in the moral condition ($M = 5.23$; $SD = 1.12$), showed greater attitude toward donation to BRC than did participants in the control condition ($M = 4.54$; $SD = 1.17$), $p = .016$. There was no main effect of Self-Monitoring, $F(1,110) = 1.15$, $p = .28$, $\eta^2 = 0.01$, and no interaction, $F(2, 110) = 1.53$, $p = .22$, $\eta^2 = 0.02$.

A 3 (Condition: Moral vs. Immoral vs. Control) x 2 (Self-Monitoring: low self-monitors vs. high self-monitors) ANOVA was conducted to evaluate the effects of these factors on participants' intentions toward donation to BRC. The main effect of Condition was marginally significant: F

(2,110) = 2.80, $p = .065$, $\eta^2 = 0.04$; participants in the moral condition ($M = 4.59$; $SD = 0.36$) showed more positive attitudes toward donation to BRC than did participants in the control condition ($M = 2.85$; $SD = 0.30$). There was no significant main effect of Self-Monitoring, $F(1,110) = 2.42$, $p = .12$, $\eta^2 = 0.02$. However, the main effect of Conditions was qualified by an interaction between Self-Monitoring and Condition, $F(2, 110) = 3.39$, $p = .037$, $\eta^2 = 0.05$. Therefore, the simple main effects model was examined; that is, the differences among Conditions for high and low self-monitors were considered separately. There was a statistically significant difference in mean “Intention to donation” scores for high self-monitors across Conditions (moral, immoral, control), $F(2, 110) = 6.91$, $p < .001$, $\eta^2 = 0.11$, but no Condition effect for low self-monitors, $F(2, 110) = 0.116$, $p = .89$, $\eta^2 = 0.002$.

For high self-monitors, all pairwise comparisons were run for each simple main effect with reported 95% confidence intervals and p-values Bonferroni-adjusted within each simple main effect. Mean intention to donation scores for high self-monitors were: moral condition ($M = 4.59$; $SD = 1.36$), immoral condition ($M = 3.90$; $SD = 1.14$), and control group ($M = 2.85$; $SD = 1.42$). High self-monitors in the moral condition had a statistically significantly higher mean intention to donation scores than did high self-monitors in the control group, 1.73 points mean difference (95% CI, 0.57 to 2.89), $p < .001$; indicating a consistency effect rather than a licensing effect. On the other hand, high self-monitors in the immoral condition showed a marginally significant ($p = .090$) higher intention to donate than did high self-monitors in the control group, indicating some evidence of a cleansing effect.

A 3 (Conditions: Moral vs. Immoral vs. Control) x 2 (Self-Monitoring: low self-monitors vs. high self-monitors) ANOVA was conducted to evaluate the effects of these factors on participants’ Moral norm with respect to donation to BRC. There was no main effect of Conditions, $F(2, 110) = 2.08$, $p = .13$, $\eta^2 = 0.03$, no main effect of Self-Monitoring, $F(1,110) = 0.57$, $p = .81$, $\eta^2 = 0.00$, and no interaction, $F(2, 110) = 0.84$, $p = .43$, $\eta^2 = 0.01$.

A 3 (Conditions: Moral vs. Immoral vs. Control) x 2 (Self-Monitoring: low self-monitors vs. high self-monitors) ANOVA was conducted to evaluate the effects of these factors on participants' behaviour toward donation to BRC. There was main effect for Condition, $F(2,110) = 3.12$, $p = .04$, $\eta^2 = 0.05$, no main effect for Self-Monitoring, $F(1,110) = 1.09$, $p = .29$, $\eta^2 = 0.01$, and no interaction, $F(2, 110) = 1.30$, $p = 0.27$, $\eta^2 = 0.02$.

Participants' mean and standard deviation scores for attitudes, intention, and moral norm by Conditions for high and low Self-Monitors are presented in Table 3 and the resultant ANOVAs are summarised in Table 4.

Table 3:

Means and Standard Deviations for each Dependent Variable by Condition for high and low Self-Monitors

Dependent Variables	Conditions					
	Moral		Immoral		Control	
	High SM	Low SM	High SM	Low SM	High SM	Low SM
	Mean	Mean	Mean	Mean	Mean	Mean
Attitude	5.35	5.10	4.81	5.10	4.29	4.092
Intention	4.59	4.28	3.90	4.10	2.85	4.33
Moral norm	5.18	4.28	4.69	4.52	4.29	4.64
Behaviour	31.11	30.01	36.47	37.75	39.60	32.81

Table 4:

Summary of ANOVAs examining the effects of Self-monitoring and conditions on TPB components and donation behaviour

	Intention			Attitude			Moral norm			Behaviour		
	<i>df</i>	<i>F</i>	ηp^2	<i>df</i>	<i>F</i>	ηp^2	<i>df</i>	<i>F</i>	ηp^2	<i>df</i>	<i>F</i>	ηp^2
Self Monitoring (SM)	1,110	2.41	0.02	1,110	1.15	0.01	1,110	0.05	0.00	1,109	1.09	0.01
Condition	2,110	2.80*	0.04	2,110	2.99*	0.05	2,110	2.08	0.03	1,109	3.12*	0.05
SM x Condition	2,110	3.38*	0.05	2,110	1.53	0.02	2,110	0.84	0.01	2,109	1.30	0.02

* $p < .05$

Predicting intentions from TPB variables

Hierarchical multiple regression analysis was carried out to determine the effect of the attitudes, subjective norms, perceived behavioural control, and moral norms on intention. Attitude was entered as a predictor at step 1, subjective norm was entered as a predictor at step 2, perceived behavioural control was entered at step 3 and moral norm was entered at step 4. The intention to donation was entered as the dependent variable: $R^2 = .60$, $F(5, 144) = 54.44$, $p < .001$. Attitudes ($r = .56$; $\beta = .75$, $p < .01$), subjective norm ($r = .58$; $\beta = .15$, $p < .001$), perceived behavioural control ($r = .60$; $\beta = -.15$, $p < .001$), and moral norms ($r = .61$; $\beta = .11$, $p < .001$) all produced significant independent predictive effects. Regarding to donation to BRC, these results indicate that more positive intentions to donation were associated with more positive attitudes and more moral concern about it. Subjective norm was also positively associated with intention, whereas PBC was negatively associated with intention. Results are summarised in Table 5.

Table 5.
Summary of Hierarchical Multiple Regression Analysis Predicting Intention

Variables entered	β	β	β	β
	Step 1	Step 2	Step 3	Step 4
Attitude	0.75	0.69	0.70	0.64
Subjective norm		0.15	0.16	0.13
Perceived behavioural control			-0.15	-0.13
Moral norm				0.11
R^2	0.56	0.58	0.60	0.61
ΔR^2		0.02	0.02	0.00

*** $p < .001$

Predicting donation behaviour from TPB variables

Hierarchical multiple regression analysis was carried out to determine the effect of the attitudes, subjective norms, perceived behavioural control, and moral norms on donation behaviour. Intention was entered as a predictor at step 1, attitude was entered as a predictor at step 2, subjective norm was entered as a predictor at step 3, perceived behavioural control was entered at step 4 and moral norm was entered at step 5. The intention to donation was entered as the dependent variable: $R^2 = .61$, $F(5, 143) = 44.78$, $p < .001$. Attitude ($r = .45$; $\beta = .20$, $p < .01$), and Intention ($r = .59$; $\beta = .50$, $p < .001$), produced significant independent predictive effects. Perceived behavioural control ($r = .61$; $\beta = -.00$, $p = .98$), Moral norm ($r = .60$; $\beta = .10$, $p = .14$) and Subjective norm ($r = .61$; $\beta = .09$, $p = .13$) were not significant predictors. Regarding to donation to BRC, these results indicate that more positive donation behaviour were associated with more positive attitudes and intention about it. Results are summarised in Table 6.

Table 6.
Summary of Hierarchical Multiple Regression Analysis Predicting Donation Behaviour

Variables entered	β	β	β	β	β
	Step 1	Step 2	Step 3	Step 4	Step 5
Intention	0.75***	0.55***	0.52***	0.52***	0.50***
Attitude		0.25***	0.24***	0.24***	0.20***
Subjective norm			0.11***	0.11***	0.09
Perceived behavioural control				-0.01	-0.00
Moral norm					0.10
R^2	0.56	0.58	0.59	0.59	0.59
ΔR^2		0.02	0.01	0.00	0.00

*** $p < .001$

Discussion

The findings of this study revealed significant differences between the conditions in terms of donation behaviour but no licensing or cleansing effects were found. The results of this study provide evidence for consistent behaviour: participants donated more to charity after recalling their previous donation than participants in the control group. In contrast to study 1, activating participants' past moral behaviour compared to past immoral behaviour, significantly affected participants' intentions, attitudes, and moral norm. Subjective norm and perceived behavioural control were not affected significantly by experimental condition. Participants in the moral condition reported more positive attitudes and intentions towards donation compared to participants in the immoral and control conditions. However, it should be noted that the MANOVA approached marginal significance and therefore the effect of the experimental conditions on participants' intentions, attitudes, and moral norm was further examined via univariate ANOVAs.

Again, participants' intentions were a strong predictor of their donation behaviour: behaviour intentions explained 60% of people's donation behaviour. Attitudes accounted for 57% of the variance in people's intentions, while moral norm, subjective norm and perceived behaviour control accounted for 61%, 58% and 60%, respectively. The current findings are in line with other research which has found support for applying the TPB in predicting pro-social behaviours, such as blood donation and volunteering behaviour (Giles & Cairns, 1995; Smith & Mc Sweeney, 2007). Moreover, in line with Kaiser's (2006) findings, the results of this study also suggest that the effect of moral norms on intentions was mediated by people's attitudes.

Regarding the moderating role of self monitoring, the results showed that high self-monitors in the moral condition were more likely to donate to charity compared to participants in the control group, thus showing consistent behaviour after recalling their past ethical behaviour. Moreover, high self-monitors in the immoral condition showed more intention to donate than did high self-monitors in the control group, thus demonstrating a cleansing effect.

General Discussion

This research adapted measures from the theory of planned behaviour (TPB) to examine the effects of moral licensing and moral cleansing on attitudes, intentions, and donation behaviour. The primary aim of the present study was to examine whether recalling past behaviour would lead to moral licensing and moral cleansing effects or to consistent behaviour. The results of the first study supported the hypothesis regarding licensing effects, in that participants donated less to charity when they recalled their past ethical behaviour (moral Condition was marginally significant). This is in line to previous finding regarding licensing effects (e.g., Jordan et al., 2011; Sachdeva et al., 2009).

However, in study 2 no licensing and cleansing effects were found. Our findings are consistent with a very recent work by Blanken et.al. (2014), who replicated the moral licensing studies reported by Sachdeva et al. (2009) and did not find a moral licensing effect. Blanken and her colleagues (2014) argued that the possible explanation for this might be due to manipulation used in Sachdeva's work which was unlikely to induce moral licensing, and suggested that studies on moral licensing should use a neutral control condition. As mentioned in the method section of the current chapter, in the current studies the materials were adapted from Sachdeva et al. (2009) and to enhance the power of priming past behaviour some methods were adopted from Jordan et al. (2011) with the addition of a neutral control condition, but still no licensing effects were found in the second study. The manipulation of priming past behaviour might still be the limitation of study 2, since it was not checked to see if participants violated the recall instructions and whether or not they wrote about their own traits or used the words in a negative way (Blanken, van de Ven, Zeelenberg, & Meijers, 2015). In this study, subsequent analysis of the data suggests that some people did in fact violate the instructions; they did not write about their own traits and some of them did not used the words in a negative way. Future research should cover this limitation and check how these violations of instruction affect licensing and cleansing effects.

Overall, in study 1 a cleansing effects was found but in the second study it was not found. It is speculated that this might be due to the sequential ordering of the dependent measures. In the first study, the question regarding donation behaviour was assessed before the measurement of the TPB predictor variables, while in the second study the behaviour measure followed the TPB measures. It might be that in the second study, participants had already established cleansing effects on their attitudes, intentions and moral norm.

However, it should be noted that adding a neutral control condition was the strength of these two studies, in that this helped assess the presence of licensing and cleansing effects, an almost ignored issue in this domain. Although a growing body of literature has found broad evidence for moral licensing effects, very few studies have measured moral licensing effect comparing a moral condition to control group behaviour; most of these studies have simply compared a moral condition to an immoral condition. In these two studies reported in this chapter, we used a neutral control condition and in order to examine licensing effects, the moral condition was compared with the control group.

From another point of view, the results of second study revealed consistent behaviour, as participants donated more to charity after recalling their past ethical behaviour, which is consistent with a considerable body of research in social psychology that suggests that people are motivated to act consistently, e.g., self-consistency theory (Lecky, 1945) and the foot in the door technique (Freedman & Fraser, 1966).

However, the results of the first study also revealed a cleansing effect, as participants were likely to donate to a charity of their choice, after recalling their prior unethical behaviour. These results are in line with other finding on cleansing effects in the domain of charity giving and pro-environment behaviour (Sachdeva et al., 2009), sexism (Monin & Miller, 2001) , and consumer choice (Khan & Dhar, 2006). However, it was of interest that the second study failed to find any evidence of cleansing effects. One possible explanation for this is might be due to the sequential

ordering of the dependent measures. In the first study, the question regarding donation behaviour was assessed before the measurement of the TPB predictor variables, while in the second study the behaviour measure followed the TPB measures. It might be that in the second study, participants had already established cleansing effects on their attitudes, intentions and moral norm. In this regard, in the first study, activating participants' past immoral behaviour, compared to past moral behaviour, did not affect their intentions, attitudes and moral norm toward donation, but in the second study, the manipulation of priming participants' past immoral behaviour increased significantly participants' intentions, attitudes, and moral norm toward donation.

Another aim of this study was to investigate the effect of moral norm on donation behaviour, using theory of planned behaviour model. The findings of the current studies provided evidence for the explanatory power of the TPB, as participants' intentions were a strong predictor of their donation behaviour in both studies. We expected that moral norm would affect intentions indirectly via attitudes. The results of this study confirmed that the effects of moral norms on intentions were mediated by people's attitudes. The significant correlation between attitude and moral norms confirmed other research findings where moral norms are considered as antecedents of attitude within the TPB (Kaiser, 2006; Kaiser & Gutscher, 2003; Sparks, Shepherd, & Frewer, 1995). The current findings are in line with other research which has found support for applying the TPB in predicting pro-social behaviours, such as donations and volunteering behaviour (Smith & McSweeney, 2007). However, it should be noted that the interrelationships between Theory of Planned Behaviour components in study 2 might be influenced by the experimental manipulation.

An additional aim of the second study was to examine the moderating role of self-monitoring between priming past behaviour and individuals' attitudes, intentions and charity donation behaviour. It was expected that after recalling their past moral behaviour, high self-monitors might not credit themselves to behave unethically since they are more sensitive to others' need for help. Indeed, the results of second study supported this hypothesis. It was found that high

self-monitors are more likely to show consistent behaviour after recalling their past ethical behaviour: they were more likely to donate than were low self monitors. Moreover, a weak cleansing effect for high self-monitors were found. It was expected that high self-monitors would be more likely to cleanse their past by engaging in moral behaviour in order to present themselves positively in social situations. It was suggested that in these social contexts, high self-monitors are sensitive to their impressions and self-presentation to others and tend to adapt their behaviour to different people's expectations. Possible explanation for a weak cleansing effect might be that this was a self reported study in which participants did not actually present themselves to others. Furthermore, as suggested by Flynn et al. (2006), high self-monitors' intentions to help does not necessary reveal an altruistic motive but might arise because they expect something in return.

Unexpectedly, the findings of the present study did not reveal significant effects for low self-monitors, possibly because they are less affected by external cues (Naumann, 2010).

Some limitations of these two studies have been alluded to above. Additionally, another important limitation of these two studies, and also the majority of studies in the domain of licensing and cleansing effects, relates to the size of participant samples. In order to study licensing effects, the sample of a population must be subdivided into groups and these subgroups needs to be big enough to provide a realistic chance of identifying significant differences between groups. Thus, as mentioned by Mullen and Monin (2016), future research should apply a large-scale replication of licensing effect studies, in order to increase confidence in the reliability of those findings.

Indeed, the findings of the current research have highlighted the need for assessing the licensing and cleansing effect by self monitoring as moderator.

CHAPTER 3

Moral Licensing and Moral Cleansing: The Effect of
Moral Identity and Moral Emotions
on Ethical Intentions and Behaviour

Introduction

It is often assumed that moral individuals always take the more moral option when making a decision, but recent developments in social psychology indicate that although people value possessing a moral self-image and want to see themselves as moral actors, they also engage, at least occasionally, in immoral behaviour (Jordan, Mullen, & Murnighan, 2011). That is, if someone has behaved morally or in some other way established a moral image, the idea is that this frees the person to subsequently not engage in an ethical behaviour. Moral licensing occurs when past moral behaviour licences people to engage in a behaviour that might otherwise discredit the self (Miller & Effron, 2010). On the other hand, moral cleansing refers to moral behaviours that people engage in as a consequence of recalling previous immoral behaviour. According to Sachdeva et al. (2009), behaving immorally has a negative influence on perceptions of self-worth, and people engage in moral behaviour in order to regain some of that lost worth.

More recently, Jordan et al. (2011) demonstrated the impact of recalling one's own (versus others') moral behaviour on subsequent moral identity, intentions, and behaviour. They found that recalling immoral behaviour increased individuals' symbolic moral identities and their pro-social intention. They also reported that priming individuals' own moral behaviour led them to cheat (frequency of using the provided answer by participants) more often than did priming others' moral behaviour.

Moral licensing and moral cleansing seem to be incompatible with the theory of self consistency. According to this theory, people have a strong motivation for consistency (Steele, 1988; Swann, Griffin, Predmore, & Gaines, 1987). As a result, priming individuals' past behaviour should lead them to act consistently with their past behaviour rather than to free them to engage in inconsistent behaviour (Miller & Effron, 2010). Therefore, it seems to be of interest to investigate when and how moral licensing and moral cleansing facilitate inconsistent behaviour. To answer this question in the research reported here, an individual difference variable, Moral Identity, was

examined as a potential moderating variable using extended Theory of Planned Behaviour measures. Specifically, we examined the role of moral identity in determining whether consistency effects or licensing effects are more likely to happen after priming past moral or immoral behaviour. To date, the Theory of Planned Behaviour (TPB, Ajzen, 1991) is one of the most influential theories for the prediction of behaviour. This theory provides a framework for studying attitudes towards behaviour and holds that the most important determinant of a person's behaviour is the individual's intention to perform the behaviour.

In addition, the mediating roles of positive and negative emotions on ethical intentions and behaviour were examined.

Moral Identity and Ethical Intention and Behaviour

Moral identity is defined as one of self-regulatory mechanism that motivates moral action (e.g., Blasi, 1984). According to Aquino and Reed (2002), moral identity is one of possible identities that people use as a basis to construct their self-definition. However, Aquino and Reed (2002) argued that people differ in the degree to which moral identity is experienced as being central to their overall self definition and identified two dimensions of moral identity: internalization and symbolization. Internalization concerns the private aspect of the self and reflects the degree to which morality is important to an individual's personal sense of self, whereas Symbolization, which concerns the public or social aspect of the moral self, reflects the degree to which individuals want others to view them as moral. Individuals high in moral identity symbolization are likely to avoid immoral behaviours because they tend to symbolize the centrality of their moral selves to others (Aquino & Reed, 2002), whereas individuals high in moral identity internalization are likely to avoid immoral behaviours because this would challenge their self concept (Mayer, Aquino, Greenbaum, & Kuenzi, 2012). However, it should be noted that in Aquino and Reed's (2002) model, the level of symbolization does not compare with a person's level of internalization; The

terms of *high* and *low* in symbolization does not make comparisons of high symbolization compared with high internalization but rather comparison is *within* each dimension; high symbolization compares with low symbolization (Winterich, Aquino, Mittal, & Swartz, 2013).

Recent research has demonstrated that moral identity dimensions effectively predict various morally relevant behaviours. For example, symbolization has been found to be positively related to volunteerism, charitable giving, and the willingness to aid out-groups (Aquino & Reed, 2002; Reed & Aquino, 2003; Reynolds & Ceranic, 2007) while Internalization has been positively related to moral reasoning, and donating food to the needy (Aquino & Reed, 2002; Reynolds & Ceranic, 2007) and giving money to a charitable organization that benefits an out-group (Reed & Aquino, 2003).

Since moral identity is deeply linked to a person's self-conception, it tends to be relatively stable over time (Aquino & Reed, 2002). But, like many other identities, it can also be promoted or reduced by variety of social, contextual, situational and individual difference factors (Aquino & Reed, 2002). Previous studies have found internalization to be a more consistent predictor of morally relevant outcomes (Aquino & Reed, 2002) and some studies have found symbolization to be associated with unethical behaviour, such as cheating (Reynolds & Ceranic, 2007).

In the case of participants' willingness to donate money, and since the internalization dimension is more connected to subjective or private aspect of self, we hypothesized that the participants in internalization dimension would donate more even after priming their past moral behaviour; showing a consistent behaviour.

Moral Emotion and Ethical Intention and Behaviour

Emotions are important in our daily lives in influencing behaviour and directing our relationships. Moral emotions are described as “those emotions that are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent” (Haidt, 2003). While moral emotions are closely linked to moral behaviours (Sheikh & Janoff-Bulman, 2010; Tangney & Dearing, 2002) and the presence of emotions in the ethical decision-making process has been examined by several scholars (e.g., Fraj & Martinez, 2007; Gaudine & Thorne, 2001) but the effect of emotions on moral behaviours is largely ignored. Only recently has research started to examine the linkages between emotions and ethical decision-making (e.g., Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Moll et al., 2002).

However, emotions might induce ethical behaviour directly or indirectly. According to Loewenstein and Lerner (2003), immediate emotions influence decision making in two different ways: “Indirect effects are those mediated by changes in expected emotions or changes in the quality and/or quantity of information processing” while direct effects “are not mediated by changes in expected emotions or in cognitive processing” (p. 626). The indirect effect of emotion on behaviour might also be through shaping attitudes and judgments (cognitive representations of the world): emotions influence attitudes and judgments, which in turn, influence the decisions (Gutnik, Hakimzada, Yoskowitz, & Patel, 2006).

In addition, emotions may have different effects depending on the negative or positive valence of the emotion (Forgas, 2001), or depending on specific negative or positive emotions, such as anger or fear, or happiness and pleasure (Lerner & Keltner, 2000).

Regarding positive emotions, different experimental studies reported consistent results: people who are happy, joyous or successful, are more likely to help others than those people who are made to feel depressed, sad, or angry (Dovidio, 1984). In fact, people who are in good moods are particularly likely to help others in order to maintain their positive mood.

In contrast, the effects of negative emotions on helping behaviour have been inconsistent. Some studies have found that negative emotions led to decreases in helping behaviour (i.e., Moore, Underwood, & Rosenhan, 1973), in a few studies no significant effects have been reported (e.g., Harris & Siebal 1975), and other studies have found that negative emotions led to increases in helping behaviour by enhancing attitudes toward helping (e.g., Carlsmith & Gross 1969; (Carlsmith & Gross, 1969; Donnerstein, Donnerstein, & Munger, 1975). It has been proposed that negative mood increases helping behaviour because helping others can reduce one's own bad feelings (Cialdini, Baumann, & Kenrick, 1981).

The objective of this research was to explore the role of positive and negative emotions on attitudes, intentions, and moral behaviour. In addition to the direct influence of these emotions on ethical behaviour, the present research examined the potential mediating effect of negative or positive emotions on ethical decision making.

Overview of the study

Although the importance of moral identity and moral emotions in the motivation of moral behaviour has been suggested, very few studies have examined the relation between moral identity, moral emotion and moral behaviour. Therefore, the interest of the present study was to examine this relationship, and to assess how and to what extent moral identity and moral emotion influence attitudes, intentions and moral behaviour. Based on previous findings, we expected both dimensions of moral identity to be positively related to donation behaviour. Specifically, moral identity was used as a moderator of the effects of priming past behaviour on moral behaviour while moral emotions were investigated as a mediator of this relationship to investigate how priming past moral behaviour compromises the likelihood of engaging in subsequent moral behaviour and whether moral identity and moral emotions decrease or increase the chance of licensing effects in the context of charity giving.

