ISCTE ◈ IUL

University Institute of Lisbon

IUL School of Social Sciences

Department of Social and Organizational Psychology

What explains whether people are morally concerned towards different

entities? The role of moral motives as predictors of the moral circle.

Angela Camacho

Dissertation submitted as a partial requirement for the conferral of *Master in Psychology of*

Intercultural Relations

Supervisor:

Dra. Christin-Melanie Vauclair (PhD, Invited Assistant Professor)

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Resumo

A expansão do nosso círculo moral apresenta um problema importante para a psicologia da moralidade, visto que, compreender as diferenças individuais em relação à expansão das nossas considerações morais, é crucial para compreender melhor o que influencia nossas decisões e comportamentos.

No geral, a pesquisa realizada em relação à expansividade moral mostram que os limites que traçamos ao incluir ou excluir entidades das nossas considerações morais, variam amplamente entre pessoas e contexto, podendo ser influenciado por diversos mecanismos.

Os fatores motivacionais demonstraram ter um impacto na expansão dos círculos morais; portanto, na presente pesquisa exploramos o Modelo de Motivos Morais para entender sua capacidade de explicar as origens do círculo moral. Examinamos os factores que predizem o nosso círculo moral usando os dados recolhidos de cento e quatro participantes portugueses que completaram um pacote de questionários sobre moralidade.

Na nossa análise, esperávamos encontrar indicadores que mostrassem uma associação positiva entre círculos morais mais abrangentes e a presença de motivos morais orientados para a activação comportamental e focado nos outros (Motivo Justiça Social). Em geral, nossos resultados mostraram que o modelo de motivos morais pode informar sobre os nossos círculos morais e sobre as diferenças individuais em relação aos limites morais. Consideramos que os resultados encontrados confirmam que o modelo de motivos morais é uma abordagem promissora na compreensão acerca da expansividade moral, por isso, a presente pesquisa abre caminho para novos estudos na mesma direcção.

Palavras-chave: Circulo Moral, Expansividade Moral, Motivos Morais.

Classificação nas categorias definidas pela American Psychological Association

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3000 Social Psychology

3020 Group & Interpersonal Processes

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Abstract

The expansiveness of our moral circle presents an important problem for the psychology of morality since to understand individual differences regarding the expansion of our moral concern is crucial to better understand what influences our moral actions. Overall the research conducted in regard to moral concern for other entities shows how moral boundaries vary extensively across people and situations and how it can be influenced by different mechanisms.

Motivational factors have shown to have an impact on moral expansiveness; therefore we explored the Model of Moral Motives to understand its ability to explain the origins of moral expansiveness. We examined the predictors of the moral circle using the data collection of one hundred and four Portuguese participants that completed a questionnaire packet about morality.

In this research we expected the moral circle to be associated with the endorsement of moral motives that are approach-oriented and other-focused (i.e., the Social Justice moral motive) overall our results showed that the model of moral motives can inform about our moral circle and inform about differences in our moral boundaries. We consider that our mains findings confirmed that moral motives are a promising approach to better understand moral expansiveness, therefore this research opens new possibilities for further studies in the same direction.

Keywords: Moral Circle, Moral Expansiveness, Moral Motives

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Introduction

In 1840 the Maori chiefs, representatives of the indigenous people of New Zealand, and the British colonizers established the Treaty of Waitangi as the basis for future governance in New Zealand but with time the treaty showed to be flawed, because the English and the Maori had different interpretations and expectations regarding the administration of the "law" and particularly ontological incompatibilities regarding the interaction between humans and nature.

One example that clearly illustrates this conflict is related to the Wanganui River located in the central North Island. Before New Zeland's colonization, in the mid-1800s, the Maori people depended, controlled, and cared for the river, in Maori's understanding, the river is their *awatupua*- river of sacred power, and for them this river is indeed a person—a tupuna, or ancestor, but since the implementation of the British rule, the resource exploitation of the Wanganui River by the government has been vast. The Maori people had to watch the violation of the Whanganui River and its environmental degradation; its rapids were dynamited to create easier passages for tourists, its gravel was extracted for railway ballast and road metal, the river mouth was diverted to become a city's effluent and its headwaters were diverted for a hydroelectric power scheme. This brought the Maori iwi people to start in1870's New Zealand's longest-running legal dispute to assert their rights over the river, which came to an end on its settlement in 2017 when the Whanganui River was granted the same legal rights as a human being.

The crown issued an apology admitting the inalienable connection between the tribes and the river which previously was undermined, preventing the Whanganui tribes of their customary rights to the river and compromising their physical, cultural and spiritual well-being. The now acknowledged personhood of the Whanganui River is perceived as recognition by Maoris; to Maori cosmology, nature is kin, they see nature as an extended relationship network, opposite to the common Occidental anthropocentric approach that perceives nature as fragmented and inanimate components inferior to humankind providing humans with a sense of entitlement to commodify it.

This event is one example of divergent moral concern about an entity (in this case a river). Why, for so many years, the government of New Zealand seemed to share little moral concern for ensuring welfare of the Whanganui River, while for the Maori people the River is seen as akin

and compared to an ancestor? This event illustrates how moral sensibilities can differ widely. For some people granting rights of personhood to nonhuman entities can be seen as absurd, whereas for others these entities are indeed seen as equals and deserve a high moral concern.