We hypothesized that the two dimensions of moral identity are associated with pro-social behaviour. According to Blasi (1984), an important source of motivation for people high in moral identity is the desire to maintain self consistency. Therefore, people high in moral identity internalization who experience moral identity as important to the self are likely to act pro-socially because doing so is consistent with their understanding of what it means to be a moral person (Winterich, Aquino, Mittal, & Swartz, 2013). Otherwise, if they do not act pro-socially, they might experience psychological distress (Blasi, 1984). More specifically in this study, we proposed that people high in moral identity internalization are more likely to show consistent behaviour after recalling their past moral behaviour. In contrast, people high in moral identity symbolization should be more likely to act pro-socially after recalling their past immoral behaviour when others can witness and/or acknowledge the behaviour.

This research also investigated the independent predictive effect of moral licensing on behaviour using key constructs of the TPB in an assessment of the relationship between moral norms, attitude, intention and behaviour. Furthermore, both the effect of recalling past behaviour on participants' behaviour and factors that may modify this effect were of interest in this study. In order to assess individuals' attitude and intention, we used the Theory of Planned Behaviour. Specifically, the objectives of this study were:

First: to assess whether recall of past behaviour would lead to moral licensing and moral cleansing effects (assessed in terms of participants' attitudes, intentions, moral norm and behaviour). Second: to assess whether Moral Identity moderates the effect of recalling past behaviour on attitudes, intentions, moral norm and behaviour. Third, to assess whether positive and negative emotions mediate the effect of priming past behaviour on participants' attitudes, intentions, moral norm and behaviour.

Hypothesis 1: Moral Identity will moderate the relationship between experimental condition and donation such that people high in moral identity internalization will show less indication of moral licensing and more cleansing effects.

Hypothesis 2: Moral Identity will moderate the relationship between experimental condition and donation such that people high in morality identity symbolization are more likely to show a licensing effect.

Method

Participants

One hundred and seventy-five students (146 females, 29 males; $M_{\text{age}} = 20.51$ years, $SD = 4.31$) at the University of Sussex took part in an online survey. Participants were asked to log-in to the study website and were instructed that they would be completing three short questionnaires. They were informed that they would gain both research participation credit and entry into a prize draw (with two £50 prizes) in return for their participation.

Materials

Moral Identity: Moral identity was measured with Aquino and Reed's (2002) internalization (4 items) and symbolization (5 items) scales. A 7-point Likert-type response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) was used for each of the items. First, participants were asked to read a list of nine characteristics that might describe a moral person (i.e., caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind) and then to visualize "the kind of person who has these characteristics and imagine how that person would think, feel, and act."

Examples of the Internalization subscale are “It would make me feel good to be a person who has these characteristics”; “Being someone who has these characteristics is an important part of who I am”; and “I strongly desire to have these characteristics”. Inter-item reliability for internalization was $\alpha = .72$.

The Symbolization subscale included “I often wear clothes that identify me as having these characteristics”; “the types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics”; the kind of books and magazines that I read identify me as having these characteristics”; “the fact that I have these characteristics is communicated to others by my membership in certain organizations”; “I am actively involved in activities that communicate to others that I have these characteristics”. Reliability for symbolization was $\alpha = .79$.

Moral Credit manipulation: Participants were randomly assigned to one of three Conditions: *Moral*, *Immoral* and *Control*. In the *Moral* condition participants were asked to recall and write few statements about “an occasion when you did something that was ethically or morally the right thing to do in a personal or work setting”.

In the *Immoral* condition, participants were asked to recall and write few statements about “an occasion when you did something that was ethically or morally the wrong thing to do in a personal or work setting”.

In the *Control* condition, participants were asked to write few statements about their typical Tuesday. These materials were adapted from Jordan et al. (2011).

Emotions: The Positive and Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988) was used to assess participants’ emotional states. Ten of the items measured Positive Affect (interested, excited, strong, proud, determined, active, enthusiastic, inspired, and attentive) and 10 items assessed Negative Affect (distressed, alert, upset, guilty, scared, hostile, irritable, afraid, nervous, Jittery, and ashamed). For each item, participants in the *Moral* and *Immoral* Conditions

were asked to indicate “how you feel now when you think about the ethical/moral behaviour that you described earlier” (1 = *very slightly or not at all*, to 5 = *extremely*). Reliabilities for Positive Emotion and Negative Emotion were $\alpha = .92$ and $\alpha = .86$, respectively.

Dependent measures: All participants completed some dependent measures taken from the Theory of Planned Behaviour. Participants were informed that this part of questionnaire concerned about their views about donating money to charity. They were asked to keep in mind the idea of donating money to charity within the next month as they answered the questions. The variables listed below were assessed. All questions were answered on 7-point scales; response options are indicated in parenthesis; scales were constructed from the means of the individual items.

Attitudes. Attitudes were measured with seven items ($\alpha = .86$). Participants were asked to respond to the following statements: “My attitude towards donating money to charity within the next month is ...” (*extremely negative* to *extremely positive* and *extremely unfavourable* to *extremely favourable*), and “my donating to charity within the next month would be...” (*extremely bad* to *extremely good*, *extremely harmful* to *extremely beneficial*, *extremely foolish* to *extremely wise*, *extremely unpleasant* to *extremely pleasant*, and *extremely unenjoyable* to *extremely enjoyable*).

Moral Norms. To assess Moral Norms, participants were asked: “It would be morally right for me to donate money to charity within the next month”, “I would feel guilty if I did not donate money to charity within the next month”, “I have a moral obligation to donate money to charity within the next month” and “donating money to charity within the next month would fit in with my ethical principles” (*strongly disagree* to *strongly agree*). The four items were summed ($\alpha = .77$) to form the measure of Moral Norms.

Behavioural intentions. Behavioural intentions were measured with three questions ($\alpha = .95$): “I intend to donate money to charity within the next month” (*definitely do not* to *definitely do*), “I shall donate money to charity within the next month” (*definitely shall not* to *definitely shall*), and “I

shall make an effort to donate money to charity within the next month” (*definitely false to definitely true*).

Donation Behaviour: Participants’ behaviour was assessed by asking them if they would like to make a small donation to a charity. First, they were informed that the experimenter conducting the study usually give the opportunity to participants to pledge a donation. They also received some information about the charity, Oxfam, and were asked “do you pledge to donate a sum of money to Oxfam”. There were two response options: “Yes” and “No”. If their response to this question was positive, they were asked to write how much (number of (English) pounds) they would like to donate. Participants were told that they could pay this amount upon receiving a subsequent email message from the experimenter.

Design and Procedure

Participants were recruited opportunistically via an email message that was sent out to mailing lists of several UK universities. The message contained information about the study alongside the web link to the questionnaire. Participants were recruited topic blind. As an incentive to participate, two cash prize draws of £50 were as offered and participants were informed that their participation was entirely voluntary and their email address was requested only so that we were able to contact the winners of the prize draws. Participants were told that the study will take about 20 minutes on average. Participants were not aware that charity donation was part of the study. At the end, two of the participants were selected at random and each won £50. The money was donated to charity on behalf of students. Participants were initially sequentially assigned to one of the three conditions and then completed the various dependent measures. Participants completed the Moral identity scale first and were then exposed to the experimental manipulation. This was followed by the Emotions measure and the attitude, moral norm, intention and behaviour measures.

Results

Preliminary analyses

There was no significant relationship between gender and condition, $\chi^2 (2, N = 175) = 2.84, p > .05$, or between age and condition, $F (2,174) = 0.69, p > .05$. We were thus confident of an unbiased allocation to different experimental conditions.

Moral licensing and moral cleansing effects

To examine the first objective, assessing licensing and cleansing effects, a logistic regression analysis was performed to predict donation behaviour using condition as predictor. First, before performing the analyses, the condition variable was dummy coded (moral condition vs. control group, and immoral condition vs. control group). A test of the full model against a constant only model was statistically significant (chi square = 6.187, $p = .045$ with $df = 2$). Nagelkerke's R^2 of .055 indicated a moderate relationship between prediction and donation. Prediction success overall was 80%. The Wald criterion demonstrated that *moral condition* did not make a significant contribution to donation ($\beta = -0.02$ exp (b) = 0.97, Wald = .006, $p = .93$) but Immoral Condition ($\beta = -.57$, Wald = 4.86, $p = .027$) was a significant predictor. Exp (B) value indicates that the possibility of donation is .56 times more for any one-unit increase in immoral condition: participants in the *immoral condition* were more pledged to donate to charity than were participants in the *control condition*. On the other hand no licensing effect was found: participants in the *moral condition* did not pledge to donate less than participants in the *control condition*. Results are presented in Table 7.

Table 7:

Logistic Regression Analysis of donation behaviour

	B	S.E.	Wald	<i>p</i>	Exp(B)
Moral condition	-0.022	0.28	.006	0.93	0.97
Immoral Condition	-.576	0.26	4.86	0.027	0.56

Effect of Condition on TPB

In line with first objective, assessing licensing and cleansing effects, separate one-way analyses of variance (ANOVA) were conducted with Conditions (moral, immoral and control) as the independent variable and attitudes, intentions and moral norms to donation as the dependent variables (Table 8).

There was a marginally significant effect of Conditions on Intentions, $F(2, 172) = 2.68$, $p = .070$, $\eta^2 = 0.03$. Planned contrasts revealed that participants in the moral condition ($M = 4.18$; $SD = 1.73$) pledged significant higher donations than did participants in the control group ($M = 3.50$; $SD = 1.43$), $t(172) = 2.31$, $p = .022$. However, participants in the immoral condition did not pledge significant higher donations than did participants in the control group $t(172) = 1.07$, $p = .28$.

There were no significant effects of Condition on Attitudes, $F(2, 172) = 1.77$, $p = .17$, $\eta^2 = 0.02$ or on Moral norm, $F(2, 172) = 0.92$, $p = .40$, $\eta^2 = 0.01$.

Table 8:

Means and Standard Deviations for each Dependent Variable by Condition

<i>Condition</i>	Attitudes		Intentions	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Moral	5.13	0.16	4.33	0.23
Immoral	5.00	0.17	4.18	0.24
Control	4.57	0.15	3.41	0.22

Moderated multiple regression

To examine the second objective, assessing the moderating role of moral identity, separate multiple regression models were tested to investigate whether the effect of priming past behaviour (Conditions) on Attitudes and Intentions to donation depend on Moral Identity (Internalization and Symbolization). First, before performing the analyses, the condition variable was dummy coded (moral condition vs. control group, and immoral condition vs. control group), moral identity subscales (Internalization and Symbolization) were mean centred and the interaction between moral condition and Internalization and Symbolization were made.

A multiple regression analysis of Attitudes was then conducted, in which Conditions and Internalization were entered as the predictors in the first step of the analysis and the interaction between condition and Internalization was added at step 2. Results indicated that moral condition compare to control group ($b = -2.58$, $SEb = 1.32$, $\beta = -1.18$, $p = .053$) were associated with lower attitude to donation but the main effect of Internalization was not significant ($b = 0.11$, $SEb = 0.16$, $\beta = 0.09$, $p = .48$). The interaction between Internalization and moral condition on participants attitude was significant ($b = .488$, $SEb = .212$, $\beta = 1.36$, $p = .023$), suggesting that the effect of moral condition depended on the level of Internalization. Therefore, following Aiken and West (1991), the significant interaction was examined by testing moral condition effect separately for

low (-1 SD below the mean), and high (+1 SD above the mean) levels of Internalization. High internalized participants reported greater attitude to donation in the moral condition than in the control condition, $b = 0.80$, $t = 3.86$, $p = .000$. There was no effect of priming past moral condition on Attitude donation for low internalized participants, $b = -0.16$, $t = -.90$, $p = .36$.

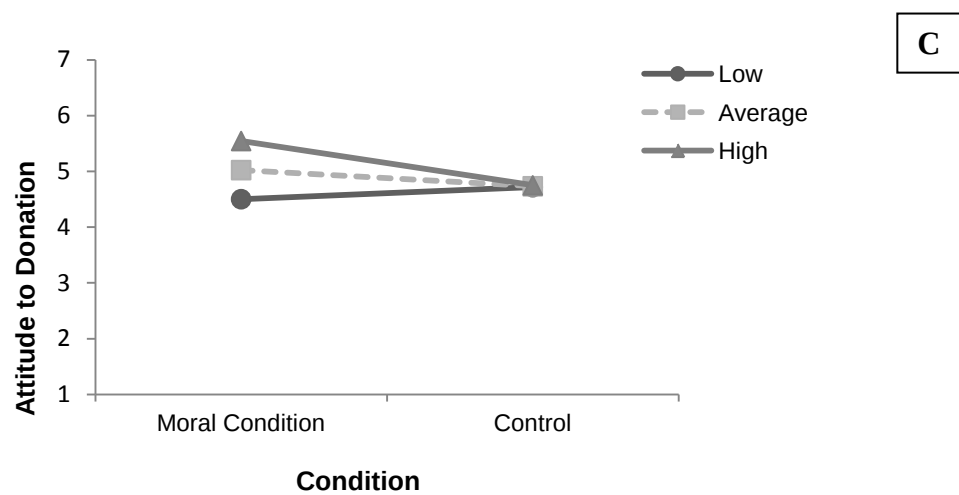
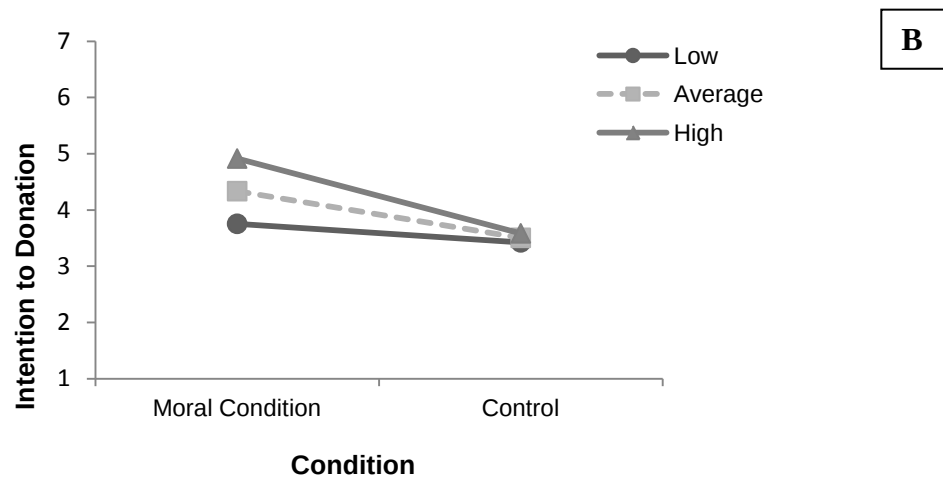
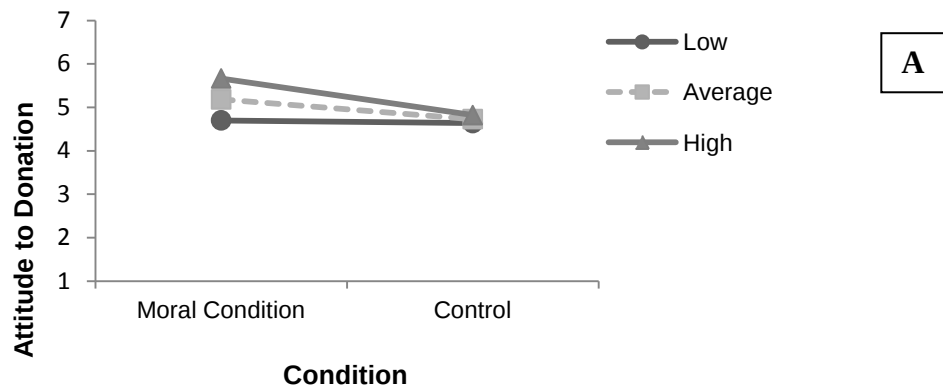
Another separate regression of Attitudes was then conducted, where condition and Symbolization were entered as the predictors in the first step and the interaction between moral condition and Symbolization was added at step 2. Results indicated that moral condition compare to control group ($b = -1.50$, $SEb = 0.64$, $\beta = -0.68$, $p = .021$) were associated with lower attitude to donation but the main effect of Symbolization was not significant ($b = 0.014$, $SEb = 0.109$, $\beta = 0.01$, $p = .89$). The interaction between Symbolization and moral condition on participants attitude was significant ($b = .440$, $SEb = .151$, $\beta = .88$, $p = .004$), suggesting that the effect of moral condition depended on the level of Symbolization. Therefore, followed by Aiken and West (1991), the significant interaction was examined by testing moral condition effect separately for low (-1 SD below the mean), and high (+1 SD above the mean) levels of Symbolization. High Symbolized participants reported greater attitude to donation in moral condition than in the control condition, $b = 0.67$, $t = 3.51$, $p = .001$. There was also marginally effect of priming past moral behaviour on donation attitude for low Symbolized participants, $b = -0.36$, $t = -1.77$, $p = .077$.

Another regression analysis was conducted where Intention was entered as the dependent variable. Again, condition and Internalization were entered as main effects in the first step of the analysis and the interaction between moral condition and Internalization was added at step 2. Results indicated that the main effect of moral condition compare to control group ($b = -3.06$, $SEb = 2.13$, $\beta = -.88$, $p = .15$) and Internalization were not significant ($b = 0.100$, $SEb = 0.26$, $\beta = 0.05$, $p = .70$). But the interaction between Internalization and moral condition on participants attitude was marginally significant ($b = .62$, $SEb = .34$, $\beta = 1.11$, $p = .070$), suggesting that the effect of moral condition depended on the level of Internalization. Therefore, followed by Aiken and West (1991),

the significant interaction was examined by testing moral condition effect separately for low (-1 SD below the mean), and high (+1 SD above the mean) levels of Internalization. High internalized participants reported greater intention to donation in moral condition than in the control condition, $b = 1.25, t = 3.78, p < .001$. There was no effect of priming past moral behaviour on donation attitude for low internalized participants, $b = 0.99, t = 0.34, p = .72$.

Another separate regression of Intentions was then conducted, where condition and Symbolization were entered as the predictors in the first step and the interaction between condition and Symbolization was added at step 2. Results indicated that moral condition ($b = -0.028, SEb = 1.02, \beta = -0.008, p = 0.97$) and immoral condition ($b = 0.412, SEb = 1.064, \beta = 0.123, p = 0.69$) were not significant predictors but the main effect of Symbolization was significant ($b = 0.36, SEb = 0.10, \beta = 0.26, p < .001$). However, the interaction between Symbolization and moral condition ($b = 0.116, SEb = 0.14, \beta = 0.25, p = 0.40$) and Symbolization and immoral condition ($b = -0.071, SEb = 0.114, \beta = -0.15, p = 0.63$) on participants intention were not significant. The interactions are plotted in Figure 1.

Figure 1: **A:** Attitudes toward donation regressed onto *Internalization* scores by Moral condition compared to control group. **B:** Intentions toward donation regressed onto *Internalization* scores by Moral condition. **C:** Attitudes toward donation regressed onto *Symbolization* scores by Moral condition compared to control group.



Moderated effect of Conditions on donation behaviour

Logistic regression analysis was conducted to predict participants' donation behaviour using condition and internalization as predictors. The condition variable was dummy coded and internalization was mean centred. The proportion of participants' donation behaviour was correctly classified into 80% at null model and full model, demonstrating the value-added contribution of internalization in the prediction of donation behaviour. The model as a whole explained between 55% (Cox and Snell R square) and 87% (Nagelkerke R squared) of the variance in participants' donation behaviour. A test of the full model against a constant only model was statistically significant, indicating that the predictors reliably distinguished participants' donation behaviour: $\chi^2(5, N = 175) = 9.84, p < .001$. The Wald criterion demonstrated that internalization (Wald = 2.84, $\exp(b) = 0.53, SE = 0.37, p = .09$) did not make a significant contribution to prediction. Furthermore, the main effect of moral condition vs. control (Wald = 0.44, $\exp(b) = 0.013, p = .50$), and the main effect of the immoral condition vs. control were not significant (Wald = 0.39, $\exp(b) = 0.01, p = .52$). However, these main effects were not qualified by significant interactions between internalization and the moral condition (Wald = 0.21, $\exp(b) = 1.24, p = 0.64$) and internalization and the immoral condition (Wald = 0.069, $\exp(b) = 1.13, p = 0.79$).

Another logistic regression analysis was conducted to predict participants' donation behaviour using condition and symbolization as predictors. The condition variable was dummy coded and symbolization was mean centred. The proportion of participants' donation behaviour was correctly classified into 80% at null model and full model, demonstrating the value-added contribution of symbolization in the prediction of donation behaviour. The model as a whole explained between 46% (Cox and Snell R square) and 73% (Nagelkerke R squared) of the variance in participants' donation behaviour. A test of the full model against a constant only model was statistically significant, indicating that the predictors reliably distinguished participants' donation behaviour: $\chi^2(5, N = 175) = 8.21, p < .001$. The Wald criterion demonstrated that symbolization

(Wald = 0.23, $\exp(b) = 0.91$, $SE = 0.18$, $p = 0.63$) did not make a significant contribution to prediction. Furthermore, the main effect of moral condition vs. control (Wald = 0.73, $\exp(b) = 5.87$, $p = 0.39$), and the main effect of the immoral condition vs. control were not significant (Wald = 0.10, $\exp(b) = 0.55$, $p = 0.74$). However, these main effects were not qualified by significant interactions between symbolization and the moral condition (Wald = 1.56, $\exp(b) = 0.72$, $p = 0.21$) and symbolization and the immoral condition (Wald = 0.13, $\exp(b) = 1.09$, $p = 0.31$).

Mediation Effects

Regarding the third objective, to examine the potential mediating role of emotions on the association between condition and donation, two separate mediation models for positive and negative emotion were run. Since both the independent variable and dependent variable were categorical, logistic regression analysis was run instead of linear regression in step 1 and 3.

Regarding the negative emotion (Figure 2), in Step 1, the logistic regression of Conditions on donation, ignoring the mediator, was not significant²; moral condition: $b = -.621$, $SE = 0.53$, $p = .24$, Wald = 1.35, $\exp(b) = .53$, immoral condition: $b = -1.175$, $SE = 0.49$, $p = .24$, Wald = 5.63, $\exp(b) = 0.30$. Step 2 showed that the regression of the condition on mediator, negative emotion, was significant, $b = .216$, $t(173) = 2.981$, $p = .003$. Step 3 of the analyses revealed that, controlling for the mediator (negative emotion) $b = .517$, $SE = 0.22$, $p = .023$, Wald = 5.186, $\exp(b) = .596$, condition were not a significant predictor of donation, $b = .440$, $SE = 0.262$, $p = .093$, Wald = 2.819, $\exp(b) = 1.552$. However, a Sobel test revealed that the indirect path from condition to

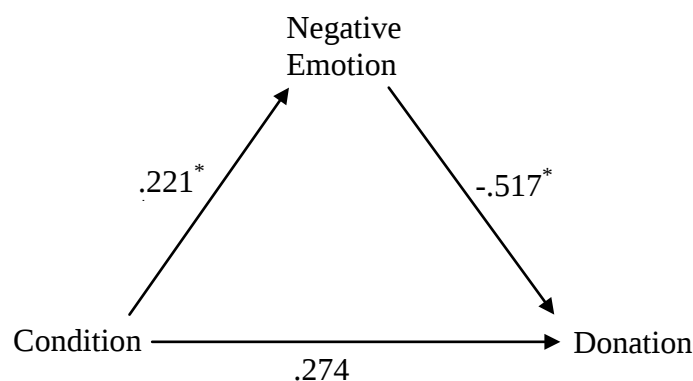
² It should be noted that step 1 was not significant. There is controversy whether all of the steps of mediations model have to be met for there to be mediation. Most contemporary analysts believe that the essential steps in establishing mediation are Steps 2 and 3. When relation between independent variable and dependent variable was not significant that MacKinnon, Fairchild, and Fritz (2007) refer to as *inconsistent mediation*, then it could be the case that Step 1 would not be met, but there is still mediation.

donation via negative emotion was significant, $z = -1.814$, $p = .06$. So, according to this mediation analysis, it is confirmed that negative emotion significantly mediated the relationship between condition and donation. Since step 1 was not met, any claim of mediation needs to be careful reported; therefore A partial mediation was identified.