Nowadays we can recognize a general trend towards more expansive moral boundaries. Besides the granted personhood to the Whanganui River, in other parts of the world, there has been attempts to establish legal rights for nature, for instance for India's sacred Ganges and the Yamuna Rivers and, voters in Toledo, Ohio, recently voted to grant legal standing to the Lake Erie. We can also refer to what can be called the rights revolutions of the 20th century, for example, women gained the right to vote and same-sex marriage was legalized in many parts of the world.

Crimston, Bain, Hornsey& Bastian (2016) developed the Moral Expansiveness Scale in order to study, how broadly and intensely people extend moral concern to other entities which is conceptualized as the moral circle. In this study, we aim to further explore this approach by examining predictors of the moral circle which have been neglected to date. More specifically, Janoff-Bulman, Sheikh &, Baldacci, (2007) proposed a motivational perspective which might address the question of why there are individual differences in the moral circle.

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CHAPTER I – Literature review

1.1 Dominant perspectives in moral psychology

The following section will provide a brief overview of the most dominant perspectives in moral psychology in order to contextualize the current study and review important concepts to which the moral circle has been found to be related to

1.1.1 The rationalist approach

One of the most dominant approaches to moral psychology has been the rationalist approach, which emerged in philosophy. It is focused on reason and it asserts that there are a priori knowable truths. This epistemological view regards reason as the center of knowledge, affirming even that sometimes empirical proofs or experience were not necessary to prove certain truths. It can be defined as a methodology or theory in which the criterion of the truth is not sensory but intellectual and deductive (Bourke &Vernon J, 1962).

Since the 17th Century, this perspective was explored by prominent philosophers (e.g.Leibniz, Descartes, Kant) in an attempt to explain the foundations for ethics, focusing on rational and conscious processes. The rationalist approach states that moral judgments and moral knowledge emerge from reasoning and reflection, therefore, emotions or socialization can have an influence on moral judgments but they are not their direct cause. Moral judgments are formed by pondering about issues of harm, justice, fairness, and rights (Haidt, 2001).

While this perspective gained force and visibility, psychologists had a different approach, for instance Freud (1900/1976) stated that there is a tension between the individual and the society's needs. He believed people's judgments, for instance moral judgment, are driven and emerge from their unconscious motives and feelings, that are then repressed and replaced to fit the values of a certain society. Also, behaviorists like Skinner (1971), did not see reason as the central foundation of moral judgments, he focused on socialization, explaining morality as behaviors that are reinforced (rewarded) or disapproved (punished) by the society.

The perspectives on moral psychology centered on emotions and socialization started to be counteracted at the time of what can be called, the cognitive revolution and the rationalist

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approach started to have a bigger impact in psychology research. For instance, the studies conducted by Jean Piaget (1896-1980) became one of the most influential in developmental psychology during the 20th Century. Piaget stated that children up until 10 years of age focused on rules and authority, and as they grew older they became autonomous creating moral judgments by reflecting and evaluating actions from a set of their own independent principles of morality. Although Piaget's research brought inputs to the study of morality, his work focused on how children think and the processes of cognitive development (Huitt, W, & Hummel, J, 2003).

Following this perspective, Lawrence Kohlberg (1971) developed one of the most important works in moral psychology, a cognitive-developmental model. Kohlberg, developed an interviewing method that could be used for adults as well as children, in which Kohlberg would assess how people resolve moral conflicts presenting them with moral dilemmas. He presented a model with a three-level sequence that aims to reflect cognitive-developmental changes in moral judgments and how people handle such dilemmas. The first level is called the Pre-conventional Level, the second is the Conventional level and the last the Post-conventional, autonomous or principled level. Children in the first level solved a moral dilemma by referring to authority mandates and avoiding punishment, focusing on their own interests. In the second level, young people think of themselves as members of the conventional society and they display helpful motives towards the maintenance of the welfare of their in-group and obeying society's laws. At the third level, people are less attached to society's rules and laws and more concerned with principles and values they consider making a good and just society.

Kohlberg's work focused on developmental psychology and undertakes morality as a result of people's deliberate attempt to increase their coordination and integration to the society, but he often referred to mechanisms, endorsing a social-cognitive perspective, in other words, a rationalist model in which affect may be taken into account in moral judgments, but reasoning ultimately makes the decisions (Kohlberg, 1971).

Another prominent model in moral psychology that illustrates the rationalist approach influence, was developed by Nucci and Turiel (1978), focused on social interactionist perspective, children were interviewed being presented with histories of actions of rule violations, following a set of probe questions to further assess how the children think about the rule in question and the participants had to provide justifications and judgments on their answers. Later on, Turiel, Hildebrandt and Wainryb (1991) also examined young adults on moral

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reasoning about issues like abortion, homosexuality, and incest. In this model participants are also prone to think about the consequences of an action before making a judgment about the rule violation, being a moral violation or not. With the social interactionist model, the authors differentiated moral rules from societal rules, understanding how individuals differentiate moral, societal and psychological concepts through their lifespan. The rules that fall into the moral domain lead to injustice, harm or violations of rights and are considered universal rules. The rules that fall into the societal domain are the ones that do not cause harm or violation of rights; they are defined by regulations that are consensually agreed by groups for the better function of social systems, or rules that are considered personal, individual prerogatives, that are not applied universally. This social domain approach shows how the social context and people's interactions influence moral development, but it is still linked to a cognitive, rationalist approach and the causal relation of reflective, conscious reasoning in moral judgments.

In conclusion, the rationalist approach has been at the center of moral psychology research and it states that people reach moral judgment primarily by a process of reasoning and reflection. As we can see in the theories explained above, the rationalist approach focuses on interviewing methods and asking participants to explain their thought process to reach a decision, so it seems to exist a consensus that morality foundations are within the individual´s mind, is a trait-like cognitive attainment, by which children attain moral standards in the course of developing their reasoning (Haidt, 2001). Therefore, one may argue that the rationalist approach is centered on the formal aspects of morality (e.g. does it violate rights? Does it cause harm? Then it is immoral) and it is mainly focused on humans´ ability to rationalize to make moral judgments, which may endorse an anthropocentric tradition, since the rationality supremacy and worship creates a bigger void between humans and other entities which are not consider to have this ability, being often denied of virtue and value. For example, the natural world or other animals are often seen as inferior and merely having an instrumental position to humans (Plumwood, 1991). That being said, the rationalist approach does not address the content of morality, who or what exactly deserves moral concern and should not be harmed, so it has shown to be insufficient in the understanding of the moral circle, which is the focus of the moral circle or moral expansiveness concept which is central to this study.

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1.1.2 The intuitionist approach

American Psychologist Jonathan Haidt counteracted the rationalist approach posing the following question: "People undeniably engage in moral reasoning. But does the evidence really show that such reasoning is the cause rather than the consequence of moral judgment? (Haidt, 2001).The author proposed the Social Intuitionist approach that claims that moral judgments are primarily intuitive and only, if necessary, followed by slow moral reflection and reasoning, that normally happens only with the purpose of influencing other people's moral judgments that can be then changed or influenced by discussing such positions.

Haidt, Koller, and Dias (1993) found seminal evidence of the social intuitionist model with a study conducted with American and Brazilian both children and adults using the structured interview procedure described by Turiel (1983) but with a different approach. The novel stimulus in Haidt, et al (1993) study is that the actions of rule violations presented to the participants aim to trigger emotions, and affective reactions, like disgust, feeling of disrespect or disobedience without effectively causing any harm. For instance, they examined Brazilian and American responses to actions such as, a woman that uses the national flag to clean her bathroom, a family that eats their dead pet dog, a brother and a sister that like to kiss each other passionately when nobody is around or a man that buys dead chickens to have sexual intercourse before cooking and eating them (Haidt et al.,1993).

In this way, the intuitionist approach questions the causality of reasoning in moral judgment. For instance Turiel, Hildebrandt, and Wainryb (1991) studied young adults' reasoning regarding issues of abortion. They found that the participants that believe that life begins at conception would generally oppose abortion, and people that believe that life begins later would not oppose. The authors argue that these findings showed the importance of "informational assumptions", jumping themselves to the assumption of causality – the belief causes the judgment. For the intuitionist approach this is not necessarily true. The evidence rather shows a correlation between judgment and supporting beliefs; from an intuitionist point of view, the anti-abortion judgment (gut feeling that abortion is bad) causes a belief that life begins at conception, which shows that moral reasoning occurs post-facto (Haidt et al, 2001).

Intuitionism in philosophy claims that basic moral propositions are self-evident, meaning that it can be known without the need of any argument, in which one "just sees without argument that they are and must be true" (Harrison, 1967, p. 72 cit in Haidt, 2001). In moral psychology,

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the intuitionist approach claim that moral intuitions are a form of cognition but not a kind of reasoning. Haidt (2001) emphasizes that intuition and reasoning are not the contrast between emotion and cognition. Intuition, reasoning, and emotions are all forms of cognition, but the main difference is that intuition occurs quickly, unconsciously and without effort, whereas reasoning includes conscious mental processes, is slow and demands effort.

Therefore, moral intuition can be defined as a quick appearance in the consciousness of moral judgment, which includes an affective valence (good-bad, like-dislike) without any awareness of having reasoning, pondered, weighing evidences or consequences. Thus, the intuitionist approach introduced a different and broader conception of the moral domain, integrating that morality varies across cultures, social status, politics, and age Haidt and Kesibir (2010, p.800) proposed a new integrative definition for moral systems: "Moral systems are interlocking sets of values, virtues, norms, practices, identities, institutions, technologies, and evolved psychological mechanisms that work together to suppress or regulate selfishness and make social life possible".