Regarding to the positive emotion, in Step 1, the logistic regression of condition on donation, was not significant; $b = .274$, $SE = 0.237$, $p = .24$, Wald = 1.31, $\exp(b) = 1.31$. Step 2 showed that the regression of the condition on mediator, positive emotion, was significant, $b = .253$, $t(173) = 2.99$, $p = .003$. Step 3 of the analyses revealed that the mediator (positive emotion) $b = .299$, $SE = 0.22$, $p = .19$, Wald = 1.720, $\exp(b) = 1.34$, was not significant, therefore, no mediation was identified (Figure 2).

As Figure 1 presents, the significant link between priming past behaviour and donation was found to be partially mediated by negative emotions. Since condition was a negative predictor of donation, the model predicted that priming past behaviour predicted lower donation. However, the significant link observed between condition and donation was not mediated by positive emotions. In short, these path-analytic results showed that priming past behaviour had important direct and indirect links through negative emotion with charity donation.

Figure 2: Unstandardized Regression Coefficient for the relationship between Condition and Donation as mediated by Negative Emotion.



Note: * = $p < .05$, ** = $p < .01$.

Effect of Condition on Emotions

Two separate one-way analyses of variance (ANOVA) were conducted with Conditions (moral, immoral and control) as the independent variable and Emotions (positive and negative) as dependent variables (Table 9).

There was a significant effect of Conditions on positive emotion, $F(2, 172) = 55.53, p < .001, \eta^2 = 0.39$. Planned contrasts revealed that participants in the immoral condition ($M = 1.26; SD = 0.40$) showed significantly less positive emotion than did participants in the moral condition ($M = 2.19; SD = 0.77$), $t(76.24) = -7.84, p = .000$.

There was a significant effect of Conditions on negative emotion, $F(2, 172) = 9.22, p < .001, \eta^2 = 0.09$. Planned contrasts revealed that participants in the immoral condition ($M = 1.80; SD = 0.70$) showed significant more negative emotion than did participants in the moral condition ($M = 1.20; SD = 0.39$), $t(93.32) = 5.59, p < .001$. Table 9 presents the means and standard deviations of the dependent variables in three Conditions.

Table 9:

Means and standard deviation for Emotion by Condition

<i>Condition</i>	<i>Positive Emotions</i>		<i>Negative Emotions</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Moral	2.19	0.77	1.33	0.39
Immoral	1.26	0.40	1.76	0.62
Control	2.63	0.90	1.46	0.40

Predicting intentions from TPB variables

Hierarchical multiple regression analysis was carried out to determine the effect of the attitudes and moral norms on intention. Attitude was entered as a predictor at step 1, and moral norm was entered at step 2. The intention to donation was entered as the dependent variable: Multiple regressions of intentions to donate on attitudes, and moral norms was: $R^2 = .49$, $F(2, 172) = 79.62$, $p < .001$.

Attitudes ($\beta = .65$, $p = .01$), and moral norms ($\beta = .26$, $p = .01$) both produced significant independent predictive effects. Regarding donation to a charity, these results indicate that more positive intentions to donation were associated with more positive attitudes and more moral concern about donation intentions. However, it should be noted that the interrelationships between these components might be influenced by the experimental manipulation. Results are summarised in Table 10.

Table 10.
Summary of Hierarchical Multiple Regression Analysis Predicting Intention

Variables entered	β	β
	Step 1	Step 2
Attitude	0.65***	0.50***
Moral norm		0.26***
R^2	0.43	0.48
ΔR^2		0.05

*** $p < .001$

Predicting donation using TPB variables

A logistic regression analysis was conducted to predict donation behaviour using attitudes, intentions and moral norms as predictors. A test of the full model against a constant only model was statistically significant (chi square = 22.992, $p < .001$ with $df = 3$). Nagelkerke's R^2 of .197 indicated a moderate relationship between prediction and donation. Prediction success overall was 79%. The Wald criterion demonstrated that only moral norms made a significant contribution to donation ($\beta = -0.511$, $\exp(b) = 0.60$, Wald = 4.77, $SE = 0.23$, $p = .029$). Attitudes ($\exp(b) = 0.60$, Wald = 2.47, $SE = 0.32$, $p = .11$) and intentions ($\exp(b) = 0.92$, Wald = 0.16, $SE = 0.16$, $p = .65$) were not significant predictors. Exp (B) value indicates that the possibility of donation is .60 times smaller for any one-unit increase in moral norms.

Predicting donation using Internalization and Symbolization

A logistic regression analysis was conducted to predict donation behaviour using Internalization and Symbolization dimensions of moral identity as predictors. A test of the full model against a constant only model was statistically significant. The Wald criterion demonstrated Internalization ($\exp(b) = 0.56$, Wald = 2.79, $SE = 0.34$, $p = .094$) and Symbolization ($\exp(b) = 1.04$, Wald = 0.05, $SE = 0.18$, $p = .81$) were not significant predictors.

Discussion

The current research contributes to the literature that examines the role of moral licensing and moral cleansing in relation to donation behaviour. The primary aim of the current study was to investigate the impact of recalling moral and immoral behaviour on subsequent attitudes, intentions, and behaviour. In order to assess individuals' attitudes and intentions, measures from the TPB were applied. The findings of the present study support the hypothesis that priming past

immoral behaviour leads to a cleansing effect, in that participants in the immoral condition were more likely to donate after recalling their past immoral behaviour than were participants in control group. This result is consistent with previous work on cleansing effects (Jordan et al., 2011; Sachdeva et al., 2009; Zhong & Liljenquist, 2006).

However, the findings of the present study do not support the main hypothesis regarding a licensing effect: recalling past moral behaviour did not lead individuals to donate less. Activating participants' past behaviour did not also affect their intentions, attitudes and moral norm toward donation. One possible explanation for this lack of effect might be that past and future behaviours were not in the same domains. Participants were asked to recall the time when they did something "that was ethically or morally the wrong thing to do"; they were not asked to write about their past charity donation. They may also have recalled an unethical behaviour that was relatively unimportant to their sense of identity. Subsequent analysis of data suggests that some people did in fact violate the instructions; they did not write about their own moral/immoral behaviour. Future research should cover this limitation and check how these violations of instruction affect licensing and cleansing effects.

The second purpose of this research was to investigate the role of moral identity, proposed by Aquino and Reed (2002), in expecting licensing and cleansing effects. First, it was expected that moral identity would be positively related to donation behaviour. Several studies have shown that symbolization and internalization dimensions of moral identity are associated with different pro-social behaviour such as donating money to charities and helping behaviour (Aquino & Reed, 2002; Hardy, 2006), moral emotions (e.g., Stets & Carter, 2006), and concern for out-group members (Hardy et al., 2010). However, our findings showed that the two dimensions of moral identity were not directly related to donation behaviour, though both internalization and symbolization were positively related to participant' attitudes, intentions and moral norm toward donation. One possible explanation could be related to the mechanisms that links moral identity to moral behaviour. It has

been argued that the exact nature of the link between moral identity and moral behaviour is unclear (Hardy, 2005; 2011). In their review of literature on moral identity, Hardy and Carlo (2005) noted that little is known about the mechanisms that links moral identity to moral behaviour, and noticed that there might be different factors between moral identity and moral behaviour. In this regard, scholars have focused on the important role of behavioural intention, a prominent construct of theory of planned behaviour, and implied that people should not only have an attitude, but also an intention in order to perform a behaviour (Hardy, 2005). The findings of current research could be explained by this; moral identity was not related to donation behaviour but was positively related to participants' donation attitudes and intentions.

In addition, the moderation role of moral identity in moral licensing and moral cleansing effects was another aim of this research. It was hypothesized that licensing effects are unlikely for individuals with a strong internalized moral identity. The results of the current study largely supported this hypothesis. Findings of this research revealed that highly internalized participants, after recalling their past moral behaviour, reported greater attitudes and intentions to donation compared to participants in the control condition. In other words, possessing high internalized moral identity decreased the chance of licensing effects in the context of charity giving.

Moreover, the findings of the present study revealed that the effect of priming past moral behaviour on attitudes also depends on the level of symbolization. High symbolized participants also reported greater attitude to donation in the moral condition than in the control condition. There was also effect of priming past moral behaviour on attitudes toward donation for low symbolization participants. According to the theory of moral identity, symbolization concerns the public or social aspect of the moral self. On the other hand charity donation could have a public component that provides opportunities for the individual to symbolize his or her identity (Reynolds, 2007). Thus, the findings are consistent with moral identity theory such that individuals symbolized their moral

traits through donation even after recalling their previous ethical action. Thus, it is not surprising that symbolization predicted donation attitude along with internalization.

Our results are consistent with other studies findings where both the symbolization and internalization dimensions were significantly related to intention to moral behaviour not exactly the actual behaviour such as self-reported volunteering for community service (Aquino & Reed, 2002), and a preference to donate time rather than money to charity (Reed et al., 2007).

Surprisingly, the current study failed to find any evidence that moral identity moderated the effect of priming past unethical behaviour on attitudes or intentions. One possible explanation might be that the past and future behaviours were not in the same domains. So far, few experimental studies have examined the effects of priming moral identity on attitudes, intentions and behaviours. Thus, further research will be needed to explore the relationship between moral identity and intention, more specificity after recalling unethical behaviour, in order to explore a link between moral identity and moral behaviour.

Finally, another purpose of this study was to find the mediating role of positive emotions and negative emotions between priming past behaviour and subsequent donation behaviour. Based on the findings, it was seen that the hypotheses regarding negative effect were supported. The negative emotions showed negative and significant relationship with donation behaviour. A negative emotion was a significant predictor of donation, and partial mediation, accounted for a significant amount of variance in the relationship between priming past behaviour and donation. The present study also found that positive emotions failed to be a mediator of the link between priming past behaviour and donation. The results presented the importance of emotion in donation behaviour. More research is needed to be done in this area to examine.

However, it is important to note that there may be some potential limitations to the present findings. First, since the present findings are based on responses obtained from university students; future research could examine nonstudent samples.

Moreover, different approaches to assessing moral identity have been applied in psychology which has their own limitations. In this study, a well-validated measure that has been shown empirically to predict a variety of morally relevant outcomes (e.g., Aquino & Reed, 2002) was applied. However, there is possibility that participants could have been motivated by other situational factors. Thus, future research should examine different factors such as considering the consequences of an action to study the mechanisms that link moral identity to moral behaviour.

CHAPTER 4

Moral licensing and pro-environmental behaviour:
The moderating role of pro-environmental attitude

Introduction

Many environmental behaviour change campaigns tend to focus on the “simple and painless” steps we can take to live a greener lifestyle, believing adoption of one pro-environmental behaviour can lead to further pro-environmental behaviours: a concept known as *positive spillover*. In recent years, the idea of positive spillover has gained increasing support as a unique way to promote sustainable lifestyle changes among scientists (Thøgersen & Crompton, 2009) and politicians (i.e., Defra, 2008; Defra, 2011). However, research has shown that performing pro-environmental actions does not always increase people’s inclination to adopt more environmentally-friendly behaviours. In fact, research has generated mixed results in this regard. Rather than positive spillover effects, several studies have reported that past pro-environmental behaviour might inhibit future pro-environmental behaviour, leading to “*negative spillover*” or “*moral licensing*” effects where the adoption of one particular pro-environmental behaviour decreases the likelihood of other pro-environmental behaviours. Moral licensing occurs when past moral behaviour licences people to engage in a behaviour that might otherwise discredit the self (Miller & Effron, 2010). This moral licensing phenomenon may apply to pro-environmental behaviours: it seems that people are not always inclined to act pro-environmentally after recalling their past pro-environmental behaviour; rather, they may feel entitled to engage in more self-indulgent behaviour (Tiefenbeck, Staake, Roth, & Sachs, 2013). In this study we examine when priming past pro-environmental behaviour produces a “license” to engage in less pro-environmental behaviour.

Priming individuals past pro-environmental behaviour

Behavioural spillover refers to the idea that engagement in a single pro-environmental behaviour may lead to further far-reaching and environmentally significant behavioural changes (Thøgersen & Crompton, 2009). It has been argued that spillover effects might be positive or negative.

Positive spillover relies on the assumption that adoption of a particular behaviour increases the motivation for an individual to adopt other related and more ambitious environmental behaviours. In this regard, several studies have reported that promotion of one pro-environmental behaviour is associated with an increase in another pro-environmental behaviour. Consistent with positive spillover effect, Berger (1997) found that recycling is positively correlated with some waste management behaviour (such as energy conservation and water conservation) and some behaviour easily within an individual's control (such as use of reusable bags and purchase of environmentally friendly devices). Moreover, in a three-wave longitudinal survey by Thøgersen and Olander (2003) recycling behaviour was correlated positively with purchasing organic products and pro-environmental transportation decisions. There are different psychological theories that support and explain positive spillover including self-perception theory (Bem, 1973), cognitive dissonance theory (Festinger, 1962) and goal theory (Fishbach & Dhar, 2005). These theories consider different potential explanations for positive spillover in terms of, for example, awareness and consistency. Research on people's desire to be consistent argues that people often prefer to behave consistently over time to maintain a particular self-view. Moreover, and importantly for the research that we report in the present study, Thøgersen and Olander (2003) considered internal factors like values and norms and found that the likelihood of positive spillover is higher if a person possesses strong personal norms for environmental-friendly behaviour.

On the other hand, sometimes adopting particular pro-environmental behaviours may establish 'moral credentials' (Miller & Effron, 2010) leading to *negative spillover* or moral *licensing*. That is, adoption of a particular behaviour reduces the motivation to adopt other related behaviours. Moral licensing occurs when someone has behaved morally or in some other way established a moral image, which then frees the person to subsequently not engage in further moral behaviour. One explanation for this finding is that performing an initial pro-environmental behaviour may temporarily satisfy people's sense of being a moral person and reduces feelings of

moral obligation to perform a subsequent pro-environmental behaviour (Miller & Effron, 2010). While engaging in pro-environmental behaviour might highlight an individual's self-conception as a moral individual and motivate them to act in line with their moral self (Conway & Peetz, 2012), research on moral licensing suggest that engaging in pro-environmental behaviour can also liberate individuals to act inconsistently with their prior action and act in a more morally questionable way (Miller & Effron, 2010).

Moral licensing in environmental context

In recent years, moral licensing and moral cleansing has received increasing amounts of attention in various behavioural domains including racial prejudice (Monin & Miller, 2001), nutrition (Wilcox, Vallen, Block, & Fitzsimons, 2009), purchasing behaviour (Mazar & Zhong, 2010), and donation (Khan & Dhar, 2006; Sachdeva et al., 2009), but very few studies investigated this phenomenon in an environmental context. Sachdeva and her colleagues (2009) found that reminding people of their good deeds reduced charitable donations and environmentally-friendly action. They asked participants to write a short story about themselves or someone they knew using nine morally positive and nine morally negative trait words. They reported that students who described themselves with positive words gave the least to charity and were the least cooperative in an environmental decision making task compare to students who described themselves with negative words.

In line with negative spillover effect, Tiefenbeck et al. (2013) showed that residents who received weekly feedback on their water consumption lowered their water use. Khan and Dhar (2006), in a series of laboratory experiments, investigated the effect of licensing on consumer decisions regarding the purchase of luxury goods. In one study, some participants were first asked to imagine working as a volunteer for a charity. Then they were asked to make a choice of a purchase of a luxury good (designer jeans) or an identically priced vacuum cleaner. Participants

who were asked to imagine volunteering task were more than twice as likely to choose luxury good compared to participants who hadn't been asked to imagine volunteering. The authors argued that participants who were able to establish their morality licensed themselves to make a frivolous purchase.

In a related study, Mazar and Zhong (2010) found that engaging in green behaviours reduce subsequent cooperative actions. In their study, participants were randomly assigned to two conditions (on-line stores: green vs. conventional) and then were asked to divide a small sum of money between themselves and a stranger where they had an opportunity to lie and steal to make more money. They reported that those who purchased in the green store were more likely to both steal and cheat in the subsequent task.

Related to the moral licensing effect, it has also been suggested that after committing bad deeds, people engage in moral behaviour to recover self-worth: this phenomenon is known as *moral cleansing* behaviour (Sachdeva et al., 2009). According to Sachdeva et al. (2009), behaving immorally has a negative influence on perceptions of self-worth, and people engage in subsequent moral behaviour in order to regain some of that lost worth. Research on moral cleansing suggests that people try to balance their bad deeds by engaging in actions that metaphorically cleanse themselves of their past transgression and reaffirm their moral selves. Zhong and Liljenquist (2006) argue that a threat to the moral self would motivate the restoration of moral purity. They found that people after recalling their own immoral behaviour from their past were more likely to choose cleansing products (e.g., soap) rather than neutral product (e.g., pens).

Taken together, research on behavioural spillover implies that there is still no general consensus about the possibility of positive or negative spillover in pro-environmental domain; while most of the evidence supports the idea that pro-environmental behaviour can positively spill over from one domain to another, some research report that a negative spillover is possible (Lanzini & Thøgersen, 2014). Moreover, research on moral licensing also suggests that licensing effects are

not always to be expected after a prior pro-environmental behaviour. Gneezy et al. (2012) found that moral licensing only occurs when the moral behaviour is costless. Consistent with this, Lanzini and Thøgersen (2014) found also that spillover effects will be stronger for behaviours that are relatively easy to change and where the change implies no or low costs.

Furthermore, Crompton and Thøgersen (2009) argued that negative spillover is more likely to be found where behaviours are not based on environmental attitudes and values. They also point out that people with a more negative attitude to the environment will not be disposed towards pro-environmental behaviour anyway. Indeed, research in environmental behaviour has given substantial attention to environmental attitudes defined as a person's tendency to be concerned about the natural environment (Bamberg, Ajzen, & Schmidt, 2003). It has been suggested that environmental attitude construct is one of powerful predictor of environmental behaviour (Kaiser, Ranney, Hartig, & Bowler, 1999).

Environmental attitude and Theory of Planned Behaviour

The relationship between attitudes and behaviour has been a matter of debate for decades. Various behavioural models examined this relationship to identify how and when attitudes predict behaviour. Among them, the theory of planned behaviour (TPB, Ajzen, 1991) is one of the most influential theories describing the attitude-behaviour relationship. The TPB posits that individual behaviour is driven by behavioural intentions where behavioural intentions are a function of three factors: *attitude towards the behaviour* (positive or negative evaluation of self-performance of the particular behaviour), *subjective norm* (perceived social pressure to perform or not perform the behaviour), and *perceived behavioural control* (degree of control a person believes he or she has over performing behaviour).

Although the TPB is not specifically designed for explaining people's environmental behaviour, it has been successfully applied in predicting a various types of environmental

behaviour, such as travel mode choice (Bamberg & Schmidt, 2001; Heath & Gifford, 2002), household recycling (Kaiser & Gutscher, 2003), the use of energy-saving light bulbs, use of unbleached paper, and reduction in meat consumption (Harland, Staats, & Wilke, 1999), water saving (Lam, 2006), green consumer behaviour (Chan & Lau, 2002), and reducing private car-use (Bamberg & Schmidt, 2001).

However research into the relationship between environmental attitudes and pro-environmental behaviours has produced mixed results. Growing amounts of research reveal that environmental attitudes are positively correlated with environmental behaviours (Hines, Hungerford, & Tomera, 1987; Kaiser, Oerke, & Bogner, 2007). For example, Hines and colleagues (1987) in a meta-analysis of the relationships between pro-environmental attitudes and behaviour reported that individuals with more positive attitudes toward the environment are more likely to report participating in pro-environmental behaviour. On the other hand, existing literature in pro-environmental fields have also reported that pro-environmental attitudes does not necessary predict specific environmental behaviours. For instance, in a work by Oom Do Valle and colleagues (2005), recycling was indirectly determined by social conscience, but not by general ecological attitudes.

In order to resolve this discrepancy, it was suggested that attitudes and behaviour must be measured at the same levels of specificity (i.e., Ajzen, Martin 1977). For example, to study recycling behaviour individual's attitudes toward recycling must be examined not their general environmental attitude. In doing so, it is essential to distinguish between general attitude and attitude toward behaviour (Meyerhoff, 2002). According to Bamberg et al., (1999, p. 5) "an attitude is general if it does not refer to a particular action, to a specific context, or to a particular time". By contrast, an attitude toward behaviour is directed toward a particular action, for example toward specific method to reduce carbon footprint. While general attitudes arguably fail to predict specific

behaviours (Ajzen & Fishbein, 2005), attitude toward behaviour has proven to be effective in predicting behaviour (Eagly & Chaiken, 1998).

Hence, in this study, both individual's attitudes towards the environment in general and their attitudes towards pro-environmental behaviours were examined. However, it has been suggested that a more complete understanding of attitudes effect can emerge from considering both types of attitudes in one study (e.g., Eagly & Chaiken, 1998). We propose that using both types of environmental attitude will enhance our understanding of the effect of priming individuals past behaviour on their future pro-environmental intention and behaviour.

Moral norm and pro-environment behaviour

In social psychology, different theoretical perspectives provide moral frameworks for understanding pro-environmental behaviour. Among them, Norm-activation Theory and Value-belief-Norms (VBN) theory are the most empirically supported theories of moral motivation in the context of environment. The norm-activation theory developed by Schwartz (1977) suggests that moral obligation regarding a specific action is only activated when at least two of the three components awareness of need, awareness of consequences, and awareness of responsibility are met. The VBN model developed by Stern et al. (2000) proposed that altruistic, egoistic, and biospheric value orientations are required in understanding environmental attitudes and behaviour. The NAM and VBN theory appeared to be successful in predicting different pro-environmental behaviour such as ecological citizenship (e.g., Stern et al., 1999), and political support and behaviours (e.g., Garling, Fujii, Garling, & Jakobsson, 2003) but they appear to be less effective in explaining wide range of environmental behaviour. Ajzen's Theory of planned behaviour approved to be more powerful in explaining environmental behaviour (Bamberg & Schmidt, 2003) which emphasizes on the role of PBC, attitudes and behavioural intention.

In this study, we applied and extended model of theory of planned behaviour to study the effect of moral norm on pro-environment behaviour.

Overview of the present study

The first objective of this research was to examine when licensing may or may not emerge in pro-environmental domain. In specific, we were interested to examine whether priming past pro-environmental behaviour produces a “license” to engage in less pro-environmental behaviour. We expected that recalling of past pro-environmental behaviour would lead to moral licensing and moral cleansing effects. In addition, as the second objective, we hypothesised that individuals’ pro-environmental attitude toward specific behaviour positively predicts their pro-environmental intentions. In addition, we expected that moral norm will affect intention indirectly, via attitude.

As the third objective, it was proposed that general environmental attitude as an individual difference variable might apply as a moderator for effect of priming individuals past pro-environmental behaviour on their environmental intention and behaviour. To measure participants’ general environmental attitudes, the Environmental Attitudes Scale (EAS) developed by Ebenbach, Moore, and Parsil (1998) was used. This scale distinguishes between internally-motivated pro-environmental attitudes and externally-motivated pro-environmental attitudes. We expected that individual’s general pro-environmental attitude moderates the relationships between priming individuals past pro-environmental behaviour and their future pro-environmental behaviour. Specifically, we expected that this relationship is stronger for individuals with internally motivated; internally motivated individuals are less likely to exhibit moral licensing effects after recalling their past pro- environmental actions.

Regarding to moral cleansing effect, we expected that individuals with internally motivated pro- environmental attitudes are also more likely to exhibit moral cleansing effects after recalling their lack of pro- environmental actions.

Method

Pilot Study

Prior to the main study, a pilot study was conducted to construct two groupings of pro-environmental actions. Participants ($N = 29$) were asked whether or not they have ever carried out each of a series of 19 environment-related actions e.g., “have you ever turned off your computer when not in use”, “have you ever made a public commitment not to take any flights for a year?” (see Table 11). The 5 actions that were most frequently reported as having been carried out were designated as ‘frequent environmental actions’ and the 5 actions that were least frequently indicated as having been carried out were designated as ‘infrequent environmental actions’.