One of the most recent and relevant developments in moral psychology, using an intuitionist approach, is the Moral Foundations Theory. Aiming to create a systematic theory of morality that could explain its origins, development and cultural differences, Haidt and Joseph (2004) performed a cross-disciplinary study in evolutionary psychology and anthropology looking to find common traces of virtues and areas of moral regulation that could be found in different cultures and were also related to evolutionary thinking. In 2007, Haidt and Graham proposed five psychological intuitions upon which cultures construct their morality: the Harm/Care foundation, that relates with the sensitivity that individuals have to dislike signs of suffering in others which are related with the potential for portraying such virtues as kindness and compassion; the Fairness/Reciprocity foundation is related with human history in alliance formation, cooperation, and reciprocal altruism, that is motivated by emotions such as guilt, gratitude, and even anger; Ingroup/Loyalty foundation is related with the fact that humans and other species are used to live within kin-based groups, which makes us develop a set of social-cognitive abilities and emotions such as recognition and trust, that endorse the maintenance and care for the ingroup while also creates separation and distrust from members of other groups: Authority/Respect, here is related with a history of living in hierarchically structured communities, which lead to feelings of respect and admiration for legitimated authority endorsing

society values such as subordination, duty, and obedience; finally, the Purity/Sanctity foundation that is related with the emotion of disgust, a feeling that is recognized to have a function of protection in all cultures, because it responds to elicitors that can potentially lead to the transmissions of diseases, nonetheless, this emotion is also linked to social constructs and beliefs, for instance religious activities in some cultures perceive carnal passions (e.g. lust, greed) as debased or impure.

After identifying five foundations for the moral domain, Haidt, B., Ditto, S., Iyer R., & Graham, J. (2011) developed the Moral Foundations Questionnaire (MFQ) proposing a measurement tool that can detect a broad array of the moral domain. Although this questionnaire is focused on informing about the foundation's people depend on to make moral judgments, rather than which entities are entitled of moral considerations, it will be further explored in this study because it has been shown to predict the moral circle: Cristmon et al (2016) found that some moral foundations can predict our moral expansiveness, particularly the Loyalty/betrayal foundation is related to a restrictive moral concern regarding the in-group.

1.1.3 The moral motivational approach

One of the most classic approaches in the psychological study of motivation is based on approach versus avoidance, meaning that our decisions are based on the perceived possible outcomes, so we tend to approach positive outcomes and avoid negative ones (Janoff-Bulman et al, 2007). This approach has been explored and applied to psychological studies bringing important contributions, for instance, one of the most influential theories in psychology of personality, is based on this approach: the Biopsychological theory of personality proposed by Gray (1982, 1990) explains that the human brain has two based systems that control our interactions with the environment and can explain our decision-making process which are the Behavioral Inhibition System (BIS) and the Behavioral Activation System (BAS). The BIS is related with activation of behavior and appetitive motivation tours positive outcomes (rewards, no punishment or avoidance of punishment) being also related with positive affects (e.g. joy, hope happiness); the BAS is related to the inhibition of action and aversive motivation for negative outcomes (punishment, no reward and novelty) being related with negative affects (e.g. anxiety, fear, frustration) (cit in Carver & White, 1994).

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Although the differential impact of these two orientations have been explored and validated by many authors, until recently it was not explored in the study of moral psychology. Janoff-Bulman, Sheikh &, Baldacci, (2007) tackled this gap and decided to apply this classic distinction of the motivational theory (approach vs. avoidance) to the psychological study of morality in order to define the motives that underlie our moral judgments and to propose a model that can inform different orientations of moral responsibility.

Janoff-Bulman et al (2007),when creating the model of moral motives, were also focused on the importance of social interdependence for the moral domain, following the idea of De Waal (1996) that "Social inclusion is absolutely central to human morality, commonly cast in terms of how we should or should not behave in order to be valued members of society". The authors explained that moral regulation can be oriented to one's own behavior or the behavior of others, thus the model of moral motives crosses approach-avoidance strategies with a self-others focus, expressing personal versus social responsibility.

The authors' proposed four distinct moral motives relate to different conceptions of moral responsibility: Self-Restrain (avoidance-self), Social Order (avoidance-other), Self-Reliance (approach-self), and Social Justice (approach-other) (Janoff-Bulman et al, 2007, p. 1092: Table 1). The moral motives model explains different conceptions of morality in which all individuals can display to some extent each motive in their moral system. Nevertheless, the authors argue that each individual is influenced by their own life experiences and social environment, so each individual can endorse one or more motives more strongly.

Model of moral motives

	Self Focus (personal responsibility)	Other Focus (social responsibility)
Avoidance (inhibition)	Self-Restraint	Social Order
Approach (activation)	Self-Reliance	Social Justice

*Figure 1.*Model of moral motives (Janoff-Bulman et al, 2007, p. 1092: Table 1)

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In the avoidance (inhibition) sphere we find: *Self-Restrain*, a self-focused avoidance orientation to one's own negative outcomes which is related to self-protection and inhibition when faced with threatening temptations regarding social responsibility. Self-Restrain prevents individual members from acting to over-benefit themselves to the detriment of others. *Social Order* is also an avoidance orientation related to a social responsibility focus, and it is based on inhibition motives to secure a larger community, for instance adhering to a set of group defining social norms (i.e., homogeneity and conformity), which guarantees in-group living order and group cohesion.

In the approach (activation) sphere we find *Self-Reliance* which is a self-focused approach orientation related to the activations of one's independence, activating the need of providing for the self. The authors explain that the base of the Self-reliance motive is a highly valued moral conception in the Western culture brought up by the Protestant ethic, which prioritizes autonomy and hard work and benefits the group by minimizing the burden that each individual brings to the group. Then, there is *Social Justice,* an approach orientation which is focused on positive outcomes for the benefit of the group. According to the authors, Social Justice is related to egalitarianism and distributional justice, the idea of helping others for the maintenance and growth of the larger community. This motive aims to ensure the social welfare and increase of social bonds.

Janoff-Bulman et al, (2007) were interested in the relation between the moral motives model and political orientations, specifically political conservatism and liberalism, in order to determine if there is an association with approach versus avoidance orientations in their moral domain. The authors conducted two exploratory studies with university students. In the first study, 596 participants were asked to fill in the 20-item Moral Motives Scale (MMS; Jannoff-Bulman, Manning & Sheikh, 2006) along with a questionnaire with four items that tapped political orientation (see Skitka, Bauman & Sargis, 2005); in the second study, to further explore the relation between the moral motives model and the political orientation, they asked the participants to complete the SDO - Social Dominance Orientation Scale (Pratto, Sidanius, Stallworth & Malle, 1994; Sidanius & Pratto, 1999) and the RWA – Right Wing Authoritarianism Scale (Altmeyer, 1981).The studies showed that the approach-avoidance orientations are strongly related with political liberalism and conservatism. In this case, the results showed that RWA and political conservatism were positively correlated with avoidance

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motives (Self-Restrain, Social Order) and the liberals were highly associated with activation-based approach motives (Self-Reliance, Social Justice).

We consider that the Model of Moral Motives adds incremental value of applying the motivational perspective to the moral domains by considering the approach-avoidance distinction in the study of moral psychology. This approach may be promising in understanding divergent standpoints in regard to moral concerns. Therefore, in this study, we aim to explore if the moral motives model can inform about moral expansiveness and the individual differences in the size of the moral circle. In our study we will use this model of four moral motives presented by Janoff-Bulman et al, (2007) and given the results found in previous studies we consider that is important to control for political orientation in order to have the unique contribution of the moral motives when examining the relation with moral expansiveness.

1.2 Concern for different entities - the moral circle

1.2.1 Conceptualization of the moral circle

While from the rationalist or intuitionist approach, there is a wide variety of research and studies with different perspectives, they still share a common focus – moral judgments, it is all about deciding what is right or wrong. The dominant approaches in moral psychology have extensively studied how morality emerges, how it develops and how people make moral judgments (whether a certain situation is right or wrong).But they do not address why people differ in the entities that they judge as valuable and entitled of moral concern, like the Maori people and the British rulers.

The study of this question started with the idea of moral expansiveness, popularized in Peter Singer's book "The expanding circle" (1981). In his book, Singer discusses that our moral sensibilities expand over time due to our capacity to reason since we are bound to use reason to be able to justify our moral actions. The author, provides several examples to demonstrate that throughout history there is a tendency to moral expansion, providing the argument that we expand our moral concern due to our social nature and the requirement of group living, which make us look beyond our own interests and makes us generalized or universalize our moral sensibilities, rejecting egoistic reasoning – "Ethical reasoning, once begun, pushes against our

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initially limited ethical horizons, leading us always toward a more universal point of view." (Singer, 1981).

The moral circle idea can be explained by picturing "(...) the self in the center, surrounded by concentric circles encompassing increasingly distant possible targets of moral concern, including family, local community, nation, all humans, all mammals, all living things including plants, and all things including inanimate objects" (Graham, Waytz, Meindl, Iyer, & Young, 2017).

This concept leads future theorists to shift their attention from the processes of moral judgment to the particular content of the judgments themselves in order to understand how and why our moral concern expands or contracts and its consequences. The expansiveness of our moral circle presents an important problem for the psychology of morality. Crimston, Bain, Hornsey & Bastian (2016) explained that to understand individual differences regarding the expansion of our moral concern is crucial to better understand what influences our moral actions, especially because the entities to which we grant or not moral concern can be fundamental to social and political debates (e.g. discussions about abortion), and the entities outside our moral circle can be targets of horrific treatments (e.g. animals in farms intended for the mass production of meat).

1.2.2 Predictors of the moral circle

More recently there has been more research in the field of psychology using the framework of moral expansion in order to understand the reasons why our moral boundaries expand or shirk. Below we will summarize the main studies and results related to the moral circle in order to provide an overview about the state-of-the-art in regard to its main predictors.

Opotow, S. in 1990 explored moral exclusion, that refers to the entities that we consider out of our moral concern boundaries and identified three types of attitudes that lead people to include others in their moral circle: when people believe that the consideration of fairness is applicable; when people are willing to share resources and when people are willing to make sacrifices to ensure others welfare, which the author referred as the scope of justice. Later in 1993, the author also conducted an experiment to investigate the variables that may lead people to include animals in their scope of justice. Opotow (1993) hypothesized that it depended on three dimensions: animal's similarity to people; animal´s utility to people and the extent of

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conflict between people and animals. The findings showed that the scope of justice was higher in low conflict situations. Yet, participants did not show higher moral concern if they perceived animals to be similar to human. Regarding the utility dimension, when there was a high perceived conflict between interests, the participants would show lower moral concern for the entities regardless of their perceived usefulness and the same was found for the similarity dimension. This study illustrates the importance of context to the expansion of the moral circle and how it can impact variables of perceived similarity or utility.

In another study, developed by Bastian Costello et al, (2012), the perceived similarity between animals and people was shown to have a significant impact on moral concern. The authors found that framing entities as similar to the individual has significant consequences for people's moral concern. Therefore, contrary to Opotow's findings, these authors found that focusing on what we share with others has an impact on moral expansiveness.