Table 11:

List of 19 environment-related actions used in the Pilot Study

-
1. Have you ever switched off a light in a room that was not in use?
 2. Have you ever joined a national or international environmental organization?
 3. Have you ever turned off your computer when not in use?
 4. Have you ever offset your flight emissions?
 5. Have you ever made a public commitment not to take any flights for a year (or more)?
 6. Have you ever put waste paper in the recycling rather than throwing it away?
 7. Have you ever saved water by turning off the tap while cleaning your teeth?
 8. Have you ever volunteered your time to an environmental charity, for over 20 hours a week?
 9. Have you ever chosen products that have environmentally-friendly packaging?
 10. Have you ever put waste glass products in the recycling rather than throwing it away?
 11. Have you ever taken public transport when you could have made the journey by car?
 12. Have you ever made a public commitment to reduce your carbon footprint?
 13. Have you ever donated over £50 (fifty pounds) to an environmental charity (e.g. World-Wide Fund for Nature)?
 14. Have you ever bought organic food every time that this option has been available?
 15. Have you ever planted a tree in your community (or paid someone to do this)?
 16. Have you ever switched off an electrical appliance at the plug rather than leaving it on standby?
 17. Have you ever used recycled printer paper?
 18. Have you ever written to your MP to urge him/her to back pro-environmental legislation?
 19. Have you ever bought an ‘organic’ product of some sort?

Main study

Participants

Two hundred and thirteen university students, from five different universities in the UK, (173 females, 40 males; $M_{\text{age}} = 21.12$) took part in an online survey. Participants were asked to log into the study website and were instructed that they would be completing four short questionnaires. They were informed that they would receive entry into a prize draw (with two £50 prizes) in return for their participation.

Materials

Environmental Attitude Scale (EAS). Participants initially completed the 17-item Environmental Attitude Scale (Ebenbach, Moore, & Parsil, 1998). This scale distinguishes between internally-motivated pro-environmental attitudes, externally-motivated pro-environmental attitudes and anti-environmental attitudes. Participants were asked to rate the extent of their agreement or disagreement with a series of statements on 7-point Likert-type response scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) was used for each of the items. Items were reverse coded, as appropriate.

Internally-motivated pro-environmental attitudes were measured with 8 items, e.g., “I try hard to carry my pro-environmental beliefs over into all the other parts of my life”, “Because of my personal values, I believe that ignoring environmental matters is OK”, and “When it comes to questions about the environment, I feel driven to know the truth” ($\alpha = .85$).

Externally-motivated pro-environmental attitudes were measured with 5 items, e.g., “I do not attempt to appear pro-environmentally to others”, “If I did something that might harm the environment, I would be concerned that others would be angry with me”, and “It is not important for me to appear pro-environmental to others” ($\alpha = .71$).

Anti-environmental attitudes consisted of two items: “I try to appear pro-environmental to please others, but I really don't believe environmental issues are important” and “Although today's PC (Politically Correct) standards pressure me to express pro-environmental views, I don't really believe the environment is threatened”, $r(213) = .40, p < .001$.

Moral Credit manipulation: To assess moral licensing and cleansing effects, participants were randomly assigned to one of three Conditions: a *stronger green credentials* group, a *weaker green credentials* group and a *control* group.

In the *stronger green credentials* condition, the five ‘frequent environmental actions’ (e.g. switching off a light, buying an 'organic' product of some sort, putting waste paper in the recycling rather than throwing it away) were listed and participants were asked if they had ever carried out these actions. There were two response options: “Yes, I have done this” and “No, I have not done this”. There was a box next to each option and participants were able to choose one of them.

In the *weaker green credentials* condition, the five ‘rare environmental actions’ (e.g. donating over £50 to an environmental charity, making a public commitment not to take any flights for a year or more, and joining a national or international environmental organization) were listed and participants were asked if they have ever carried out these actions. Again, there were two response options: “Yes, I have done this” and “No, I have not done this”.

In the *Control* condition, participants were asked if they have ever carried out five unrelated actions (e.g., visiting the Tower of London, completing a Sudoku puzzle, and eating in an Indonesian restaurant). The same response options were provided: “Yes, I have done this” [x] and “No, I have not done this”.

To make salient the high or low number of ‘yes’ boxes that had been ticked by participants, they were asked to indicate to how many of the 5 behaviours they had responded ‘yes, I have done this’.

Dependent measures: All participants subsequently completed dependent measures representing variables from the theory of planned behaviour. First, participants were provided with a definition of carbon footprints and the effect of carbon footprints and Greenhouse gases on the environment. They were then asked to keep in mind the idea of reducing their carbon footprints within the next few months as they answered the questions. All questions were answered on 7-point scales; response options are indicated in parenthesis; scales were constructed from the means of the individual items.

Attitudes. Attitudes were measured with two items. Participants were asked to respond to the following statements: “My attitude towards reducing my carbon footprint within the next few months is...” (*extremely negative to extremely positive*), “My attitude towards reducing my carbon footprint within the next few months is...” (*extremely unfavourable to extremely favourable*), $r(213) = .80, p < .001$.

Moral Norm. To assess Moral Norm, participants were asked: “I would feel guilty if I did not reduce my carbon footprint within the next few months”, “It would be morally right for me to reduce my carbon footprint within the next few months”, “I have a moral obligation to reduce my carbon footprint within the next few months”, Reducing my carbon footprint within the next few months would fit in with my ethical principles” (*strongly disagree to strongly agree*), $\alpha = .81$.

Behavioural intentions. Behavioural intentions were measured with three questions ($\alpha = .92$): “My intention to reduce my carbon footprint within the next few months is...” (*extremely weak to extremely strong*), “I shall make an effort to reduce my carbon footprint within the next few months” (*extremely unlikely to extremely likely*) and “I intend to reduce my carbon footprint within the next few months” (*extremely unlikely to extremely likely*).

Subjective norm. Subjective norm was measured with two items, $r(213) = .31, p < .001$: “Most people who are important to me would support me reducing my carbon footprint within the next few months” (*strongly disagree* to *strongly agree*) and “Most people who are important to me think that I should reduce my carbon footprint within the next few months” (*strongly disagree* to *strongly agree*).

Perceived behavioural control. Perceived behavioural control (PBC) was measured with two items: “If I wanted to I could reduce my carbon footprint within the next few months” (*extremely difficult* to *extremely easy*), and “For me, reducing my carbon footprint within the next few months would be...” (*extremely difficult* to *extremely easy*). The correlation was good, $r(213) = .57, p < .001$.

Information-seeking behaviour. Participants’ subsequent information-seeking behaviour was measured in two ways.

Information request. First, whether or not they requested information about calculating carbon footprint was assessed. Participants were asked if they would like to calculate their carbon footprint: they were informed that knowing their carbon footprint would help them to understand their impact on the environment and help them find easy ways to reduce that impact. They were given the option to request a link to information that would assist them with this: “If you would like to calculate your *carbon footprint*, we will direct you to a useful webpage”. There were two response options: “Yes, I would like to be directed to the webpage” and “No, I do not want to be directed to the webpage”.

Accessing web-page. Secondly, an assessment was made of whether or not participants actually clicked on the web page address provided. In order to do this, a web page address was provided at the end of the questionnaire and participants were informed that if they had asked for information about the webpage to calculate their carbon footprint, then they should click on this link. When they clicked on it, they were automatically connected to a page that asked them to re-

enter the university email address which they indicated earlier in the survey. Participants then clicked a *next* button to be re-directed to the carbon calculator page.

Design and Procedure

Participants were recruited opportunistically via an email message that was sent out to mailing lists of several UK universities. The message contained information about the study alongside the web link to the questionnaire. Participants were recruited topic blind. As an incentive to participate, two cash prize draws of £50 were as offered and participants were informed that their participation was entirely voluntary and their email address was requested only so that we were able to contact the winners of the prize draws. Participants were told that the study will take about 20 minutes on average. Participants were not aware that charity donation was part of the study. At the end, two of the participants were selected at random and each won £50. Participants were initially sequentially assigned to one of the three conditions and then completed the various dependent measures. Participants completed the Environmental Attitude scale (EAS) first, then were exposed to the experimental manipulation, and then completed the various dependent measures.

Results

Preliminary analyses

There was no significant relationship between gender and Conditions, $\chi^2 (2, N = 213) = 1.57, p = .45$, or between age and Conditions, $F (2,212) = 0.455, p = .63$. We were thus confident of an unbiased allocation to the three different experimental conditions.

Moral licensing and moral cleansing effect: information-seeking behaviour

A logistic regression analysis was performed to examine the relation between Conditions and participants' information-seeking behaviour (Table 12). First, before performing the analyses, the

condition variable was dummy coded (*stronger green credentials group* vs. control group, and *weaker green credentials group* vs. control group). A test of the full model against a constant only model was statistically significant (chi square = 7.369, $p = .025$ with $df = 2$). Nagelkerke's R^2 of .045 indicated a moderate relationship between prediction and donation. Prediction success overall was 58%. The Wald criterion demonstrated that *weaker green credential* made a significant contribution to donation ($\beta = 0.466$, $\exp(b) = 1.59$, Wald = 5.45, $p = .019$). *Stronger green credentials group* ($\beta = -0.466$, Wald = 5.47, $p = .020$) was also a significant predictor. Exp (B) value indicates that participants in the *stronger green credentials group* were .62 times less likely to request information than were participants in the *control* group; a strong evidence of licensing effect. On the other hand participants in *weaker green credentials* group were more likely to request information in comparison to *control* group; proof of cleansing effect.

Table 12:

Logistic Regression Analysis of information-seeking behaviour

	B	S.E.	Wald	p	Exp(B)
stronger green credentials group	-0.466	0.199	5.47	0.020	0.629
weaker green credential group	0.466	0.199	5.45	0.019	1.59

Moral licensing and moral cleansing effect: actual behaviour (clicking on the web page)

A logistic regression analysis was performed to examine the relation between Conditions and participants actual behaviour (clicking on the web page address provided in order to access information about reducing carbon footprint). First, before performing the analyses, the condition variable was dummy coded (*stronger green credentials group* vs. control group, and *weaker green*

credentials group vs. *control group*). A test of the full model against a constant only model was statistically significant (chi square = 7.620, $p = .022$ with $df = 2$). Nagelkerke's R^2 of .047 indicated a moderate relationship between prediction and donation. Prediction success overall was 60%. The Wald criterion demonstrated that *stronger green credential* made a significant contribution to donation ($\beta = -0.441$, $\exp(b) = 0.64$, Wald = 4.73, $p = .030$). *Weaker green credentials group* ($\beta = 0.500$, Wald = 6.43, $p = .011$) was also a significant predictor. Exp (B) value indicates that participant in the *weaker green credentials group* were more likely to click on the provided web address than participants in *control group*; evidence of cleansing effect. Moreover, participants in *stronger green credentials group* were less likely to click on the provided web address in comparison to *control group*; proof of licensing effect. Results are presented in Table 13.

Table 13:

Logistic Regression Analysis of actual behaviour

	B	S.E.	Wald	p	Exp(B)
stronger green credential group	-0.441	0.202	4.73	0.030	0.64
weaker green credentials group	0.500	0.197	6.43	0.011	1.64

Correlations among moderator, TPB variables and Actual Behaviour

Table 14 shows the descriptive statistics and correlations among moderators and TPB variables. Four extended TPB components (Attitude, Intention, Moral norm, and PBC) were highly correlated with one another. Overall, Internally-motivated pro-environmental attitude was highly correlated with all the TPB variables and also the actual behaviour (Wald = 16.76, $\exp(b) = 0.53$, $p < .001$), so

the focus on subsequent analyses is on Internally motivated pro-environmental attitude and the two Externally-motivated pro-environmental attitudes and Anti-environmental attitudes measures were omitted.

Table 14:

Descriptive Statistics of and Correlations Among Moderators and TPB Variables

	1	2	3	4	5	6
1. Internal EAS	-	.045	.582**	.550**	.486**	.205**
2. External EAS		-	.057	.164*	.246**	.053
3. Attitude			-	.700**	.513**	.449**
4. Intention				-	.614**	.522**
5. Moral norm					-	.301**
6. PBC						-
<i>M</i>	5.50	3.57	4.98	4.55	4.74	4.66
<i>SD</i>	1.01	0.92	1.10	1.39	1.22	1.28

* $p < 0.05$ (2-tailed). ** $p < 0.01$ (2-tailed).

Moderated effect of Conditions on information seeking behaviour

Separate logistic regression analyses were conducted to predict participants' information-seeking behaviour using condition and internally motivated pro-environmental attitude (internal EAS) as predictors Table 15. The Condition variable was dummy coded (1 = stronger green credentials vs. control, 2 = weaker green credentials vs. control). To reduce multicollinearity, internal EAS was mean centred before performing the analyses.

Table 15:

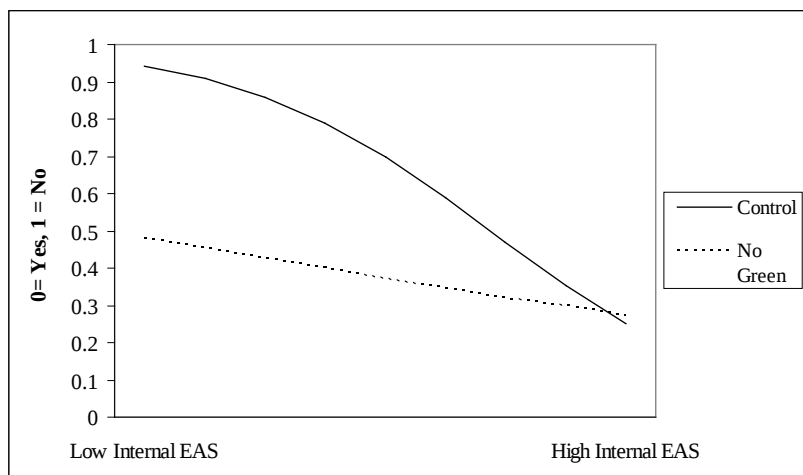
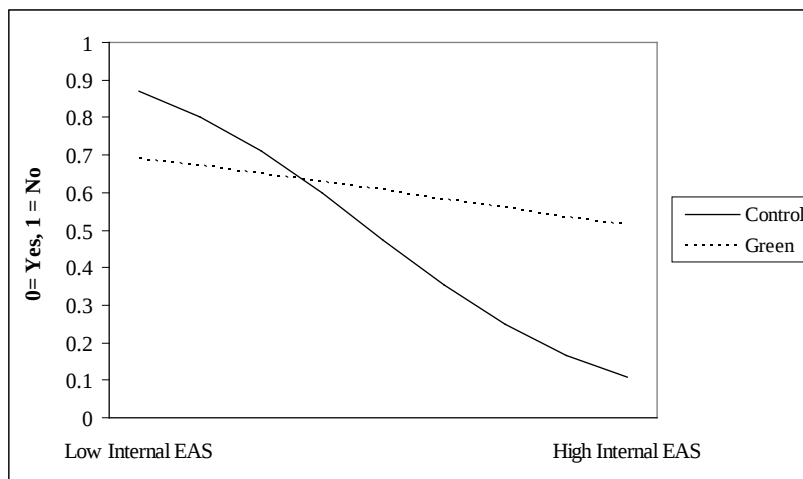
Moderated Logistic Regression Analysis of information-seeking behaviour

	B	S.E.	Wald	<i>p</i>	Exp(B)
Internal EAS	-1.194	0.343	12.145	0.000	0.303
Stronger green credentials vs. control (DC1)	-.266	0.374	0.508	0.476	0.766
Weaker green credentials vs. control (DC2)	0.684	0.377	3.302	0.069	1.983
Internal EAS x DC1	0.818	0.464	3.113	0.078	2.267
Internal EAS x DC2	0.745	0.406	3.362	0.067	2.107

The results of the logistic regression of information-seeking behaviour on internal EAS, Conditions and the Condition x internal EAS interactions are summarized in Table 14. The proportion of participants' information-seeking behaviour was correctly classified into 51% and 64% at null model and full model respectively, demonstrating the value-added contribution of internal EAS in the prediction of information-seeking behaviour. The model as a whole explained between 13% (Cox and Snell *R* square) and 18% (Nagelkerke *R* squared) of the variance in participants' information-seeking behaviour. A test of the full model against a constant only model was statistically significant, indicating that the predictors reliably distinguished participants' information-seeking behaviour: $\chi^2(5, N = 213) = 30.86, p < .001$. The Wald criterion demonstrated that internal EAS (Wald = 12.145, $\exp(b) = 0.303$, $SE = 0.343$, $p < .001$) made a significant contribution to prediction, such that for every one unit increase in a participants' internal EAS attitude (as measured by a 7-unit index), the likelihood of participants' information-seeking behaviour decreased by 0.30 times, after controlling for other factors in the model. Furthermore, the main effect of the second dummy coded variable (weaker green credentials vs. control) was marginally significant (Wald = 3.302, $\exp(b) = 1.98$, $p = .069$). The $\exp(b)$ value indicates that

being in the *weaker green credentials group* increased the likelihood of participants' information-seeking behaviour by 1.98 times compared to the control group, after controlling for the other predictors in the model. The stronger green credentials vs. control condition was not a significant predictor. These main effects are qualified by marginally significant interactions between internal EAS and the stronger *green credentials group* (Wald = 3.12, $\exp(b) = 2.27$, $p = .078$) and internal EAS and the *weaker green credentials group* (Wald = 3.37, $\exp(b) = 2.11$, $p = .067$). The relationship between Conditions and information-seeking behaviour for low and high internal EAS is illustrated in figure 3.

Figure 3. *Information-seeking behaviour as a function of EAS for (a) stronger Green and Control Conditions and (b) Weaker Green and Control Conditions*



Moderated effect of Conditions on actual behaviour (clicking on the web page)

Another logistic regression analyses were conducted to predict participants' actual behaviour (clicking on the web page) using condition and internally motivated pro-environmental attitude (internal EAS) as predictors. The Condition variable was dummy coded and internal EAS was mean centred. The results of the logistic regression of actual behaviour are summarized in Table 16. The proportion of participants' actual behaviour was correctly classified into 55% and 67% at null model and full model respectively, demonstrating the value-added contribution of internal EAS in the prediction of actual behaviour. The model as a whole explained between 13% (Cox and Snell R square) and 18% (Nagelkerke R squared) of the variance in participants' actual behaviour. A test of the full model against a constant only model was statistically significant, indicating that the predictors reliably distinguished participants' actual behaviour: $\chi^2 (5, N = 213) = 34.58, p < .001$. The Wald criterion demonstrated that internal EAS (Wald = 12.72, $\exp(b) = 0.23, SE = 0.40, p < .001$) made a significant contribution to prediction, such that for every one unit increase in a participants' internal EAS attitude (as measured by a 7-unit index), the likelihood of participants' actual behaviour decreased by 0.23 times, after controlling for other factors in the model. Furthermore, the main effect of first dummy coded variable (stronger green credentials vs. control) was not significant (Wald = 0.003, $\exp(b) = 1.023, p = .95$), but the main effect of the second dummy coded variable (weaker green credentials vs. control) was significant (Wald = 5.44, $\exp(b) = 0.39, p = .020$). The $\exp(b)$ value indicates that being in the *weaker green credentials group* decreased the likelihood of participants' actual behaviour by 0.39 times compared to the control group, after controlling for the other predictors in the model. However, these main effects are qualified by marginally significant interactions between internal EAS and the *stronger green credentials group* (Wald = 3.96, $\exp(b) = 2.79, p = .046$) and internal EAS and the *weaker green credentials group* (Wald = 4.46, $\exp(b) = 2.62, p = .035$).

Therefore, followed by Aiken and West (1991), the significant interaction was examined by testing *stronger green credentials group* effect separately for low (-1 SD below the mean), and high (+1 SD above the mean) levels of internal EAS. High internally motivated participants, in *stronger green credentials group*, did not click on the web page significantly compared to control group, $b = 0.23$, $\exp(b) = 1.26$, $p = .59$ but they significantly clicked on the web page in *weaker green credentials group* compared to control group, $b = -1.23$, $\exp(b) = 0.29$, $p < .001$. On the other hand Low internally motivated participants, in *stronger green credentials group*, clicked on the web page significantly compared to control group, $b = 1.05$, $\exp(b) = 2.87$, $p = .020$ but did not significantly click on the web page in *weaker green credentials group* compared to control group, $b = -0.29$, $\exp(b) = 0.74$, $p = .42$.

Table 16:

Moderated Logistic Regression Analysis of actual behaviour (clicking on the web page)

	B	S.E.	Wald	p	Exp(B)
Internal EAS	-1.43	0.401	12.726	0.000	0.239
Stronger green credentials vs. control (DC1)	0.023	0.404	0.003	0.954	1.023
Weaker green credentials vs. control (DC2)	-0.932	0.400	5.442	0.020	0.394
Internal EAS x DC1	1.027	0.516	3.964	0.046	2.793
Internal EAS x DC2	0.965	0.457	4.468	0.035	2.625

Predicting intentions from TPB variables

Hierarchical multiple regression analysis was carried out to determine the effect of the attitudes, subjective norms, perceived behavioural control, and moral norms on intention (Table 17). Attitude was entered as a predictor at step 1, subjective norm was entered as a predictor at step 2, perceived behavioural control was entered at step 3 and moral norm was entered at step 4: $R^2 = .63$, $F(3, 209) = 114.22$, $p < .001$. Attitudes ($\beta = .41$, $p < .01$), perceived behavioural control ($\beta = .21$, $p < .01$), and moral norms ($\beta = .29$, $p < .01$) all produced significant independent predictive effects but subjective norm was not a significant predictor ($\beta = .07$, $p = .12$). These results indicate that more positive intentions to reduce carbon footprint were associated with more positive attitudes and greater moral concern about it. PBC was also positively associated with intention, indicating that the more that people felt in control of reducing their carbon footprint, the stronger their intentions to be directed to the webpage.

Table 17.
Summary of Hierarchical Multiple Regression Analysis Predicting Intention

Variables entered	β	β	β	β
	Step 1	Step 2	Step 3	Step 4
Attitude	0.70***	0.60***	0.52***	0.41***
Subjective norm		0.21***	0.17***	0.07
Perceived behavioural control			0.22***	0.21***
Moral norm				0.29***
R^2	0.49	0.52	0.56	0.62
ΔR^2		0.03	0.04	0.05

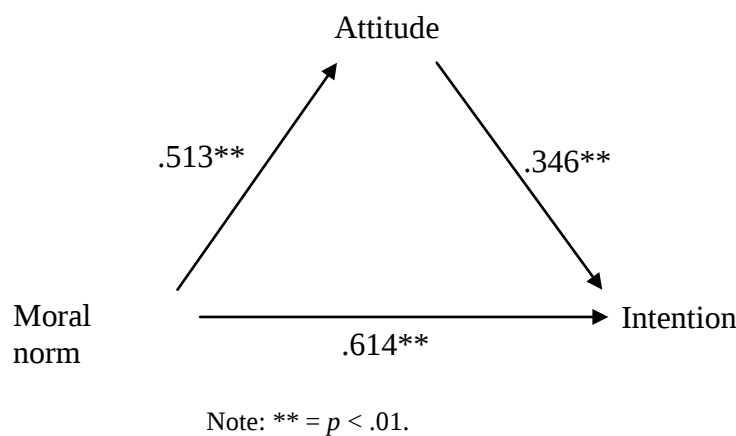
*** $p < .001$

Mediation Effect of Moral Norms on Intention via Attitudes

To test for mediation effect of moral norms on intention via attitudes, two simple regression analyses were separately conducted to test the relationship of moral norms to attitudes (the proposed mediator), and the direct relationship of Moral norms to intentions. Moral norm was associated significantly with Attitudes [$R^2 = 0.26$, $F(1,211) = 75.47$, $p < .001$] and Intention [$R^2 = 0.37$, $F(1,211) = 127.95$, $p < .001$].