Yet another research line deals with values as predictors of moral concern. Schwartz, (2007) studied moral inclusiveness with representative samples from 21 countries. The author established values which people normally identify as moral (e.g. justice, equality and peace) and investigated how they are associated with people's moral inclusiveness. The author found that individuals from cultures that endorse egalitarian values and have democratic political systems, display high moral inclusiveness. He concluded that in societies in which universalism values are endorsed, people tend to be more inclusive in their moral circle.

McFarland, Webb & Brown (2012) came to similar conclusions. They proposed a scale to study people's identification with all humanity as an attribute for moral expansiveness – the identification with All Humanity Scale (IWAH). Across several studies, the authors found that caring for all humanity goes beyond the absence of ethnocentrism; it relates to empathy, moral reasoning, identity, and Schwartz´ (2007) value of universalism.

Crimston, Bain, Hornsey & Bastian (2016) developed the Moral Expansiveness Scale (MES)in order to distinguish between entities that are deemed worthy or unworthy of moral consideration. They authors found that moral expansiveness varies as a function of demographic characteristics such as, age, gender, religiosity and political conservatism. However, there were no strong associations between the MES and the demographic variables indicating that general political attitudes or religious beliefs are not key explanations for moral expansiveness. The authors also explored the convergent and predictive validity of the Moral Expansiveness Scale

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compared to constructs that are focused on moral judgments and moral values: The Moral Foundations Theory (MFT – Haidt & Joseph, 2004) and Moral values (Schwartz, 2007). Even though these constructs do not focus on the content of moral concern they were able to predict moral expansiveness.

More specifically, the results showed that the MES scores had a positive correlation with moral foundations that are conceptually related to considerations for other's well-being and protecting them from harm (Care/Harm foundation). In contrast, the "binding foundations" (Loyalty, Authority and Purity) were moderately negatively correlated with the MES suggesting that people who endorse these moral foundations tend to restrict the size of their moral circle to the entities that are part of their in-group (Crimston et al, 2016). Moreover, Crimston et al (2016) found that those who score high on moral expansiveness reported also greater endorsement of universalism values (Schwartz, 2007). This association is remarkable given that the moral values, as identified by Schwartz (2007),such as universalism values are every general constructs (e.g., a World at Peace) and do not capture the extent to which moral concern is given to a range of different and specific entities.

Crismton et al (2016) also conducted other studies with more "general" constructs that have been related with moral concern in order to understand the unique contribution of moral expansiveness to predict behavioral intentions. In these studies, the authors found that moral expansiveness was a powerful predictor of the willingness to self-sacrifice on behalf of protecting others over and above the identification with all humanity and connectedness to nature. Hence, apart from the findings that moral expansiveness is related to moral foundations (e.g. moral judgments dependent on the importance of the in-group), it was also shown to be strongly related to the ability to overcome self-interest.

Laham (2009) also took interest in the moral circle, yet from an experimental angle. He found that adopting a mindset of inclusion or exclusion has an impact on moral expansiveness. In this study, participants that had to *exclude* entities from their moral circle demonstrated larger moral circles than participants that had to *include* entities in their moral circle. Moreover, the study showed that adopting a mindset of exclusion generates a spillover effect to include various out-groups in their moral concern. With this finding, the author demonstrated that decision framing effects have consequences on the size of the moral circle.

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1.3 Research gap, research question and hypotheses

As the review shows above, a number of constructs have been associated with the moral circle or moral expansiveness concept. Yet, there is paucity of studies that approached the moral circle from a moral motivational perspective. One of the exceptions is the study by Bastian, Loughnan, Haslam &Radke (2012) who argued that granting moral concern can be influenced by motivational factors. The authors were interested in explaining the inconsistency between caring and liking animals and consuming and enjoying meat. Across three studies, the authors found that denying the animals of mental capacities is one of the strategies used by people to reduce the cognitive dissonance which facilitates effective behavior such as eating meat. These studies show that the process is driven by people´s motivation by demonstrating that when meat consumers were reminded of the link between meat and animal suffering, they would deny minds specifically to the animals they eat reducing the negative affect that the cognitive conflict could produce.

Overall the research conducted in regard to moral concern for other entities shows how moral boundaries vary extensively across people and situations and how it can be influenced by different mechanisms. Some studies refer to mechanisms related to individual differences such as empathy, perspective taking, creativity, loyalty to the in-group and universalism values; other studies look at cognitive factors, such as the effect of adopting an inclusion or exclusion mindset or the influence of framing effects. Yet, other studies tackle motivational factors for moral concerns, such as conflicts of interests, or increased feelings of relatedness or the motivation to reduce cognitive dissonance and negative affect.

In this study we aim to bring attention to the fact that, although motivational factors have shown to have an impact on moral expansiveness and moral concern decision making (e.g. Opotow, 1990, 1993; Bastian et al, 2012), up until now, it has not been studied in the form of moral motives. We believe that the model of moral motives developed by Janoff-Bulman, et al (2007) may be promising in understanding divergent standpoints in regard to moral concerns and worthy of further exploration to understand its ability to explain the origins of moral expansiveness. Hence, the guiding research question of this study is: Are moral motives related to greater moral concern for different entities?

Considering the previous findings with the MES (Crimston, et al 2016), more specifically, that it is related to overcoming self-interest, willingness to self-sacrifice, universalism values and

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to the Harm/Care moral foundation (Haidt & Joseph, 2004)which focuses on the well-being of others, it seems that moral expansiveness is related to the interpersonal domain of morality and to social responsibilities. Moreover, moral expansiveness is concerned with positive outcomes in the sense of protecting entities by granting them moral concern. Therefore, it is hypothesized that the moral circle should be associated with the endorsement of moral motives that are approach-oriented and other-focused (i.e., the Social Justice moral motive) because they indicate a greater "inclusion" motivation to ensure welfare for every*one* and maybe even every*thing*.

H1: Social Justice is positively related with the moral circle.

Given that Crimston et al (2016) found that the "binding foundations" (associated with in-group loyalty, endorsement of traditional social hierarchies and marking a group's cultural boundaries)were negatively associated with moral expansiveness, we hypothesized that the endorsement of Social Order moral motives should result in a smaller moral circle. Although being other-focused, this motive is related with the inhibition motivation to guarantee in-group living order and group cohesion, meaning greater distinction between who is part of the in-group and who is part of the out-group. These stricter in-and out-group boundaries may result in disregarding many entities from moral consideration because they are not seen as being part of in-group.

H2: Social Order is negatively associated with moral expansiveness.

Taking into consideration that the other two moral motives, Self-reliance and Self-restraint, are perceived *personal* responsibilities, we did not expect them to be related to the moral circle.

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CHAPTER II – Empirical Study

2.1 Participants

In the present study we considered 194 students, 192 Portuguese, 1 German and 1 Italian (are also being consider in the present study because they are Portuguese citizens living in Portugal for 8 and 19 years). The age of the participants was between 18 and 49 years old (M= 20.95, SD= 4,447) 21 males and 173 female (10,8% *male*, 89,2% *female*).

The participants answer to a demographic questionnaire in which we assessed the grade of importance for each individual regarding nationality, religion and political orientation for social and economic issues.

The results showed that most of the participants consider the nation where they live as an important part of who they are. In a 7-point scale with endpoints 1= *"Not all important to who I am"*; 7= *"Extremely important to who I am"*(M= 5,072, SD=1,215);When asked if they follow a religion 41,8% answered *"No"* and of the 56,7% that answered *"Yes"* the majority considers the religion as an important factor in their daily live, using a 7-point scale 1= *"Not at all important"* and 7= *"Extremely important"*(M=4.147, SD= 1.452).Regarding political orientation, the participants were asked to indicate their political believes on issues of economy using a 7-point scale, in which 1=*Left/Liberal* and 7=*Right/Conservative* and most of the participants indicated to have a more *Centrist* or more inclined to the *Left/Liberal* position (M=3.787, SD=1.109), regarding their political beliefs on social issues, the participants indicated to have a *Centrist* or more inclined to the *Left/Liberal* position (M=3,161, SD= 1.43) using also a 7-point scale in which 1= *Left/Liberal* and 7=*Right/Conservative*.

2.2 Methods and procedure

The participants completed a questionnaire packet for course credit, as a part of a cross-cultural study across 28 nations about morality (Bastian, Vauclair & Loughnan, et al., in press).The questionnaire packet was composedofthe following scales: the Moral Circle Scale (MCS) (Loughnan, S., Bastian, B., &Vauclair, C.-M., 2011); Moral Vitalism Scale (Bastian et al, 2015); Moral Motives Scale (MMS; Janoff-Bulman, Manning & Sheikh, 2006); Moral Foundations Questionnaire (MFQ; Graham et al, 2009) and the Short Schwartz´Values Scale (Lindeman & Verkasalo, 2005). The participants also provided socio-demographic information.

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This study is a secondary data analysis for the data collected in Portugal. For the purpose of examining predictors of the moral circle, only the scales MCS, MMS and MFQ were analyzed.

2.3 Materials

Moral Motives Scale (MMS; Janoff-Bulman, Manning & Sheikh, 2006). The scale has 20 items divided in 5-item subscales corresponding to the four moral motives: self-restraint, social order, self-reliance, social justice. The original items are rated on a 7-point scale with endpoints 1= *"Strongly disagree"*, 7= *"Strongly agree"*. In the current study, a 6-point Likert scale was used to avoid a mid-point response style which is more common in some cultures. The reliabilities for the four subscales were .780(*Self-Restrain ;M=4.50, SD=.83*) , .645 (*Social Order; M=2.59, SD=.81*), .764 (*Self-Reliance; M=5.27, SD=.059*), .677 (*Social Justice; M=4.46, SD=.79*). The reliabilities are similar to the ones obtained in the original study(Janoff-Bulman, Manning & Sheikh, 2006):.757 (*Self-Restraint; M = 5.02*), .746 (*Social Order; M = 2.78*), .835 (*Self-Reliance; M = 5.97*), and .716 (*Social Justice; M = 4.39*). Composite mean scores were created for each subscale.