A hierarchical multiple regression with the IV (moral norms) and Mediator (attitudes) predicting DV (intentions) was then conducted. Moral norms ($\beta = .61$, $p < .001$) accounted for significant variance in Intentions, $R^2 = 0.37$, $F(1,211) = 127.95$, $p < .001$. Moreover, attitudes ($\beta = .52$, $p < .001$) added significantly to the variance accounted for in Intentions, $R^2 = 0.57$, $F(1,210) = 100.23$, $p < .01$. When the mediator (attitudes) was controlled, the direct effect of Moral norms (IV) decreased to $\beta = .34$, $p < .001$. Since the correlation between the IV and the DV was not reduced to a non-significant level, partial mediation had been identified. A Sobel test revealed that the indirect path from Moral norms to Intentions via Attitudes was significant, $z = 6.58$, $p < .001$ (Figure 4).

Figure 4: *Unstandardized Regression Coefficient for the relationship between Moral norm and Intention as mediated by Attitude.*



Effect of Condition on TPB

Separate one-way analyses of variance (ANOVA) were conducted with Conditions (*stronger green credential, weaker green credentials, and control group*) as the independent variable and attitudes, intentions and moral norms to reducing carbon foot print as the dependent variables. There were not significant effects of condition on Attitude, $F(2, 210) = 1.38, p = .25, \eta^2 = 0.01$, Intention, $F(2, 210) = 1.10, p = .33, \eta^2 = 0.01$ and Moral norm, $F(2, 210) = 1.09, p = 0.33, \eta^2 = 0.01$.

Discussion

This study investigated the possibility of licensing and cleansing effects in the pro-environmental domain. The primary aim of this research was to examine the impact of priming past pro-environmental behaviour on subsequent attitudes, intentions, and behaviour. The results of the current study largely supported the hypothesis that priming past pro-environmental behaviour would lead to a licensing effect, such that participants were less likely to seek information about calculating their Carbon footprint after recalling their past pro-environmental behaviours compared to participants in control group. Moreover, participants who recalled their past environmentally-friendly behaviour did not click on the provided web page to calculate their Carbon footprint. These findings are similar with previous work on licensing effect (Jordan et al., 2011; Sachdeva et al., 2009) and negative spillover (Tiefenbeck et al., 2013) in the domain of the environment.

Moreover, the findings of the present study supported the hypothesis that priming past behaviour would lead to a cleansing effect, such that participants were more likely (than were participants in the control group) to seek information about calculating their Carbon footprint and to click on the provided webpage, after recalling their past unfriendly pro-environmental behaviours. These results are consistent with the earlier finding of cleansing effects (Sachdeva et al., 2009).

As mentioned in the discussion of chapters 2 and 3, one of the main limitations of the empirical work presented in these chapters was the manipulation of priming past behaviour; whether participants followed the recall instructions and wrote about their own traits or used the words in a negative way or not. To overcome this limitation, in this study and prior to the main study, a pilot study was conducted to construct three groupings of pro-environmental behaviour. In the main study, to make salient the high or low number of ‘yes’ boxes that had been ticked by participants, they were asked to indicate to “how many of the 5 behaviours they had responded”. We believe that this question helped us to make salient participants’ past moral/immoral behaviour and also helped us to ensure that the manipulation of priming past behaviour was not violated (by checking the number that participants responded to the question of “how many ...”) question. It is interesting to mention that subsequent analysis of these data suggests that no violation of instructions happened in the *stronger green credentials* group and in the *weaker green credentials* group.

However, a growing body of studies has reported that past pro-environmental actions might inhibit rather than increase subsequent environmentally-friendly behaviour. In order to study when priming past environmental behaviour will lead to licensing effects or to consistent behaviour, two measures of attitude were used: a specific attitude toward the environment (reducing Carbon footprint) using a TPB component and a general environment attitude using the Environmental Attitude Scale. It was hypothesised that individuals’ specific attitude toward a specific pro-environmental behaviour would positively predict their pro-environmental intentions. Indeed, a significant positive effect of specific attitude toward environment (reducing Carbon footprint) was found on intention which is in line with research findings that have consistently shown that pro-environmental attitudes positively predict pro-environmental behaviours (e.g., Bamberg & Möser, 2007).

We proposed that general environmental attitude might act as a moderator of the effect of priming individuals' past pro-environmental behaviour on their subsequent environmental behaviour. It was hypothesized that licensing effects are unlikely for individuals with internally motivated pro-environmental attitudes. The results of the current study largely supported this hypothesis. Findings of this research revealed that internally motivated participants, after recalling their past moral behaviour, were more likely to ask for information about reducing their carbon footprint and also clicked on the provided web page to calculate their carbon footprint (actual behaviour) compared to participants in the control condition, evidence of consistent behaviour. In other words, possessing internal motivated attitudes decreased the chance of licensing effects in the context of pro-environmental behaviour. Moreover, the results of this study showed that internally motivated pro-environmental attitude is an important factor explaining the cleansing effect. It was found that when individuals' environmental attitudes are internally motivated, after recalling their unfriendly behaviour toward the environment, were more likely to ask for information about reducing their carbon footprint and also clicked on the provided web page to calculate their carbon footprint (actual behaviour) compared to participants in the control condition, an indication of cleansing behaviour. Furthermore, the findings here suggest that high internally motivated participants were more likely to click on the provided web page, after recalling their unfriendly behaviour, suggesting that priming past unfriendly environment behaviour increased future environment friendly behaviour.

The results of this study supported the prediction that internally motivated individuals are less likely to exhibit moral licensing effects after recalling their past pro-environmental actions and are also more likely to exhibit moral cleansing effects after recalling their lack of pro-environmental actions.

Another aim of this study was to investigate the effect of moral norm on pro-environment behaviour, using an extended theory of planned behaviour. Once again, findings of this study

provided evidence for the explanatory power of the TPB, as participants' intentions were a strong predictor of their pro-environment behaviour. An extensive body of research reported a direct effect of moral norm in predicting behavioural intention (see Manstead, 2000, for a review). The findings of this study revealed a direct effect of moral norm on pro-environment action. Participants with high moral norm were more likely to reduce their Carbon footprint. However, it should be noted that the interrelationships between these components might be influenced by the experimental manipulation.

Moreover, we expected that moral norm would affect intention indirectly via attitude. The results of this study confirmed that moral norm effects on intentions were mediated by people's attitudes. The significant correlation between attitude and moral norms confirmed other research findings where moral norm are considered as antecedents of attitude within the TPB (Kaiser & Scheuthle, 2003; Sparks, Shepherd & Frewer, 1995). Together, and consistent with previous research (i.e., Manstead, 2000), the findings of the present research support the addition of moral norm in the prediction of pro-environment behaviour within the TPB.

However, the results of this study are subject to a number of limitations. The composition of our sample is a limitation of this study in that university students are not representative of the general population. According to Lanzini (2014), students usually have very tight budgets and very specific behavioural patterns influenced by their situational conditions (i.e., living on campuses), which might influence their pro-environmental behaviour. Therefore, future research is needed to assess licensing and cleansing effects with samples representative of other populations in different domains of pro-environmental behaviour, such as energy consumption, transportation, and consumer choice. Another limitation of our results concerns the size of the sample. Most of studies investigating licensing and cleansing effects usually have been carried out in a laboratory setting with small samples, as noticed by Mullen and Monin (2016) applying Large-scale replication efforts of licensing and cleansing effects will increase our confidence of licensing effects.

Perhaps the biggest limitation of this study was the measurement of Environmental Attitude. To date, several scales of environmental attitude have been applied which have been criticised on account of their inability to predict behaviour. The Environmental Attitude scale used in this study is not widely supported in other empirical studies. Future research might apply more tested and reliable scales.

A possible avenue for future research might be to consider different individual difference variables to examine the licensing and cleansing effects. In the current study, the moderating impact of environmental attitude was examined; obviously there are other moderator variables that may increase or decrease the likelihood of licensing and cleansing effects. For example, the level of conceptual abstraction of past behaviour (the extent to which past behaviours are conceptualised on an abstract or concrete level) may impact on pro-environmental behaviour. Conway and Peetz (2012) found that participants who recalled a temporally distant abstract moral behaviour acted consistently with their conceptualized identity, while participants who recalled a recent concrete moral behaviour feel licensed to engage in immoral behaviour.

CHAPTER 5

The Effect of Moral Values and Cultural Orientations on

Moral Attitudes and Intentions:

Examination of UK and Iran

Abstract

In the study reported in this chapter, the horizontal and vertical distinction within individualism and collectivism was used to predict differences in moral foundation values and charity giving intentions and attitudes across two national cultures: Iran ($n = 142$) and the United Kingdom ($n = 245$). As expected, Iranian participants were more collectivist and UK participants were more individualistic. However, the UK participants were more horizontally individualistic than vertically individualistic. Differences in cultural orientations also corresponded to differences in moral foundations values (binding and individualizing foundations) such that both female and male participants in the UK tended to subscribe to the individualizing foundations more than to the binding foundations. In both cultures, binding foundations appeared to be associated with vertical collectivism orientation, but individualizing foundations were associated with horizontal individualism only in UK participants. Moreover, among the UK participants, collectivism was associated with more positive intentions to donate to ingroup charity than to outgroup charity.

Introduction

Morality is a complex and culturally variable construction (Koleva, Graham, Iyer, Ditto, & Haidt, 2012) that shapes our interactions and guides our behaviour. Although theories of moral development and moral reasoning have emphasized universal principles that apply to all people in all societies (Sverdlik, Roccas, & Sagiv, 2012), research findings have demonstrated that morality diverges across cultures; different societies build different moralities and different individuals have different values and standards of right and wrong. Values are related to decisions that guide people's behaviour and are defined as "desirable goals, varying in importance, that serve as guiding principles in people's lives" (Sagiv & Schwartz, 1995, p. 93). The relationship between values and behaviour has been the focus of large growing body of research where values have been found to be associated with a large variety of behaviors and behavioral intentions (for a review, see Roccas & Sagiv, 2010). However, it has been suggested that the psychological processes that impact the relationship between values and behaviour are affected by the social and cultural context (Roccas & Sagiv, 2010). Concerning these social and cultural differences that impact on moral intentions and behaviour, the study reported in this chapter focuses on how different moral values and cultural orientations shape moral attitudes and intentions, using an extended Theory of Planned Behaviour model.

Differences at the Individual Level of Analysis: Moral Foundation theory

Every culture contains a different style of moral reasoning (and there will be also different styles within cultures) since each culture has a different set of values. One promising recent approach to both within- and between-cultural difference in moral reasoning (Sachdeva, Singh, & Medin, 2011) is Moral Foundations Theory. This theory provides a theoretical framework for understanding the universal and societal aspects of morality (Haidt & Graham, 2007; Haidt & Joseph, 2004). Moral Foundations Theory (MFT) argues that there are five categories of moral concern to explain cross-

cultural differences in morality. The five moral foundations are care, reciprocity, loyalty, respect, and sanctity.

The *Care* foundation concerns about suffering and the welfare of others (to protect others from care and pain) and includes disapproval of individuals that cause pain and approve of those who prevent it. It underlies virtues of kindness and compassion. The *Reciprocity* foundation concerns unfair treatment and is linked to notions like justice, equality and rights. This foundation guides us to treat others in proportion to their actions (whether or not they violate these notions). *Loyalty* emphasizes community concerns and is based on virtues such as loyalty, self - sacrifice and patriotism. This foundation includes disapproval of those who betray the group. The *Respect* foundation is related to social order and hierarchical relationships and requires people to be aware of status and rank. It underlies virtues of leadership and followership including respect for authority and tradition. The *Sanctity* concerns about physical and spiritual contagion like avoiding disgusting things such as foods and actions. It includes virtues of chastity and control of desires and is based on the emotion of disgust.

The first two foundations of care and reciprocity are labelled as the *individualizing foundations* because of their emphasis on the rights and welfare of individuals (Graham et al., 2009). The other three foundations are referred as the *binding foundations*, because they build a sense of attachment to the group and because of their emphasis on group-binding loyalty, duty, and self-control, so learnable and so compelling to so many people (Graham et al., 2009). Research has reported that liberal moralities tend to endorse the individualizing foundations more than the binding foundations, whereas conservative morality tends to endorse all five foundations equally (Graham et al., 2009; Van Leeuwen & Park, 2009).

Differences at the Cultural Level of Analysis: Individualism versus Collectivism

Cultures are often divided into two categories: collectivistic and individualistic. The constructs of individualism (IND) and collectivism (COL) have undeniably been extremely popular, both theoretically and empirically (Green, Deschamps & Paez, 2005), in studies on the psychological impacts of culture over the last 20 years (Oyserman, Coon & Kemmelmeier, 2002). The individualism-collectivism dimension has been used to explain, and predict differences in, motivations, attitudes, values, behaviours, communication, attribution, self-definitions and emotional connections to ingroups (Hofstede, 1980; Oyserman et al., 2002; Triandis, 1995; Triandis, Chen & Chan, 1998).

In Individualist cultures, it has been suggested that attributes such as independence, autonomy, self-determination, and individual uniqueness are valued (Hofstede, 1980). Individualism places more importance on attitudes than on social norms and emphasizes personal freedom and achievement regardless of group goals. Therefore, social status is awarded to personal accomplishments, resulting in a strong sense of competition. People in individualist cultures, it has been argued, usually establish non-intimate and short-term relationships (Triandis & Suh, 2002). Collectivism, on the other hand, is associated with a sense of duty toward one's group, interdependence with others, a desire for social harmony, and conformity with group norms (Green et al., 2005). In collectivist societies, people are expected to identify with and work well with their ingroups such as families, schools, or companies. People usually establish intimate and long-term loyalty to their ingroups by placing group interests before individual interests and, in turn, they expect the ingroup to protect them (Hofstede, 1991). Behaviour in collectivist cultures is largely regulated by people's desire to conform to ingroup norms to ensure harmony (Triandis, McCusker, & Hui, 1990).

To identify differences of cultural orientations between cultures as well as within a culture, the two major value dimensions of ‘vertical’ and ‘horizontal’ (e.g., Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis et al., 1998), are distinguished; within each IND-COL category, some societies are *horizontal* (valuing equality) whereas others are *vertical* (emphasizing hierarchy). The horizontal and vertical distinction focuses on important differences in the way that individuals view the self and contribute to understanding a culture’s value system (see Maheswaran & Shavitt, 2000). In vertical-individualist societies, competitiveness is high and people strive to be distinct and desire special status – distinguishing themselves from others via competition, achievement, and power (Shavitt, Torelli & Riemer, 2010). In horizontal-individualist societies, in turn, the emphasis is on self-reliance, independence from others, and uniqueness (Triandis & Gelfand, 1998). People prefer to view themselves as equal to others without desiring special status (e.g., Feather, 1994; Nelson & Shavitt, 2002). In vertical-collectivist societies, emphasis is on enhancing ingroup cohesion and status, and respect for ingroup norms even when that entails sacrificing one’s own personal goals. Individuals emphasize both interdependence within the ingroup and competition with outgroups. In horizontal-collectivist societies, people emphasize common goals with others; therefore the focus is on sociability, empathy, cooperation and interdependence with others (Triandis & Gelfand, 1998).

Thus, the horizontal view values equality and assumes that oneself has the same status as others (horizontal-individualist: independent, same status; horizontal-collectivist: interdependent, same status) and the vertical view, with its emphasis on hierarchies and accept inequality, assumes that oneself is different from others (vertical-individualist: independent, different status; vertical-collectivist: interdependent, different status) (Singelis et al., 1995).

Cultural Orientations and helping Behaviour

Differences in individualism-collectivism orientation have been shown in helping behaviour (e.g., Triandis & Suh, 2002). According to the collectivism-individualism dimension, collectivists emphasize cooperation and ingroup cohesion and attention to other people (Triandis et al., 1990). It has been argued that people in collectivist cultures draw a clearer line between in-groups and out-groups and therefore are more likely to help in-group members than are people from individualistic cultures (Aronson, Wilson, Akert & Fehr, 2004). To date, some studies have reported that people in collectivistic societies shows more of an orientation toward helping. For example, Freeberg & Stein (1996) reported that Mexican Americans endorsed more collectivistic values and were more likely to support members of their ingroup compared to Anglo-Americans. Related to this, in some studies notable differences in behaviour toward ingroup and outgroup members within collectivists' society have also been reported. (e.g., Schwartz, 1990; Triandis, Bontempo, Villareal, Asai & Lucca, 1988). According to Triandis (2002), in collectivist cultures morality is more contextual, and the welfare of group is the ultimate value. On the other hand, people in individualist cultures are more likely to seek sincerity and authenticity (Trilling, 1972). People in collectivist cultures see helping an ingroup member as duty-based, whereas people in individualist cultures see it more as a matter of personal choice (Miller, 1997). Thus, it has been suggested that people in collectivistic cultures show less concern for out-group members than do people in individualist cultures see (Bond & Smith, 1996).

The Current Study

This study draws upon the idea that the conception of morality differs in different cultures. The main concern of this work was to investigate how different cultural orientations and moral values influence participants' attitudes, moral norms and moral intentions, using an extended Theory of

Planned Behaviour model. This study was designed to extend our understanding of participants' intentions and attitudes toward helping behaviour by undertaking a cross-cultural comparison of British and Iranian participants. The UK and Iran were chosen for comparison because they differ in their individualism- collectivism orientation (Hofstede, 1980). Based on Hofstede's research (1980), Iran is considered as a collectivistic society and the UK is amongst the highest of the individualistic countries.

In particular, the first objective of this study was to assess whether there are differences between Iran and UK in levels of Individualism and Collectivism. Therefore, the horizontal and vertical distinction within individualism and collectivism was used as a theoretical framework to predict differences across two national cultures: Iran and the United Kingdom. Based on previous findings (Hofstede, 1980), it was expected that UK participants are more Individualistic than Iranian participants and that Iranian participants are more Collectivistic than UK participants. Moreover, we hypothesized that UK participants would score higher on vertical orientation indices and Iranian participants would score higher on horizontal orientation.

The second objective of this study was to assess whether there are differences between Iran and UK on Moral Foundation values. In doing so, the Moral Foundations Questionnaire was used to examine moral foundation differences within and between UK and Iran individuals. In line with the first objective of this study, we hypothesised that UK participant (individualistic-oriented) would score higher on *individualizing foundations* and Iranian participants (collectivistic-oriented) would score higher on *binding foundations*,

The third objective was to examine relations between Individualism/Collectivism and Moral Foundation in the sample of UK and Iran participants. To date, a growing body of research has examined the link between Individualism-Collectivism distinction and Schwartz's personal value categories. For instance power, achievement, and conformity values (vertical orientation), as contrasted with self-direction, benevolence, and universalism values (horizontal orientation; e.g.,

Schwartz & Bilsky, 1990). However, based on definitions of Individualism and Collectivism orientations (Singelis et al., 1995; Triandis & Gelfand, 1998), it has been suggested that there are considerable common characteristics between key aspects of collectivism (i.e., sharp ingroup-outgroup distinctions, conformity) and the contents of the binding moral foundations (group loyalty, respect for authority, bodily/spiritual sanctity) (Van Leeuwen, Koenig, Graham & Park, 2014). Therefore it was expected that Individualistic orientations would be positively correlated with *individualizing foundations* (*care* and *reciprocity*) and Collectivistic orientations would be correlated with *binding foundations* (*Loyalty* and *Sanctity*). However, few studies have examined this relationship.

The fourth objective of this study was to assess whether there are differences between Iran and UK in terms of TPB variables. In this study we also were interested to assess the relation of moral values and theory of planned behaviour measures to achieve a better understanding of individual and cultural differences in this regard.

The fifth objective was to study the relationship between the collectivism-individualism dimension and helping behaviour toward ingroup and outgroup. As mentioned earlier, collectivistic individuals emphasise cooperation and ingroup cohesion; therefore it was hypothesised that collectivistic orientations would predict intentions to donate money to a charity that promotes the welfare of ingroup rather than outgroup members.

The sixth objective concerned whether moral norm and attitudes predict intentions differently for Iranian and UK participants.

Method

Participants

In the UK, two hundred and forty-five psychology students (220 females, 25 males; $M_{\text{age}} = 19.89$, $SD = 2.92$) from six UK Universities took part in an online survey. The study link was sent to students via their university email addresses. Participants were asked to log into the study website and were instructed that they would be completing four short questionnaires. They were informed that they would receive research participation credit and/or entry into a prize draw (with two £50 prizes) in return for their participation.

Iranian participants were one hundred and forty two students (96 females, 42 males; $M_{\text{age}} = 24.96$, $SD = 8.51$) from two Universities in Tehran and Sari. Hard copies of questionnaire were given to students in a classroom. Questionnaires were translated from the English version and then back translated into Persian by an official translator and also by a bilingual volunteer.

Materials

Participants initially completed the following three scales:

Individualism and Collectivism scale. Participants completed the 32-item Individualism and Collectivism scale (Singelis & Triandis, 1995) with 8 items designed to assess each of four cultural orientations (Horizontal Individualism, Horizontal Collectivism, Vertical Individualism and Vertical Collectivism). For each of the 32 items, participants were asked to rate the extent of their agreement or disagreement. A 7-point Likert-type response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) was used for each of the items.

Examples of “Horizontal Individualism” items are: “I prefer to be direct and forthright when I talk with people”, “I enjoy being unique and different from others in many ways”, and “I am a unique individual”. Reliabilities were $\alpha = .69$ and $\alpha = .89$ for UK and Iran participants, respectively.

Examples of “Horizontal Collectivism” items are: “My happiness depends very much on the happiness of those around me”, “It is important to maintain harmony within my group”, and “The well-being of my co-workers is important to me”. Reliabilities were $\alpha = .94$ and $\alpha = .71$ for UK and Iran participants, respectively.

Examples of Vertical Individualism items are: “It annoys me when other people perform better than I do” and “It is important that I do my job better than others”, and “When another person does better than I do, I get tense and aroused”. Reliabilities were $\alpha = .84$ and $\alpha = .74$ for UK and Iran participants, respectively.

Examples of “Vertical Collectivism” items are: “I would do what would please my family, even if I detested that activity”, “I usually sacrifice my self-interest for the benefit of my group”, and “We should keep our aging parents with us at home”. Reliabilities were $\alpha = .80$ and $\alpha = .65$ for UK and Iran participants, respectively.

Moral Foundation Questionnaire (MFQ): Participants completed the Moral Foundation Questionnaire (Graham, Haidt & Nosek, 2008). The scale contains 32 questions in two parts, measuring the degree to which a person relies on each of five moral foundations³: *care*, *reciprocity*, *loyalty*, *respect*, and *sanctity*. The first part measures abstract assessments of moral relevance (e.g., “when you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?”). Examples of the items in this part for care, reciprocity, loyalty, and sanctity are respectively: “Whether or not someone suffered emotionally”, “Whether or not some people were treated differently than others”, “Whether or not someone’s action showed love for his or her country”, “Whether or not someone violated standards of purity and decency”. A

³ It should be mentioned that “*respect*” was not included in this study (for both UK and Iranian samples) since it was not related to the research question and the authors believe that asking about this might mislead Iranian participants and affect their responses.

6-point Likert-type response scale ranging from 1 (*not at all relevant*) to 6 (*extremely relevant*) was used for each of the items.

The second part measures agreement with more specific moral statements. Examples of the items in this part for care, reciprocity, loyalty, and sanctity are respectively: “Compassion for those who are suffering is the most crucial virtue”, “Justice is the most important requirement for a society”, “I am proud of my country’s history”, “People should not do things that are disgusting, even if no one is harmed”. A 6-point Likert-type response scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) was used for each of the items.

The measure of internal reliability in four moral foundations in UK participants and Iran participants were reasonable; care⁴ (UK: $\alpha = .67$, Iran $\alpha = .77$), reciprocity⁵ (UK: $\alpha = .72$, Iran $\alpha = .70$), loyalty (UK: $\alpha = .71$, Iran $\alpha = .66$), and sanctity (UK: $\alpha = .69$, Iran $\alpha = .71$).

Dependent measures: Participants completed the following dependent measures:

Theory of Planned Behavior Measures: Participants subsequently completed extended TPB measures concerning donating money to charity. All questions were answered on 7-point scales; response options are indicated in parenthesis; scales were constructed from the means of the individual items.

Attitudes. Attitudes were measured with two items. Participants were asked to respond to the following statements: “My attitude towards donating money to charity is...” (*extremely negative to extremely positive*), “My attitude towards donating money to charity is...” (*extremely unfavourable to extremely favourable*). Correlations between the items were $r(245) = .83, p < .001$ in the UK and $r(142) = .49, p < .001$ in Iran.

⁴ To improve α one item (the same item) was deleted in both countries.

⁵ To improve α one item (the same item) was deleted in both countries.

Moral Norm. To assess Moral Norm, participants were asked: “it would be morally right for me to donate money to charity”, “I have a moral obligation to donate money to charity”, “and donating money to charity would fit in with my ethical principles” (strongly *disagree* to strongly *agree*). Inter-item reliability was $\alpha = .79$ in the UK and $\alpha = .66$ in Iran.

Behavioural intentions. Behavioural intentions were measured with three statements: “My intention to donate money to charity within the next month is...” (extremely *weak* to extremely *strong*), “I shall donate money to charity within the next month” and “I intend to donate money to charity within the next month” (extremely *unlikely* to extremely *likely*). Inter-item reliability was $\alpha = .96$ in the UK and $\alpha = .90$ in Iran.

Subjective norm. Subjective norm was measured with two items: “Most people who are important to me probably think that I should donate money to charity” (strongly *disagree* to strongly *agree*) and “If I were to donate money to charity, most people who are important to me would probably...” (*disapprove strongly* to *approve strongly*). Correlations between the items was $r(245) = .38, p < .001$ in the UK and $r(142) = .54, p < .001$ in Iran.

Perceived behavioural control. Perceived behavioural control (PBC) was measured with two items: “If I wanted to I could donate money to charity” (strongly *disagree* to strongly *agree*), and “For me, donating money to charity would be...” (extremely *difficult* to extremely *easy*). Correlations between the items was $r(245) = .65, p < .001$ in the UK and $r(142) = .58, p < .001$ in Iran.

Obligations and intentions to donate : Next, participants responded to six statements: “I have a moral obligation to donate money to a charity that promotes the welfare of...” (strongly *disagree* to strongly *agree*) and then “Within the next 6 months, I intend to donate money to a charity that promotes the welfare of...” (extremely *unlikely* to extremely *likely*). Participants received these

statements in relation to each of ‘people in my community’, ‘people in my country’, and ‘people in other parts of the world’. All statements were responded to on 7-point scales.

Demographic questions: Finally, participants answered some background questions (relating to e.g., age and gender) and a question about their religion: they were asked to rate the extent of their agreement or disagreement with this statement: “I consider myself to be a religious person” on a 7-point Likert-type response scale ranging from 1 (*completely disagree*) to 7 (*completely agree*).

Design and Procedure

UK participants were recruited opportunistically via an email message that was sent out to mailing lists of several UK universities. The message contained information about the study alongside the web link to the questionnaire. Participants were recruited topic blind. As an incentive to participate, two cash prize draw of £50 was offered and were informed that their participation is entirely voluntary and their email address is requested only so that we were able to contact the winners of the Prize Draws. They were told that the study will take about 30 minutes on average. At the end, two of the participants were selected at random and each won £50. Iranian participants were recruited in various areas at campus in Sari, and asked if they were willing to fill in a questionnaire.

Participants in both countries were sequentially assigned to one of the three conditions; they completed the Individualism and Collectivism scale first, followed by the Moral Foundation Questionnaire. Afterwards, they completed the indicated TPB variables and other measures.

Results

Preliminary analyses

There was a significant relationship between gender and country, $\chi^2 (1, N = 383) = 25.03, p < .001$; the ratio of females to males was higher in the UK (UK: 90% female, 10% male, Iran: 65% female, 28% male). The relationship between age and country was also significant, $t (374) = 8.45, p < .0$

01, showing that Iranian participants were significantly older than were UK participants (UK: $M_{\text{age}} = 19.89$, $SD = 2.92$, Iran: $M_{\text{age}} = 24.96$, $SD = 8.51$). There was also a significant relationship between religion and country, $t(385) = 7.95$, $p < .001$. (UK: $M_{\text{religion}} = 2.78$, $SD = 2.05$, Iran: $M_{\text{religion}} = 4.30$, $SD = 1.28$); showing that Iranian participants rated themselves as more religious than did UK participants.

Individualism/Collectivism Scale across two countries

According to Hofstede's (1980) research, the United Kingdom is presumed to be an individualist culture and Iran to be a collectivistic culture. To assess the first objective of the study, it was expected that both Iranian and UK participants would score higher on vertical orientation indices than on horizontal orientation indices. However, the scores of Iranian and British participants were more horizontal (see Table 18). A multivariate analysis of covariance (MANCOVA) was conducted with Country as the independent variable and the four cultural orientation scales (HI, HC, VI, and VC) as dependent variables: since there were age and gender differences between the samples, gender was included as a factor and age as a covariate to ensure that the significant differences are between countries and not simply because of gender or age differences. The Box's M was not significant. There was a statistically significant difference on cultural orientation between Iranian participants and the UK participants: $F(4, 368) = 28.91$, $p = .000$; Wilk's $\Lambda = 0.761$, partial $\eta^2 = .239$ but gender was not a significant factor: $F(4, 368) = 1.34$, $p = .252$; Wilk's $\Lambda = 0.986$, partial $\eta^2 = .014$. Age was a significant covariate: $F(4, 368) = 3.41$, $p = .009$; Wilk's $\Lambda = 0.964$, partial $\eta^2 = .036$, but the main effect of age was not significant for any cultural orientations.

Table 17 presents the means and standard deviations of the dependent variables in the two countries. Univariate analysis of variance (ANOVAs) was conducted as follow-up tests to the MANOVA. A significant main effect of Country for all cultural orientations was found. For Vertical Individualism, $F(1, 385) = 4.45$, $p < .01$, $\eta^2 = 0.01$, Iranian participants ($M = 4.30$; $SD =$

1.09) scored higher than British participants ($M = 4.06$; $SD = 1.11$). For Vertical Collectivism, $F(1, 385) = 135.81$, $p < .001$, $\eta^2 = 0.26$, again Iranian participants ($M = 5.34$; $SD = 0.81$) scored higher than British participants ($M = 4.12$; $SD = 1.08$). For Horizontal Collectivism, $F(1, 385) = 21.38$, $p < .001$, $\eta^2 = 0.05$, Iranian participants ($M = 5.54$; $SD = 0.76$) scored higher than British participants ($M = 5.04$; $SD = 1.34$). But, for Horizontal Individualism, $F(1, 385) = 7.89$, $p < .001$, $\eta^2 = 0.02$, British participants ($M = 5.19$; $SD = 0.69$) scored higher than Iranian participants ($M = 4.88$; $SD = 1.46$).

Table 18:

Standardized Means and Standard Deviations for Individualism/Collectivism by Country

<i>Cultural Orientation Subscale</i>								
	Horizontal Individualism		Horizontal Collectivism		Vertical Individualism		Vertical Collectivism	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Iran	4.88	1.46 ^b	5.54	0.76 ^b	4.30	1.09 ^b	5.34	0.81 ^b
UK	5.19	0.69 ^b	5.01	1.34 ^b	4.06	1.11 ^b	4.12	1.08 ^b

NOTE: a. Difference between countries is significant at $p < .05$.

b. Difference between countries is significant at $p < .01$.

Moral Foundation Scale scores across two countries

To assess the second objective of the study, a multivariate analysis of covariance (MANCOVA) was conducted with country and gender as independent variables, age as a covariate, (to ensure that the significant differences are between countries and not simply because of gender or age differences) and the Moral Foundation subscales (i.e., care, reciprocity, loyalty, and sanctity) as dependent variables. A Box's M was not significant. There was a statistically significant difference

of country on Moral Foundation categories, $F(4, 368) = 33.04, p < .005$; Wilk's $\Lambda = 0.736$, partial $\eta^2 = .264$. Gender was a significant factor: $F(4, 368) = 5.58, p = .252$; Wilk's $\Lambda = 0.943$, partial $\eta^2 = .057$ but age was not a significant covariate: $F(4, 368) = .512, p = .72$; Wilk's $\Lambda = 0.994$, partial $\eta^2 = .006$.

Univariate analyses of variance (ANOVAs) were conducted as follow-up tests to the MANOVA. Significant main effect of country were found for reciprocity, $F(1, 371) = 3.17, p = .075, \eta^2 = 0.008$, Loyalty, $F(1, 371) = 79.97, p < .001, \eta^2 = 0.17$, and Sanctity, $F(1, 371) = 103.17, p < .001, \eta^2 = 0.21$. All pairwise comparisons were run for each simple main effect with reported 95% confidence intervals and p-values Bonferroni-adjusted within each simple main effect. Reciprocity in the Iran had a statistically significantly higher mean scores than did reciprocity in the UK; a statistically significant mean difference of 1.92 (95% CI, -0.02 to 0.40), $p = .075$. Iranian female ($M = 5.31; SD = 0.70$), Iranian male ($M = 5.24; SD = 0.63$), British female ($M = 5.19; SD = 0.68$), British female ($M = 4.90; SD = 0.95$).

Loyalty in the Iran had a statistically significantly higher mean scores than did Loyalty in the UK; a statistically significant mean difference of 1.13 (95% CI, 0.88 to 1.38), $p < .001$. Iranian female ($M = 4.94; SD = 0.71$), Iranian male ($M = 5.07; SD = 0.60$), British female ($M = 3.84; SD = 0.90$), British female ($M = 3.82; SD = 0.85$).

Sanctity in the Iran had a statistically significantly higher mean scores than did Sanctity in the UK; a statistically significant mean difference of 1.31 (95% CI, 1.06 to 1.57), $p < .001$. Iranian female ($M = 4.93; SD = 0.64$), Iranian male ($M = 4.57; SD = 0.86$), British female ($M = 3.63; SD = 0.89$), British female ($M = 3.16; SD = 1.06$).

However, the main effect of Country was not significant for Care: $F(1, 371) = .087, p = .35, \eta^2 = 0.002$. Table 19 presents the means and standard deviations of the dependent variables in two countries for men and women.

Table 19:

Standardized Means and Standard Deviations for Value Types by Country and Gender

Moral Foundation Subscale																
Care				Reciprocity				Loyalty				Sanctity				
Female		Male		Female		Male		Female		Male		Female		Male		
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Iran	5.09	0.90	4.91	0.84	5.31	0.70	5.24	0.63	4.94	0.71	5.07	0.60	4.93	0.64	4.57	0.86
UK	5.11	0.76	4.64	0.99	5.19	0.68	4.90	0.95	3.84	0.90	3.82	0.85	3.63	0.89	3.16	1.06

NOTE: a. Difference between countries is significant at $p < .05$.b. Difference between countries is significant at $p < .01$.

Relations between Individualism/Collectivism and Moral Foundation

As mentioned earlier, it has been suggested that there are considerable common characteristics between key aspects of collectivism and *binding foundations* and it was hypothesised that Individualistic orientations would be positively correlated with *individualizing foundations* and Collectivistic orientations would be correlated with *binding foundations*. To assess the third objective of the study, a bivariate correlation was used to examine relations between cultural orientations and Moral Foundation categories across two countries (Table 20).

For Iranian participants, correlations supported these expectations: Horizontal Collectivism was correlated positively with *Binding foundations* (*Loyalty*: $r = 0.35$, $n = 142$, $p < .001$, *Sanctity*: $r = 0.27$, $n = 142$, $p < .001$) and Vertical Collectivism was also correlated positively with *Binding foundations* (*Loyalty*: $r = 0.48$, $n = 142$, $p = .000$, *Sanctity*: $r = 0.37$, $n = 142$, $p < .001$). But for UK participants, Horizontal Collectivism was not correlated significantly with *Binding foundations* (*Loyalty*: $r = -0.05$, $p = .40$, *Sanctity*: $r = -0.00$, $p = .88$) and Vertical Collectivism was not correlated significantly with *Binding foundations* (*Loyalty*: $r = 0.09$, $p = .13$, *Sanctity*: $r = 0.26$, $p < .001$).

Conversely, in the UK, Horizontal individualism was positively correlated with *individualizing foundations* (care: $r = 0.20$, $n = 245$, $p = .002$, reciprocity: $r = 0.24$, $n = 245$, $p < .001$) and Vertical individualism were correlated positively with *binding foundations* (*Loyalty*: $r = 0.24$, $n = 245$, $p < .001$, *Sanctity*: $r = 0.126$, $n = 245$, $p = .049$). In Iran, Horizontal individualism was not significantly correlated with *individualizing foundations* (care: $r = 0.05$, $p = .49$, reciprocity: $r = -0.02$, $p = .75$) and Vertical individualism was not correlated significantly with *binding foundations* (*Loyalty*: $r = -0.01$, $p = .81$, *Sanctity*: $r = 0.04$, $p = .57$). These findings indicate that *binding foundations* relates to collectivism in different way in two countries.

Table 20:

Correlations Between Cultural Orientations and Moral Foundation Values by Country

	<i>Cultural Orientation</i>							
	<i>Horizontal Individualism</i>		<i>Horizontal Collectivism</i>		<i>Vertical Individualism</i>		<i>Vertical Collectivism</i>	
	Iran	UK	Iran	UK	Iran	UK	Iran	UK
Care	.05	.20**	.05	.07	.01	.02	.12	.07
Reciprocity	-.02	.23**	.07	.12	-.01	-.02	.03	.10
Loyalty	-.01	.05	.35**	-.05	-.01	.24**	.48**	.09
Sanctity	-.00	.05	.27**	-.00	.04	.12*	.37**	.26**

NOTE: Horizontal Individualism = independent, same status; Horizontal Collectivism = interdependent, same status; Vertical Individualism= independent, different status; and Vertical Collectivism = interdependent, different status.

* $p < .05$.

** $p < .01$.

Relationships between Moral Foundation categories and the TPB in two countries

To assess the fourth objective of the study, a bivariate correlation was used to examine relations between Moral Foundation categories and TPB elements across two countries (Table 21). In the sample of UK participants all foundations were correlated positively with attitude to donation (*care*: $r = 0.311$, $n = 245$, $p < .001$, *reciprocity*: $r = 0.284$, $n = 245$, $p < .001$, *loyalty*: $r = 0.138$, $n = 245$, $p = .031$, *sanctity*: $r = 0.166$, $n = 245$, $p = .009$) and Moral norm regarding donation to charity (*care*: $r = 0.311$, $n = 245$, $p < 0.001$, *reciprocity*: $r = 0.276$, $n = 245$, $p < .001$, *sanctity*: $r = 0.185$, $n = 245$, $p = .004$) but not with Intentions to donations (*care*: $r = 0.03$, $n = 245$, $p = .58$, *reciprocity*: $r = 0.11$, $n = 245$, $p = .06$, *sanctity*: $r = 0.09$, $n = 245$, $p = .14$).

However, for Iranian participants Attitudes to donation was only correlated positively with loyalty (*care*: $r = 0.12$, $n = 142$, $p = .15$, *reciprocity*: $r = 0.08$, $n = 142$, $p = .31$, *loyalty*: $r = 0.17$, $n = 142$, $p = .04$, *sanctity*: $r = 0.11$, $n = 142$, $p = .16$) and Moral norm regarding donation to charity was

correlated positively with loyalty and sanctity (*care*: $r = 0.10$, $n = 142$, $p = .19$, *reciprocity*: $r = 0.12$, $n = 142$, $p = .12$, *loyalty*: $r = 0.18$, $n = 142$, $p = .03$, *sanctity*: $r = 0.21$, $n = 142$, $p = .00$) and Intentions to donations was correlated positively with loyalty (*care*: $r = 0.01$, $n = 142$, $p = .82$, *reciprocity*: $r = -0.03$, $n = 142$, $p = .69$, *loyalty*: $r = 0.24$, $n = 142$, $p = .00$, *sanctity*: $r = 0.14$, $n = 142$, $p = .07$).

Table 21:

Correlations Between Moral Foundation Values and TPB variables by Country

	<i>TPB components (in relation to donation to a charity)</i>					
	<i>Attitude</i>		<i>Intention</i>		<i>Moral norm</i>	
	Iran	UK	Iran	UK	Iran	UK
Care	.12	.31**	.01	.03	.10	.31**
Reciprocity	.08	.28**	-.03	.11	.12	.27**
Loyalty	.17*	.14*	.24**	.11	.18*	.09
Sanctity	.11	.16**	.14	.09	.21**	.18**

* $p < .05$.** $p < .01$.***Collectivism and Donation to out/ingroup in two countries***

To assess the fifth objective of the study, to examine if collectivistic orientations predicted intention to donate money to a charity that promotes the welfare of community members (ingroup), two separate multiple regressions for UK sample and Iranian sample were conducted where cultural orientations were used as independent variables and intention to donate to community (ingroup) and intention to donate to world (out-group) as dependent variable.

In both countries, horizontal and vertical collectivism orientations significantly predicted intention to donate money to community (ingroup); UK participants: $R^2 = .31$, $F(2, 242) = 3.856$, p

= .022, and Iranian participants: $R^2 = .55$, $F(2, 130) = 3.776$, $p = .025$. For the UK participants, both horizontal collectivism ($\beta = -.33$, $p < .001$) and vertical collectivism ($\beta = .44$, $p < .001$) produced a significant independent predictive effect. For Iranian participants, only horizontal collectivism ($\beta = .48$, $p = .037$) produced a significant independent predictive effect but vertical collectivism did not ($\beta = .06$, $p = .76$).

However, in both countries, neither collectivism orientations [UK participants: $R^2 = .13$, $F(2, 242) = 1.534$, $p = .218$, and Iran participants: $R^2 = .61$, $F(2, 130) = 4.241$, $p = .016$] and nor individualism did not significantly predicted intention to donate money to people in other parts of the world (out-group).

These results stated that collectivism were associated with more positive intentions to donate to ingroup charity than to out-group charity.

Predicting intentions from Attitude and Moral norm

To assess the sixth objective of the study, a hierarchical multiple regression analysis was carried out to determine the effect of the attitudes and moral norms on intention to donate (Table 22). Attitude was entered as a predictor at step 1, and moral norm was entered at step 2. For the UK participants, moral norms ($F(4, 240) = 46.07$, $p < .001$) and attitudes ($F(4, 240) = 64.05$, $p < .001$) produced significant independent predictive effect. For the Iranian participants, moral norms ($F(1, 139) = 24.12$, $p < .001$) and attitudes ($F(1, 140) = 8.15$, $p < .001$) also produced significant independent predictive effect. These results indicate that more positive intentions to donate to charity were associated with greater moral concern about it in both countries. It was interesting to find that moral norms were the most useful predictor of intentions.

Table 22.

Summary of Hierarchical Multiple Regression Analysis Predicting Intention

	UK		Iran	
	β	β	β	β
Variables entered	Step 1	Step 2	Step 1	Step 2
Attitude	0.45***	0.18***	0.23***	-0.07***
Moral norm		0.45***		0.48***
R ²	0.20	0.33	0.05	0.19
ΔR^2		0.12		0.14

*** $p < .001$

Discussion

Individualism and collectivism dimensions have been widely used to interpret differences across cultures in various fields. This paper explored the potential relationship between individualism and collectivism, on the one hand, and charity giving intentions, on the other. Specifically, the purposes of the present study were to investigate and compare the associations between cultural orientations, moral values and behavioural intentions toward charitable giving in the UK and Iran. The results of this study revealed that UK participants and Iranian participants differed significantly along individualistic and collectivistic orientations. As expected, and consistent with previous research (Hofstede, 1980), the UK participants were more individualistic than the Iranian participants and the Iranian participants were more collectivistic than the UK participants. Therefore the first objective of this study was achieved.

It was also expected that UK participants would score higher on vertical orientation indices and Iranian participants would score higher on horizontal orientation indices but both Iranian and UK participants were more horizontally oriented. The UK participants scored higher on horizontal individualism than on the vertical individualism dimension which might be attributable to sample

bias arising from college students. According to Triandis and Gelfand (1998) individualism is strongly linked to horizontal definitions of social relationships among students. It is possible that college students are more horizontally oriented and care more about friendships and relationships than the overall population does (Chiou, 2001). Indeed, this finding is consistent with the findings of previous work on US university students in reporting higher scores on horizontal individualism than on other cultural orientations (Chiou, 2001; Singelis et al., 1995). Triandis's (1995) suggested that Americans are moving to a more horizontal orientation. This may be true of a sample of UK students who may be more focused on elements of horizontal individualism such as equality and freedom than are other UK populations. However it is interesting to note that Iranian participants scored higher than UK participants on *vertical Individualism*.

However, cultural differences also emerged in the moral value ratings. As expected, and in line with the second objective, both female and male participants in UK tended to endorse the individualizing foundations more so than the binding foundations. Contrary to the hypothesis, Iranian female participants also scored higher on individualizing foundations while Iranian male participants endorsed the individualizing and binding foundations to the same extent.

Regarding to the third objective, correlations between cultural orientation and values were found. In both cultures, binding foundations appeared to be associated with a vertical collectivism orientation, and individualizing foundations were associated with horizontal individualism (but only among UK participants). However, no relation between individualizing foundations and any cultural orientations were found among Iranian participants. These results also suggest that the cultural orientation of vertical collectivism is related to binding foundations in similar ways across the two different cultures.

Moreover, the fifth objective was supported in UK such that collectivism was associated with more positive intentions to donate to community charity (ingroup) than outgroup charity. This finding is consistent with Bond & Smith (1996) who argued that collectivistic cultures show less

concern for out-group members than individualistic cultures.

It was very interesting to find that moral norms were the more useful predictor of intentions than were attitudes. Regarding to this, Godin et al. (2006) found that intentions aligned with moral norms better predict behaviour compared with intentions aligned with attitudes. Thus, further research is needed to examine this on actual donation behaviour between two countries. In conclusion, the present study demonstrates that an extended TPB (Ajzen, 1991) incorporating moral norm is useful in predicting people's intentions toward charity giving.

The limitations of this research correspond to sample composition. Of course the samples in this study were not representative of their national populations and may not even be representative of the population of university students in the two countries. Consequently, a broader and more representative sample of respondents is necessary in order to assure validity. Future research could examine nonstudent samples in both cultures. Secondly, it has been suggested that the use of self-report data may cause social desirability effects (Randall & Fernandes, 1991). Moreover, moral values may be dependent on other demographic factors such as education (Feather, 1994). Further research needs to illuminate the association between such demographic factors and moral values in both national cultures.

In the present study cultural orientations were assessed within two countries, the UK and Iran. Using different sampling of cultural orientations such as vertical individualistic and vertical collectivistic societies would be helpful for establishing the generalizability of the link between cultural orientation, moral values and TPB components. Indeed, future research should examine the relation of cultural orientations and moral values in other, for example more vertical oriented, cultures.

Chapter 6

Discussion

Overview of Current Thesis

When does past moral behaviour lead people to take further moral action and when does it liberate them to act inconstantly with their prior moral action. A considerable body of research in social psychology suggests that people are motivated to act consistently after recalling their past moral behaviour, while recent research in moral psychology has documented that priming past moral behaviour might reduce subsequent ethical behaviour by producing 'licence' to engage in a behaviour that might otherwise discredit the self (e.g., Jordan, Mullen, & Murnighan, 2011; Sachdeva, Iliev, & Medin, 2009).

The majority of this latter research has not taken into account the role of moderating variables on the effectiveness of priming past behaviour. Therefore, the aim of the current thesis was to extend moral licensing research by exploring different individual difference variables as potential moderators of priming past action on subsequent motivation and behaviour.

In Chapter 2, two studies examined the effect of priming past behaviour on individuals' attitudes, intentions and charity donation behaviour. The first study revealed evidence of moral cleansing effects such that after recalling their past unethical behaviour participants were more likely to donate to charity than were participants in the control group. Moreover, in study 1 a moderate licensing effects were supported (moral Condition was marginally significant), in that participants donated less to charity after recalling their past ethical behaviour. Study 2 was designed to examine the moderating role of self-monitoring between priming past behaviour and individual's donation behaviour. The results showed that high self-monitors were more likely to show consistent intentions after recalling their past ethical behaviour than were high self-monitors in control group. However, there were no

effects of the priming past behaviour manipulation on donation behaviour for low self-monitors.

Study 3 (in Chapter 3) extended the design of the first two studies (reported in Chapter 2) by exploring the moderating impact of moral identity regarding licensing and cleansing effects on attitudes, intentions, moral norm and donation behaviour. The findings revealed that high internalized participants reported greater intention to donation after recalling their past moral behaviour than in the control condition. However, no effect of priming past moral behaviour on donation intentions for low internalized participants was found. There was also no evidence that moral identity moderated the effect of priming past unethical behaviour on attitudes or intentions. Moreover, another purpose of this study was to assess the mediating role of positive and negative emotions between priming past behaviour and subsequent donation behaviour. Based on the findings, negative emotions showed a significant relationship with donation behaviour but no mediation effect of priming past behaviour and donation behaviour by positive emotions was identified.

Study 4 (in Chapter 4) further explored the effects of licensing and cleansing effects in the context of environment-related actions and investigated whether environmental attitude moderates the effect of priming past behaviour on subsequent pro-environment behaviour. The findings revealed that priming past pro-environmental behaviour lead to a licensing effect such that participants were less likely to behave pro-environmentally after recalling their past pro-environmental behaviours. Moreover, the results revealed cleansing effects. Additionally, internally motivated individuals were less likely to exhibit moral licensing effects after recalling their past pro- environmental actions and were more likely to exhibit moral cleansing effects after recalling their lack of pro- environmental actions than were participants in control group. This study provided preliminary evidence that environmental

attitudes might moderate priming past behaviour effects in the context of environment-related actions.

Along with the investigation of moral licensing and cleansing effects, another purpose of this thesis was to investigate the effect of moral norms on intentions, using an extended theory of planned behaviour. Results of studies 1, 2 and 4 confirmed that moral norm effect on intentions was mediated by people's attitudes. Therefore, moral norm was identified as a strong predictor of charitable donation and pro-environment intentions.

Study 5 (in Chapter 5) was built on the idea that conception of morality differs in different cultures and examined how different moral values and cultural orientations relate to moral attitudes and intentions. Specifically, the purpose of this study was to investigate and compare the associations between cultural orientations, moral values and behavioural intentions toward charitable giving in the UK and Iran. Surprisingly, moral norms were a more useful predictor of intention than were attitudes in both national cultures.

Implications

The findings of the current thesis contribute to the existing literature by highlighting the importance of considering individual differences as moderators of licensing effects. Some studies have found that past moral behaviour may inhibit subsequent moral behaviour (Sachdeva et al., 2009; Jordan et al., 2011). The findings of current thesis may provide some insight into the results of earlier studies that demonstrated that moral actions may decrease subsequent moral behaviour by suggesting that these studies did not take into account whether initial behaviour was important to individuals' self-identity and whether signalled that one is a moral person. According to Van der Werff and her colleagues (Van der Werff et

al., 2014), moral behaviour can be promoted by reminding people of their past moral actions, particularly when these actions strongly signal that one is a moral person.

The study reported in Chapters 3 examined the moderating effect of moral identity on moral intentions and behaviour in charity donation context. The findings of this study found that the effects of moral identity were most apparent for highly internalized individuals; highly internalized participants, after recalling their past moral behaviour, reported greater attitudes and intentions to donate than did low internalized participants. These findings are consistent with the findings of Van der Werff et al. (2014), who similarly found that past pro-environmental behaviour will promote subsequent environmentally-friendly behaviour if it strengthens environmental self-identity. Together, these findings highlight the importance of taking into account self identity as a moderator of the effects of priming past behaviour. Previous research that has explored the impact of self identity on priming past behaviour effects has typically explored self identity as a motivational factor influencing moral behaviour not as moderator of the effects of past behaviour (Jordam et al., 2011; Van der Werff et al., 2014).

Additionally, study reported in Chapter 4 shown that the licensing effect is influenced by the way the environmental attitude is motivated; whether individuals are internally motivated or not. It was concluded that internally motivated individuals are less likely to exhibit moral licensing effects after recalling their past pro- environmental actions and were also more likely to exhibit moral cleansing effects after recalling their lack of pro-environmental actions than were participants in control group.

The studies reported in the current thesis provide a novel approach to the licensing and cleansing effect, as this research is one of few to examine licensing effects comparing recalling past behaviour with a neutral condition. Importantly, adding a neutral control

condition was the strength of four studies investigating licensing and cleansing effects in the present thesis. Although a growing body of literature has found broad evidence for moral licensing, very few studies have measured moral licensing effect comparing moral condition to control group behaviour; most of these studies have compared a moral condition to an immoral condition. In the present research, a neutral control condition was used to examine the licensing effect.

Furthermore, the findings support the hypothesis that priming past unethical behaviour increases subsequent moral intentions and behaviour. In all four studies examining the effect of past unethical behaviour, cleansing effects were found (except the second study reported in Chapter 2). In Chapter 4, the results revealed that when individuals' environmental attitudes are internally motivated, highly internally motivated individuals are more likely to act pro-environmentally after recalling their unfriendly behaviour toward environment than are low internally motivated individuals. However, in the second study of Chapter 2, a weak cleansing effect for high self-monitors were found. It was expected that high self-monitors will be more likely to cleanse their past by involving themselves in moral behaviour. The lack of evidence for cleansing effect in this study might be due to the fact that this study designed as a self reported study and participants did not present themselves to others; participants were aware that that their responds will not be revealed to others.

Furthermore, the present thesis highlights that the Theory of Planned Behaviour is a helpful framework for better understanding of charitable giving and pro-environment intentions. This thesis has tested an extended model of TPB, by adding moral norm as a component, and findings revealed that moral norms were a significant predictor of donation intentions. Four studies in Chapter 2, 3, and 5 reported that people with a high moral norm displayed greater intentions to donation. This suggests that public campaigns and charitable

organizations need to consider levels of “moral norm” in their promotional materials when targeting people’s sense of responsibility toward charitable giving.

The results of the studies presented in this thesis suggest that in order decrease the chance of licensing effects and increase the chance of consistency effects, it is vital that individuals see themselves as a moral or environmentally friendly person. Thus, in order to induce environmentally friendly actions, environmental campaigns should focus on the pro-environmental actions that signal individuals as an environmental friendly person. As proposed by Van der Werff et al. (2014), campaigns should focus on, a range of rather different pro-environmental actions or on single actions that have strong signalling features; the stronger the signalling functions of these behaviours, the more likely it is that they will strengthen people's environmental self-identity which might lead to more pro-environmental actions. The same pattern may apply for charity organizations such that to promote more moral actions these organizations should focus on the moral behaviour that signal individuals as moral person.

This is also in line with Meijers et al.’s (2014) conclusion that when people have a sustainable self-view (or such a view is made temporarily salient), they are more likely to engage in sustainable behaviour after recalling their past pro-environment behaviour. In this regard, communicators might use symbolising to persuade environmental self identity in creating wider behaviour change. As mentioned in Chapter 3, people high in moral identity symbolization should be more likely to act pro-socially after recalling their past immoral behaviour when others can witness and/or acknowledge the behaviour. Moreover, internalisation could be applied to reduce the likelihood of licensing effects since people high in moral identity internalization are likely to act pro-socially because doing so is consistent with their understanding of what it means to be a moral person.

However, another particularly useful technique to elicit an environmental self identity is the social labelling technique (Meijers et al. 2014). Meijers et al. (2014) argued that by providing individuals with the social label ‘you are an environmental person’, they are more likely to view themselves as an environmental person.

Potential Limitations

The current thesis is subject, of course, to a number of limitations. One potential limitation that needs to be addressed is the manipulation of moral licensing. It has been argued that the initial writing task that was used to recall past behaviour might not be effective in priming past behaviour (Blanken, van de Ven, Zeelenberg, & Meijers, 2015). In the current thesis, in first three studies reported in Chapters 2 and 3, it was not checked whether or not participants violated the recall instructions and whether participants wrote about their own traits or used the negative traits when they were asked to write a couple of lines about themselves. Moreover, it was not checked whether or not participants’ recalled past behaviour was in the same domain of outcome measures. However, the study reported in Chapter 4 used a different method of recalling past behaviour, where both the past and future behaviour were in the same domain and the licensing effects were found. Therefore it might be the case that the manipulation used in Chapter 2 and 3 was not effective and reliable.

Another potential limitation of current thesis is that it measured self-reported rather than actual behaviour. Donation behaviour in Chapters 2 and 3 was measured by self report method; while the actual dependent measure of behaviour in Chapter 4 was used (whether or not participants actually clicked on the web page address provided about calculating Carbon footprint). There is evidence that that moral licensing would be stronger in actual behavioural situations compared to hypothetical situations. Blanken and her colleagues (2015), in their meta-analysis, hypothesized that hypothetical behaviour are cheap and easy for people to

display than actual behaviour which would make a consistency effect more likely. They examined the differences between actual versus hypothetical behaviour and found no differences. Their findings were consistent with Young et al.'s (2012) findings that investigated the effects of recalling good deeds on hypothetical and actual donations on charity and found no correlation between hypothetical donations and actual donations. However, there is evidence in the field of environment-related behaviour that individuals are more likely to adopt new pro-environmental behaviours that are simple and painless (Thøgersen & Crompton, 2009). Therefore, besides the manipulation of priming past behaviour, the more careful consideration of dependent variables in moral licensing studies is necessary. To achieve more reliable evidence of moral licensing in real life, future research may consider the development of more reliable measures of behaviour and pay more attention to the validity and reliability of self reported behaviour measures.

A further limitation of the studies reported in thesis is that the studies have been based on self-reported behaviours in surveys which are subject to a number of errors and biases such as social desirability bias (Randall & Fernandes, 1991) where participants might present themselves in a positive way. However, using self report methods provided the possibility of running surveys online, which is a cheaper, faster, and more efficient method than paper surveys.

As has been mentioned in the discussion sections of the empirical chapters, an important limitation in this research programme is the reliance on student samples. The majority of the participants in the studies presented in Chapters 2, 3, 4 and 5 were university students. According to Lanzini (2014), students usually have very tight budgets and very specific behavioural patterns influenced by their situational conditions (i.e. living at campuses), which might influence their pro-environmental behaviour and charity donations.

In line with this, an important limitation of the study reported in Chapter 5 was that respondents were not representative of their national populations. Hence, a broader and more representative sample of respondents would be useful for establishing the generalizability of the link between cultural orientations and moral values in Chapter 5.

Future research directions

Considering the limitations which have been mentioned earlier, a number of possible directions for future research are outlined below.

Regarding the possible limitations of the licensing manipulation, future work needs to reconsider the way that past behaviour is primed made salient. Further studies are needed to develop an effective moral licensing manipulation in order to examine moral licensing effects. It is essential to apply more reliable moral licensing manipulations and also to include checks to ensure that recalled past behaviours are relatively important to participants' identity and also in the same domain as the intentions and behaviour that form the outcome measures. However, it should be noted that taking a separate assessment to assess whether or not the recalled past behaviour is important to the person's sense of self prior to behaviour measure might impact the effects of licensing manipulations.

Regarding sample limitations, most of studies investigating licensing and cleansing effects usually have been carried out in a laboratory setting with small samples of participants. The generalisability of the study findings could be strengthened by testing the licensing and cleansing effects with samples representative of other populations (than students) in different domains of pro-environmental behaviours charity activities. Moreover, future research would benefit from the use of larger samples of nonstudent participants. To

study licensing effects, the sample of a population must be subdivided into groups and if the size of samples in each subgroup is too small, finding significant relationships might be difficult, as statistical tests normally require a larger sample size to ensure a representative distribution of the population. As noticed by Mullen (2016) applying Large-scale replication efforts of licensing and cleansing effects will increase our confidence in licensing effects. In Chapter 4, where licensing effects were found, the sample size was larger than in the studies reported in Chapters 2 and 3.

In the present thesis, several motivational factors (such as attitudes, identity and self monitoring) that we expected would accentuate or attenuate licensing and cleansing effects have been proposed as moderator variables. However, I recognize that other variables may also be efficient in influencing these effects. Therefore, a possible avenue for future research might be to consider alternative individual difference variables as potential moderators of licensing and cleansing effects.

For example, the level of conceptual abstraction of past behaviour (the extent to which past behaviours are conceptualised as an abstract or concrete level) may impact on the subsequent behaviour. Conway and Peetz (2012) found that participant who recalled a temporally distant abstract moral behaviour demonstrated consistency effects; those who recalled immoral actions were less willing to help than participants who recalled moral actions, while participants who recalled a recent concrete moral behaviour feel licensed to engage in immoral behaviour; participants who recalled immoral actions were more willing to help than participants who recalled moral actions.

Considering moral behaviour as goal pursuit may also impact subsequent moral behaviour. Research on goal pursuit suggests that one's behavioural history will liberate future behaviours when one's past behaviours are interpreted in terms of progress rather than in terms of commitment to a goal (e.g., Fishbach & Dhar, 2005). Fishbach and Dhar reported

that actions that are framed as a goal progress increase the likelihood of pursuing incongruent actions and to pursue inconsistent goals, whereas the same actions framed as a goal commitment elicit a tendency to subsequently maintain the pursuit of the focal goal. Further research is needed to shed light on this issue.

From another point of view, the relationship between priming past behaviour and subsequent behaviour may be mediated by motivational factors such as attitudes, affect, or identity. Further research is needed to study different mediators of the link between priming past behaviour and future action in the domains of environment-related behaviours and charity giving. Among the most important motivational factors, several studies have focused on the role of self identity and shown that self identity predicts behaviour (Aquino, 2002; Hardy, 2006). In Chapter 3, the role of self identity has been examined, not as a mediator; the moderating effect of moral identity was investigated. The results also revealed that a strong moral identity predicted attitudes, intentions and moral norm toward charity. Moreover, the effect of priming past behaviour on self identity has been already examined by Jordan et al. (2011). They reported that recalling moral or immoral behaviour did not influence individuals' internal moral identities; after recalling moral behaviour, internal dimension of moral identity remained stable and no licensing effects occurred. Therefore, another possible direction for future research might be to study under which circumstances self identity mediates the relationship between recalling past behaviour and subsequent behaviour.

In the domain of environment-related behaviour, Steg and Vlek (2009) proposed that besides motivational moderators, contextual factors (e.g., the availability of recycling facilities or the quality of public transport) may facilitate or constrain environmental behaviour and influence individual motivations. They argued that contextual factors may operate in four different ways: they may directly affect behaviour, may moderate the

relationship between motivational factors and behaviour, may determine which type of motivations most strongly affects behaviour or the relationship between contextual factors and behaviour may be mediated by motivational factors. Regarding licensing and cleansing effects, contextual factors have not been examined. Therefore, an important direction for future research is to study under which circumstances contextual factors as well as motivational factors influence licensing and cleansing effects.

In the discussion of Chapter 4, it was explained that licensing effects might have occurred because both the initial behaviour and measured behaviour were in the same domain. However, there is also evidence that undertaking a moral behaviour in one domain might inhabit or exhibit licensing or cleansing effects even in different domains (e.g., Mazar & Zhong, 2012). Hence, this is a direction for future research: to test the moderating effects of different contextual and motivational factors in the same as well as in different domains.

Regarding the study reported in Chapter 5, moral values may be dependent on other demographic factors such as age and education (Feather, 1994) or religion. Further research needs to illuminate the association between such demographic factors and moral values in both national cultures. Importantly, the effects of religion on donation behaviour should be considered to determine whether variation in donation behaviour across cultures depends on religious belief.

Conclusion

A substantial body of research has demonstrated that past moral behaviour may inhibit as well as promote subsequent moral behaviour. The findings of the current thesis add to this body of research by addressing the moderating impact of self monitoring, moral identity and environmental attitude to determine when recalling past behaviour leads to licensing effects and when it leads to consistent behaviour. Obviously, there are other moderator variables that may increase or decrease the likelihood of licensing and cleansing effects. Hopefully, future researchers will examine other potential moderators to determine whether other factors may strengthen the impact of priming past behaviour in terms of licensing effects. The findings of present thesis also highlight that the manipulation of priming past behaviour needs to be revisited and replicated in order to improve its reliability and validity.

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Appendix 1

Questionnaires referred to in Chapter 2 (study 1 and 2)

Study 1

All participants completed the following sections:

Thank you very much for agreeing to participate in this research.

Please answer each question carefully and honestly (for most questions, you are required to mark the box that best represents your opinion).

Your participation is entirely voluntary: you are under no obligation to take part in this research.

Your email address is requested only so that we are able to contact the winners of the Prize Draws. These addresses are then removed so that no records of them remain on file.

Please note that once you have clicked on the CONTINUE button at the bottom of each page you cannot return to review or amend that page.

Background Questions

1. Your *university* email address:
2. Please indicate your gender: Female --- Male ---
3. Please indicate your age: ----
4. What is your nationality? ----
5. What is your occupational status?
Student --- Employed --- Other (*please specify*): -----
6. If you are student, what subject are you studying?
7. Are you an undergraduate or postgraduate student? (*Optional*)
Undergraduate ---- Postgraduate ----

Questionnaire 1: Moral Licensing and Cleansing Manipulation

WRITING TASK

Moral Condition:

1. Please think about an occasion **when you did something that helped another person** (in a personal or work setting). Write a few sentences (2-3) about this in the space provided below.
2. Please copy out the following words into the nine spaces below: **caring, generous, fair, kind, compassionate, friendly, helpful, hardworking, and honest.**
3. What we would like you to do now is to **write a couple of paragraphs about yourself** that includes all the above nine words. Please make full use of the space provided.

Immoral Condition:

1. Please think about an occasion **when you used others to get something** (in a personal or work setting). Write a few sentences (2-3) about this in the space provided below.
2. Please copy out the following words into the nine spaces below: **disloyal, greedy, mean, selfish, cruel, jealous, dishonest, spiteful, and unfriendly.**
3. What we would like you to do now is to **write a couple of paragraphs about yourself** that includes all the above nine words. Please make full use of the space provided.

Control Group:

1. Please think about your typical Tuesday. Write a few sentences (2-3) about what you usually do in the space provided below.
2. Please copy out the following words into the nine spaces below: book, keys, house, computer, TV, phone, pen, car, and desk.
3. What we would like you to do now is to write a couple of paragraphs about yourself that includes all the above nine words. Please make full use of the space provided.

Outcome Measures

Thank you for completing the previous part of the questionnaire.

Before we move on to the main part of the questionnaire, we would like to give you the opportunity to pledge a donation to a charity. We often ask participants after they have taken part in our research whether they would like to do this and now seems like a good time to give participants this option. You will be able to donate this amount online; one of our researchers will email you the simple information on how you can do this (after you have completed the study).

Do you pledge to donate a sum of money to a charity of your choice? Whether or not you do so is entirely up to you.

1. Yes
2. No

a. Please select which of the causes you would like to donate to, or enter the name of your charity.

- Cancer Research ,
- Action for Kids,
- WWF (Worldwide fund for Nature),
- Other (*please specify*):

b. How much (in UK pounds £) would you like to donate?

Theory of Planned Behaviour Measures

Attitudes toward donating money to a charity

In the following questions, we ask about your views about you donating money to a charity within the next month. Please think about any charity of your choice that you generally feel positively towards.

Please write the name of the charity that you are thinking about here:.....

Attitudes Items

- “My attitude towards donating money to this charity is.....” [*Extremely negative to Extremely positive*] [*Extremely unfavourable to Extremely favourable*]
- “For me, donating money to this charity would be.....” [*Extremely bad to Extremely good*], [*Extremely harmful to Extremely beneficial*], [*Extremely foolish to Extremely wise*], [*Extremely unpleasant to Extremely pleasant*], [*Extremely unenjoyable to Extremely enjoyable*]

Behavioural intentions Items

- “I shall donate money to this charity within the next month.” [*Definitely shall not to Definitely shall*]
- “I shall make an effort to donate money to this charity within the next month.” [*Definitely false to Definitely true*]
- “I intend to donate money to this charity within the next month.” [*Definitely do not to Definitely do*]

Moral Norms Items

- “I would feel guilty if I did not donate money to this charity.” [*Strongly disagree to Strongly agree*]
- “It would be morally right for me to donate money to this charity.” [*Strongly disagree to Strongly agree*]
- “I have a moral obligation to donate money to this charity.” [*Strongly disagree to Strongly agree*]
- “Donating money to this charity would fit in with my ethical principles.” [*Strongly disagree to Strongly agree*]

Study 2

All participants completed background questions exactly the same as those reported in study 1.

Questionnaire 1: Self Monitoring Scale

ABOUT ME

The statements below concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. IF a statement is TRUE or MOSTLY TRUE as applied to you, tick **"True"** after the statement. If a statement is FALSE or NOT USUALLY TRUE as applied to you, tick **"False"** after the statement.

- | | | |
|--|-------------------------------|--------------------------------|
| 1. I find it hard to imitate the behaviour of other people. | ☐ True | ☐ False |
| 2. My behaviour is usually an expression of my true inner feelings, attitudes, and beliefs. | ☐ True | ☐ False |
| 3. At parties and social gatherings, I do not attempt to do or say things that others will like. | ☐ True | ☐ False |
| 4. I can only argue for ideas which I already believe. | ☐ True | ☐ False |
| 5. I can make impromptu speeches even on topics about which I have almost no information. | ☐ True | ☐ False |
| 6. I guess I put on a show to impress or entertain people. | ☐ True | ☐ False |
| 7. When I am uncertain how to act in a social situation, I look to the behaviour of others for cues. | ☐ True | ☐ False |
| 8. I would probably make a good actor. | ☐ True | ☐ False |
| 9. I rarely seek the advice of my friends to choose movies, books, or music. | ☐ True | ☐ False |
| 10. I sometimes appear to others to be experiencing deeper emotions than I actually am. | ☐ True | ☐ False |
| 11. I laugh more when I watch a comedy with others than when alone. | ☐ True | ☐ False |
| 12. In groups of people, I am rarely the centre of attention. | ☐ True | ☐ False |

- | | | |
|--|-------------------------------|--------------------------------|
| 13. In different situations and with different people, I often act like very different persons. | ☐ True | ☐ False |
| 14. I am not particularly good at making other people like me. | ☐ True | ☐ False |
| 15. Even if I am not enjoying myself, I often pretend to be having a good time. | ☐ True | ☐ False |
| 16. I'm not always the person I appear to be. | ☐ True | ☐ False |
| 17. I would not change my opinions (or the way I do things) in order to please someone else or win their favour. | ☐ True | ☐ False |
| 18. I have considered being an entertainer. | ☐ True | ☐ False |
| 19. In order to get along and be liked, I tend to be what people expect me to be rather than anything else. | ☐ True | ☐ False |
| 20. I have never been good at games like charades or improvisational acting. | ☐ True | ☐ False |
| 21. I have trouble changing my behaviour to suit different people and different situations. | ☐ True | ☐ False |
| 22. At a party, I let others keep the jokes and stories going. | ☐ True | ☐ False |
| 23. I feel a bit awkward in company and do not show up quite as well as I should. | ☐ True | ☐ False |
| 24. I can look anyone in the eye and tell a lie with a straight face (if for a right end). | ☐ True | ☐ False |
| 25. I may deceive people by being friendly when I really dislike them. | ☐ True | ☐ False |
-

Questionnaire 2: Moral Licensing and Cleansing Manipulation

Moral, Immoral and control Condition were exactly the same as those reported in study 1.

Questionnaire 3: Theory of Planned Behaviour Measures

Attitudes toward donating money to the British Red Cross

On Thursday 9th December, one of the participants in this research will be selected at random and will win £50 (this will actually happen!). The winner of this £50 will have the chance to donate some of this money to the British Red Cross if she or he wishes.

About the Red Cross:

"The British Red Cross helps people in crisis, whoever and wherever they are. We are part of a global voluntary network, responding to conflicts, natural disasters and individual emergencies. We enable vulnerable people in the UK and abroad to prepare for and withstand emergencies in their own communities. And when the crisis is over, we help them to recover and move on with their lives."

The British Red Cross Society, incorporated by Royal Charter 1908, is a charity registered in England and Wales (220949) and Scotland (SC037738). Charity Registration No 220949 (England and Wales) and Scotland (SC037738).

Please think about the event of you winning the £50; then answer the questions on the following pages [1 – 7 scales]

Attitudes Items

- “My attitude towards donating at least £25 to the British Red Cross if I win the £50 is ...”
[*Extremely negative* to *Extremely positive*] [*Extremely unfavourable* to *Extremely favourable*]
- “For me, donating at least £25 to the British Red Cross (if I win the £50) would be...”
[*Extremely bad* to *Extremely good*], [*Extremely harmful* to *Extremely beneficial*],
[*Extremely foolish* to *Extremely wise*], [*Extremely unpleasant* to *Extremely pleasant*],
[*Extremely unenjoyable* to *Extremely enjoyable*]

Behavioural intentions Items

- “ I shall donate at least £25 to the British Red Cross if I win the £50” [*Definitely shall not* to *Definitely shall*]
- “I shall make an effort to donate at least £25 to the British Red Cross if I win the £50” [*Definitely false* to *Definitely true*]
- “ I intend to donate at least £25 to the British Red Cross if I win the £50” [*Definitely do not* to *Definitely do*]

Subjective norm Items

- “Most people who are important to me probably think that I should donate at least £25 to the British Red Cross if I win the £50” [*Strongly disagree* to *Strongly agree*]
- “If I were to donate at least £25 to the British Red Cross if I win the £50, most people who are important to me would probably...” [*Disapprove strongly* to *Approve strongly*]

Perceived behavioural control Items

- “For me, donating at least £25 to the British Red Cross if I win the £50 would be...” [*Extremely difficult* to *Extremely easy*]
- How much control do you have over whether you do or do not donate at least £25 to the British Red Cross if you win the £50? [*No control* to *Complete control*]
- “It is mostly up to me whether or not I donate at least £25 to the British Red Cross if I win the £50” [*Strongly disagree* to *Strongly agree*]

Moral Norms Items

- “ I would feel guilty if I did not donate at least £25 to the British Red Cross if I won the £50” [*Strongly disagree* to *Strongly agree*]
- “It would be morally right for me to donate at least £25 to the British Red Cross if I win the £50” [*Strongly disagree* to *Strongly agree*]
- “ If I win the £50, donating at least £25 to the British Red Cross would fit in with my ethical principles” [*Strongly disagree* to *Strongly agree*]
- “I have a moral obligation to donate at least £25 to the British Red Cross if I win the £50” [*Strongly disagree* to *Strongly agree*]

Two of the participants in this research will be selected at random and will each win £50!

Appendix 2

Questionnaires referred to in Chapter 3

All participants completed the following sections:

Thank you very much for agreeing to participate in this research. Please answer each question carefully and honestly (for most questions, you are required to mark the box that best represents your opinion).

Your participation is of course voluntary: you are under no obligation to take part in this research if you do not wish to do so.

The questionnaire is anonymous and the information you provide is confidential and will not be disclosed to third parties. Your email address is requested only so that we are able to contact the winners of the Prize Draws. These addresses are then removed so that no records of them remain on file.

Please note that once you have clicked on the CONTINUE button at the bottom of each page you cannot return to review or amend that page.

Thank you very much for your help with our research!

Background Questions

8. Your *university* email address:
9. Please indicate your gender: Female --- Male ---
10. Please indicate your age: ----
11. What is your nationality? ----
12. What is your occupational status?
Student --- Employed --- Other (*please specify*): -----
13. If you are student, what subject are you studying?
14. Are you an undergraduate or postgraduate student? (*Optional*)
Undergraduate ---- Postgraduate ----

Questionnaire 1: Moral Identity Scale

Listed below are some characteristics that may describe a moral person:

- Caring - Compassionate - Fair - Friendly
- Generous - Helpful - Honest - Kind
- Hardworking

The person with these characteristics could be you or it could be someone else. For a moment, visualise in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, please answer the following questions [1 – 7 scales: *Strongly disagree* to *Strongly agree*]

1. It would make me feel good to be a person who has these characteristics.
2. Being someone who has these characteristics is an important part of who I am.
3. I would be ashamed to be a person who has these characteristics.
4. I strongly desire to have these characteristics.
5. I often wear clothes that identify me as having these characteristics.
6. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.
7. The kind of books and magazines that I read identify me as having these characteristics.
8. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
9. I am actively involved in activities that communicate to others that I have these characteristics.

Questionnaire 2: Moral Licensing and Cleansing Manipulation**WRITING TASK****Moral Condition:**

Please think about an occasion when you did something **ethical** in a personal or work setting. Write a few sentences (2-3) about this in the space provided below.

Immoral Condition:

Please think about an occasion when you did something **unethical** in a personal or work setting. Write a few sentences (2-3) about this in the space provided below.

Control Group:

Please think about an occasion when you did something **typical Tuesday** in a personal or work setting. Write a few sentences (2-3) about this in the space provided below.

Questionnaire 3: Moral Emotion Measures

YOUR FEELINGS

The scale below consists of a number of words that describe different feelings and emotions. Please indicate how you feel **now** when you think about the **ethical** behaviour (in moral condition: ethical behaviour; in immoral condition: unethical behaviour; in control group: typical Tuesday) that you described above. Read each item and then mark the appropriate answer in the space next to that word.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremel y
Interested	☐	☐	☐	☐	☐
Distressed	☐	☐	☐	☐	☐
Excited	☐	☐	☐	☐	☐
Upset	☐	☐	☐	☐	☐
Strong	☐	☐	☐	☐	☐
Guilty	☐	☐	☐	☐	☐
Scared	☐	☐	☐	☐	☐
Hostile	☐	☐	☐	☐	☐
Enthusiastic	☐	☐	☐	☐	☐
Proud	☐	☐	☐	☐	☐
Irritable	☐	☐	☐	☐	☐
Alert	☐	☐	☐	☐	☐
Ashamed	☐	☐	☐	☐	☐
Inspired	☐	☐	☐	☐	☐
Nervous	☐	☐	☐	☐	☐
Determined	☐	☐	☐	☐	☐
Attentive	☐	☐	☐	☐	☐
Jittery	☐	☐	☐	☐	☐
Active	☐	☐	☐	☐	☐
Afraid	☐	☐	☐	☐	☐

Questionnaire 4: Theory of Planned Behaviour Measures

Attitudes toward donating money to a charity

In the following questions, we ask about your views about you donating money to a charity within the next month. Please keep in your mind the idea of donating a charity within the next month as you answer the following questions.

Attitudes Items

- “My attitude towards donating money to charity within the next month is...” [*Extremely negative to Extremely positive*] [*Extremely unfavourable to Extremely favourable*]
- “My donating to charity within the next month would be...” [*Extremely bad to Extremely good*], [*Extremely harmful to Extremely beneficial*], [*Extremely foolish to Extremely wise*], [*Extremely unpleasant to Extremely pleasant*], [*Extremely unenjoyable to Extremely enjoyable*]

Behavioural intentions Items

- “I shall donate money to charity within the next month.” [*Definitely shall not to Definitely shall*]
- “I shall make an effort to donate money to charity within the next month.” [*Definitely false to Definitely true*]
- “I intend to donate money to charity within the next month.” [*Definitely do not to Definitely do*]

Moral Norms Items

- “I would feel guilty if I did not donate money to charity within the next month.” [*Strongly disagree to Strongly agree*]
- “It would be morally right for me to donate money to charity within the next month.” [*Strongly disagree to Strongly agree*]
- “I have a moral obligation to donate money to charity within the next month.” [*Strongly disagree to Strongly agree*]
- “Donating money to charity within the next month would fit in with my ethical principles.” [*Strongly disagree to Strongly agree*]

Outcome Measures: Donating money to the Oxfam

Thank you for completing the previous parts of the questionnaire. Before you finish, we usually ask participants if they would like to contribute to a worthy cause in an effort to increase social responsibility. If you would like to, you can now pledge to make a donation (however large or small) to Oxfam. We hope that You will pay this amount at a later time upon receiving a confirmation e-mail from the experimenter.

About the Oxfam:

Oxfam is an international confederation of 15 organizations working together in 98 countries and with partners and allies around the world to find lasting solutions to poverty and injustice. Oxfam works directly with communities and seek to influence the powerful to ensure that poor people can improve their lives and livelihoods and have a say in decisions that affect them.

Do you pledge to donate a sum of money to Oxfam?

1. Yes
2. No

How much (in UK pounds £) would you like to donate?

Final Page

Thank you very much for taking the time to help with this survey. Your responses have now been submitted.

You will be automatically entered into the prize draw (two prizes of £50)!

Two of the participants in this research will be selected at random and will each win £50 !

Appendix 3

Questionnaires referred to in Chapter 4

Pretest

Actions that benefit the environment

Thank you very much for agreeing to participate. You are required to mark the box that best represents your opinion. Your participation is entirely voluntary: you are under no obligation to take part in this research.

Pro-environmental behaviour is an increasingly prominent topic of debate these days. There are many types of pro-environmental behaviour, some of which are listed below.

Please indicate whether or not you have ever carried out each of the following pro-environmental behaviours.

Response options: Yes, I have done this - No, I have not done this

Have you ever...

1. ...switched off a light in a room that was not in use?
2. ...joined a national or international environmental organization?
3. ...turned off your computer when not in use?
4. ...offset your flight emissions?
5. ...made a public commitment not to take any flights for a year (or more)?
6. ...put waste paper in the recycling rather than throwing it away?
7. ...saved water by turning off the tap while cleaning your teeth?
8. ...volunteered your time to an environmental charity, for over 20 hours a week?
9. ...chosen products that have environmentally-friendly packaging?
10. ...put waste glass products in the recycling rather than throwing it away?
11. ...taken public transport when you could have made the journey by car?
12. ...made a public commitment to reduce your carbon footprint?
13. ...donated over £50 to an environmental charity (e.g. World-Wide Fund for Nature)?
14. ...bought organic food every time that this option has been available?
15. ...planted a tree in your community (or paid someone to do this)?
16. ...switched off an electrical appliance at the plug rather than leaving it on standby?
17. ...used recycled printer paper?
18. ...written to your MP to urge him/her to back pro-environmental legislation?
19. ...bought an 'organic' product of some sort?

Main Study

All participants completed the following sections:

Environmental Opinions Questionnaire

Thank you very much for agreeing to participate in this research. Please answer

each question carefully and honestly (for most questions, you are required to

mark the box that best represents your opinion). Your participation is entirely voluntary: you are under no obligation to take part in this research if you do not wish to do so.

The information you provide is confidential and will not be disclosed to third parties. Your email address is requested only so that we are able to contact the winners of the Prize Draws. These addresses are then removed so that no records of them remain on file.

Please note that once you have clicked on the CONTINUE button at the bottom of each page you cannot return to review or amend that page.

Background

1. Your *university* email address:
 2. Please indicate your gender: Female Male
 3. Please indicate your age:
 4. What is your nationality?
 5. Are you a student? Yes No
 6. Are you employed? Yes No
 7. If you are student, what subject are you studying?
- Are you an undergraduate or postgraduate student? Undergraduate Postgraduate

Questionnaire 1: Environmental Attitude Scale

Please read the following statements carefully, and in the space provided rate the extent of your agreement or disagreement with each of the statements. [1 – 7 scales: *Strongly disagree to Strongly agree*]

1. I try hard to carry my pro-environmental beliefs over into all the other parts of my life.
2. I try to appear pro-environmental to please others, but I really don't believe environmental issues are important.
3. Because of my personal values, I believe that ignoring environmental matters is OK.
4. I try to act pro-environmentally because of pressure from others.
5. Although today's PC (Politically Correct) standards pressure me to express pro-environmental views, I don't really believe the environment is threatened.
6. When it comes to questions about the environment, I feel driven to know the truth.
7. If I did something that might harm the environment, I would be concerned that others would be angry with me.
8. I do not attempt to appear pro-environmental to others.
9. According to my personal values, ignoring human impacts on the larger ecosystem is OK.
10. It is not important for me to appear pro-environmental to others.
11. I am motivated by my personal beliefs to try to protect the environment.
12. The interrelatedness of all living things in the ecosystem is something I have never felt personally compelled to consider.
13. I try to express only my pro-environmental views in order to avoid negative reactions from others.
14. What happens to the larger ecosystem, beyond what happens to humans, and doesn't make much difference to me.
15. I have not found it essential to try to protect the larger ecosystem, beyond what happens to humans.
16. Because of today's PC (Politically Correct) standards, I try to appear pro-environment.
17. It is personally important to me to try to protect the larger ecosystem, beyond what happens to humans.

Questionnaire 2: Moral Licensing and Cleansing Manipulation

Pro-environmental behaviour is an increasingly prominent theme in today's world. People's pro-environmental actions can make a positive difference. It is widely seen as important that everyone makes their own full contribution towards a more sustainable society and planet.

Some important pro-environmental actions are listed below.

Moral Condition

Please indicate whether or not you have ever carried out each of these. Have you ever...

- ... switched off a light in a room that was not in use?
- ... turned off your computer when not in use?
- ... bought an 'organic' product of some sort?
- ... put waste paper in the recycling rather than throwing it away?
- ... put waste glass products in the recycling rather than throwing it away?

Please indicate to how many of the above 5 behaviours you have responded 'Yes, I have done this'. Insert the appropriate number between 1 and 5.

Immoral Condition

Please indicate whether or not you have ever carried out each of these. "Have you ever..."

- ... donated over £50 to an environmental charity (e.g. World-Wide Fund for Nature)?
- ... made a public commitment not to take any flights for a year (or more)?
- ... volunteered your time to an environmental charity, for over 20 hours a week?
- ... joined a national or international environmental organization?
- ... written to your MP to urge him/her to back pro-environmental legislation?

Please indicate to how many of the above 5 behaviours you have responded 'Yes, I have done this'. Insert the appropriate number between 1 and 5.

Control Group

Please indicate whether or not you have ever carried out each of these. "Have you ever..."

- ... visited the Tower of London?
- ... completed a Sudoku puzzle?
- ... eaten in an Indonesian restaurant?
- ... walked up a small mountain?
- ... played chess?

Please indicate to how many of the above 5 behaviours you have responded 'Yes, I have done this'. Insert the appropriate number between 1 and 5.

Questionnaire 3: Theory of Planned Behaviour Measures

We each can affect the environment in many different ways -- through our driving, flying, heating our homes, for example; even the type of food we eat can make a difference.

Our carbon footprint is the amount of carbon dioxide that enters the atmosphere because of the electricity and fuel we use. It's measured in tonnes of carbon dioxide.

Carbon dioxide is part of a collection of gases that negatively influence the quality of our air and increase the greenhouse effect. Greenhouse gases have a direct influence on the environment, causing extreme weather changes, a global temperature increase, the loss of ecosystems and potentially hazardous health effects for people.

In the following questions, we ask you about your views about reducing your carbon footprint in the near future (this can be done in many ways).

Please think about reducing carbon footprint within the next few months as you answer the following questions.

Attitudes Items

- “My attitude towards reducing my "carbon footprint" within the next few months is...” [*Extremely negative* to *Extremely positive*] [*Extremely unfavourable* to *Extremely favourable*]

Behavioural intentions Items

- “My intention to reduce my "carbon footprint" within the next few months is:” [*Extremely weak* to *Extremely strong*]
- “I shall make an effort to reduce my "carbon footprint" within the next few months:” [*Extremely unlikely* to *Extremely likely*]
- “I intend to reduce my "carbon footprint" within the next few months:” [*Extremely unlikely* to *Extremely likely*]

Subjective norm Items

- “Most people who are important to me would support me reducing my "carbon footprint" within the next few months.” [*Strongly disagree* to *Strongly agree*]
- “Most people who are important to me think that I should reduce my "carbon footprint" within the next few months.” [*Strongly disagree* to *Strongly agree*]

Perceived behavioural control Items

- “For me, reducing my "carbon footprint" within the next few months would be:”
[*Extremely difficult to Extremely easy*]
- If I wanted to I could reduce my "carbon footprint" within the next few months. [*Strongly disagree to Strongly agree*]

Moral Norms Items

- “I would feel guilty if I did not reduce my "carbon footprint" within the next few months.”
[*Strongly disagree to Strongly agree*]
- “It would be morally right for me to reduce my "carbon footprint" within the next few months” [*Strongly disagree to Strongly agree*]
- “I have a moral obligation to reduce my "carbon footprint" within the next few months.”
[*Strongly disagree to Strongly agree*]
- “Reducing my "carbon footprint" within the next few months would fit in with my ethical principles” [*Strongly disagree to Strongly agree*]

Outcome Measures,

Your carbon footprint mostly depends on:

- how much energy you use to heat your home
- the electronics and appliances you use
- what kind of transport you use day-to-day
- how often you fly.

Knowing your carbon footprint helps you understand your impact on the environment - and, more importantly, find easy ways to reduce that impact.

Therefore, calculating your "carbon footprint" would be the first step towards reducing it.

If you would like to calculate your "carbon footprint", we will direct you to a useful webpage.

Yes, I would like to be directed to the webpage

No, I do not want to be directed to the webpage

Final Page

Your responses have now been submitted.

If you have asked for information about the webpage to calculate your "carbon footprint", please click this link: <https://www.lifesci.sussex.ac.uk/research/psylab/mg296/carbon.php>

You will be automatically entered into the prize draw (there are two prizes of £50 each)! That is: two participants in this research will be selected at random and will each win £50!

Thank you very much for your participation in our research! This is very much appreciated.

Appendix 4

Questionnaires referred to in Chapter 5

All participants completed the following sections:

Thank you very much for agreeing to participate in this research. Please answer each question carefully and honestly (for most questions, you are required to mark the box that best represents your opinion).

Your participation is entirely voluntary: you are under no obligation to take part in this research if you do not wish to do so. The information you provide is confidential and will not be disclosed to third parties. Your email address is requested only so that we are able to contact the winners of the Prize Draws.

Please note that once you have clicked on the CONTINUE button at the bottom of each page you cannot return to review or amend that page. Thank you very much for your participation in our research! This is very much appreciated.

Background Questions

1. Your *university* email address:
2. Please indicate your gender: Female --- Male ---
3. Please indicate your age: ----
4. What is your nationality? ----
5. What is your occupational status?
Student --- Employed --- Other (*please specify*): -----
6. If you are student, what subject are you studying?
7. Are you an undergraduate or postgraduate student? (*Optional*)
Undergraduate ---- Postgraduate ----

Questionnaire 1: Individualism and Collectivism Scale

Please read each of the statements in this section and select the response that you believe best indicates how well these statements describe you. [1 – 7 scales: *Strongly disagree to Strongly agree*]

Horizontal Individualism

1. I prefer to be direct and forthright when I talk with people
2. One should live one's life independently of others
3. I often do my own thing
4. I am a unique individual
5. I like my privacy
6. When I succeeded, it is usually because of my abilities
7. What happens to me is my own doing
8. I enjoy being unique and different from the others in many ways

Vertical Individualism

1. Winning is everything
2. It annoys me when others perform better than I do
3. It is important for me that I do my job better than the others
4. I enjoy working in situations involving competition with others
5. Competition is law of nature
6. When another person does better than I do, I get tense and aroused
7. Without competition it is impossible to have a good society
8. Some people emphasize winning; I am not one of them (reverse)

Horizontal Collectivism

1. My happiness depends very much on the happiness of those around me
2. I like sharing little things with my neighbors
3. The wellbeing of my coworkers is important to me
4. It is important for me to maintain harmony within my group
5. If a relative were in financial difficulty, I would help within my means
6. If a co-worker gets a prize (prize) I would feel proud
7. To me pleasure is spending time with others
8. I feel good when I cooperate with others

Vertical Collectivism

1. I would do what would please my family
2. I usually sacrifice my self-interest for the benefit of my group
3. We should keep our aging parents with us at home
4. Children should feel honored if their parents receive a distinguished award
5. Children should be taught to place duty before pleasure
6. I would sacrifice an activity that I enjoy very much if my family did not approve of it
7. I hate to disagree with others in my group
8. Before making a major trip, I consult with most members of my family and many friends

Questionnaire 2: Moral Foundation Scale

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale: [0 – 5 scales: not at all relevant extremely relevant]

- _____ 1. Whether or not someone suffered emotionally
- _____ 2. Whether or not some people were treated differently than others
- _____ 3. Whether or not someone's action showed love for his or her country
- _____ 4. Whether or not someone showed a lack of respect for authority
- _____ 5. Whether or not someone violated standards of purity and decency
- _____ 6. Whether or not someone was good at math
- _____ 7. Whether or not someone cared for someone weak or vulnerable
- _____ 8. Whether or not someone acted unfairly
- _____ 9. Whether or not someone did something to betray his or her group
- _____ 10. Whether or not someone conformed to the traditions of society
- _____ 11. Whether or not someone did something disgusting
- _____ 12. Whether or not someone was cruel
- _____ 13. Whether or not someone was denied his or her rights
- _____ 14. Whether or not someone showed a lack of loyalty
- _____ 15. Whether or not an action caused chaos or disorder
- _____ 16. Whether or not someone acted in a way that God would approve of

Part 2. Please read the following sentences and indicate your agreement or disagreement: [0 – 5 scales: *Strongly disagree to Strongly agree*]

- _____ 17. Compassion for those who are suffering is the most crucial virtue.
- _____ 18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
- _____ 19. I am proud of my country's history.
- _____ 20. Respect for authority is something all children need to learn.
- _____ 21. People should not do things that are disgusting, even if no one is harmed.
- _____ 22. It is better to do good than to do bad.
- _____ 23. One of the worst things a person could do is hurt a defenseless animal.
- _____ 24. Justice is the most important requirement for a society.
- _____ 25. People should be loyal to their family members, even when they have done something wrong.
- _____ 26. Men and women each have different roles to play in society.
- _____ 27. I would call some acts wrong on the grounds that they are unnatural.
- _____ 28. It can never be right to kill a human being.
- _____ 29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
- _____ 30. It is more important to be a team player than to express oneself.
- _____ 31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
- _____ 32. Chastity is an important and valuable virtue.

Questionnaire 3: Theory of Planned Behaviour Measures

Attitudes toward donating money to a charity

In the following questions, we ask about your views about you donating money to charity.

Attitudes Items

- “My attitude towards donating money to charity is ...” [*Extremely negative* to *Extremely positive*] [*Extremely unfavourable* to *Extremely favourable*]

Behavioural intentions Items

- “My intention to donate money to charity within the next month is..” [*Extremely weak* to *Extremely strong*]
- “I shall donate money to charity within the next month.” [*Extremely unlikely* to *Extremely likely*]
- “I intend to donate money to charity within the next month.” [*Extremely unlikely* to *Extremely likely*]

Subjective norm Items

- “Most people who are important to me probably think that I should donate money to charity..” [*Strongly disagree* to *Strongly agree*]
- “If I were to donate money to charity, most people who are important to me would probably...”[*disapprove strongly* to *approve strongly*]

Perceived behavioural control Items

- “For me, donating money to charity would be...” [*Extremely difficult* to *Extremely easy*]
- If I wanted to I could donate money to charity..... [*Strongly disagree* to *Strongly agree*]

Moral Norms Items

- “It would be morally right for me to donate money to charity.” [*Strongly disagree* to *Strongly agree*]
- “I have a moral obligation to donate money to charity.” [*Strongly disagree* to *Strongly agree*]
- “Donating money to charity would fit in with my ethical principles.” [*Strongly disagree* to *Strongly agree*]

Outcome Measures,

I have a moral obligation to donate money to charities that promote the welfare of...[1 – 7 scales: Strongly disagree to Strongly agree]

- a. People in my community
- b. People in my country
- c. People in other parts of the world

Within the next 6 months, I intend to donate money to a charity that promotes the welfare of... [1 – 7 scales: Strongly disagree to Strongly agree]

- a. People in my community
- b. People in my country
- c. People in other parts of the world

Background Questions

1. Your *university* email address:
 2. Please indicate your gender: Female Male
 3. Please indicate your age:
 4. What is your nationality?
 5. Are you a student? Yes No
 6. Are you employed? Yes No
 7. If you are student, what subject are you studying?

Are you an undergraduate or postgraduate student? Undergraduate Postgraduate
 8. **How much do you agree or disagree with the following statement? "I consider myself religious person."** [1 – 7 scales: Completely disagree to Completely agree]
-

Final Page

Your responses have now been submitted.

Thank you very much for taking the time to help with this survey.

You will be automatically entered into the prize draw (two prizes of £50)! Two of the participants in this research will be selected at random and will each win £50!