Moral Foundations Questionnaire (MFQ; Graham et al, 2009). The scale has 22 items divided in 5-item subscales corresponding to each foundation: Harm/Care (items 1, 2, 4, 19); Fairness/Reciprocity (items 6, 8, 17, 21); In group/Loyalty (items 10, 11, 13, 16, 22) and, Purity/Sanctity (items 3,7, 9, 20).The items are rated on 6-point scales with endpoints 1= *"Never Relevant"*, 6= *"Always Relevant"*. The reliabilities for the five subscales were .821 (*Harm/Care; M=5.30, SD=.68*), .755 (*Fairness/Reciprocity; M=4.89, SD=.77*), .802 (*Ingroup/Loyalty; M=4.64, SD=.83*), .776 (*Purity/Sanctity; M=4.24, SD=.94*).The reliabilities are similar to the ones obtained in the original study: Cronbach's alphas for the three-item measures of each foundation were .62 (*Harm*), .67 (*Fairness*), .59 (*Ingroup*), .39 (*Authority*), and .70 (*Purity*). Composite mean scores were created for each subscale.

Moral Circle Scale (MCS) developed by the coordinators of the cross-cultural research project on morality (Loughnan, S., Bastian, B., &Vauclair, C.-M., 2011). In this scale the participants indicate the extent of their moral concern regarding 22 different entities ona 6-point scales with endpoints 1= *"Less concern"*6= *"More concern"*. A composite mean score based on all items was created. Furthermore, the 22 items/entities were divided into 4 categories: animals,

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humans, non-living and marginalized as indicated by a Principal Component Analysis (PCA) which will be reported below (see Table 1.)

2.4 Results

2.4.1 Principal Component Analysis

A Principal Component Analysis of all 22 items of the MES was performed using varimax rotation. Based on the scree plot andeigenvalues criterion > 1, only the first 4 factors provided meaningful incremental explanatory power or interpretability. The reliabilities for the four factors were .946 (*Animals; M=3.48, SD=1.10*), .849 (*Humans; M=5.29, SD=.66*), .218 (*Non-living; M=2.58, SD=1.03*), .477 (*Marginalized; M=4.10, SD=1.25*). The reliabilities of the last two categories of entities is relatively low, however, this is common when there are as few as two items (Nunnally, 1978).

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Table 1. PCA factor loadings of Moral Expansiveness Scale (MES)

	Factor Loadings			
	Aminals (Factor 1)	Humans (Factor 2)	Non-living (Factor 3)	Marginalized (Factor 4)
Moral Expansiveness Scale (MES) items				
Abird	**,832**	-,176	-,202	,040
Achimpanzee	**,850**	-,138	-,221	,005
Afish	**,815**	-,339	-,056	-,037
Afrog	**,802**	-,386	,041	-,192
Acow	**,805**	-,301	-,168	-,056
Ahorse	**,795**	-,063	-,272	-,034
Alizard	**,763**	-,429	,203	-,092
Abeetle	**,696**	-,464	,262	-,086
Adog	**,692**	,078	-,441	-,028
Aworm	**,509**	-,401	,374	,011
Atree	**,715**	-,206	-,110	,179
Ahomelessperson	,564	**,542**	,115	,243
an embryo (an unborn child)	,468	**,462**	,167	-,067
a baby	,436	**,640**	-,125	-,054
Awoman	,476	**,634**	-,002	-,228
Aman	,538	**,607**	,016	-,201
Adisabledperson	,563	**,578**	-,050	,059
a man in a coma (permanent vegetative state)	,413	**,448**	,325	-,057
Adeadperson	,237	,269	**,580**	-,467
a robot	,318	-,373	**,382**	,054
Adrugaddict	,572	,327	,022	**,470**
aviolent criminal	,262	,070	,396	**,709**

Note: Varimax rotation with Kaiser Normalization. Substantial factor loadings on Factor 1, 2, 3, 4 are in bold

2.4.2 Descriptive statistics and correlations

Table 2 shows the means, standard deviations and Pearson correlation coefficients of all variables. The means and standard deviations related to each factor identified in our principal component analysis indicate that the participants consensually showed the highest moral concern for the entities included in the *Humans* factor (*M*= 5.29, *SD*= .65), followed by the *Marginalized* and *Animals* factors (*M*= 4.10, *SD*= 1.25; *M*= 3,48, *SD*= 1.11) and, the entities included in the

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Nonliving factor were the ones that held the lowest moral standing of all the targets (*M*= 2.58, *SD*=1.03).

Regarding social demographic variables, the only significant correlation found with the Moral circle was with *Age* (*r*=.15, *p*<.05). As hypothesized (H1), the results show that Social Justice has a significant positive correlation with the Moral Circle (*r*=.23, *p*< .01). More specifically, we found significant positive correlations with the factors *Animals* (*r*=.16, *p*< .05), *Humans* (*r*= .24, *p*<.01) and *Marginalized* (*r*= .21, *p*<.05), with the *Nonliving* factor being the only one that did not show a significant and positive correlation with Social Justice. Nevertheless, overall the results indicate that individuals who endorse Social Justice motive also display greater moral concern across a larger set of entities. Unexpectedly, the *Self-reliance* motive showed a significant positive correlation with the Moral Circle (*r*= .16, *p*< .05) and more specifically, with the factor *Humans* (*r*= .17, *p*< .05); also, Self-Restrain, showed a positive correlation with the Nonliving Factor (r= .19, p< .05). Both findings might be explained by the fact that this motive is a self-focused approach orientation motive which might activate in-group concerns. Regarding *Social Order,* in line with our hypothesis H2, we found negative correlations with the Moral Circle and with all the groups of entities, with the exception of *Nonliving*, but none of these correlations were significant.

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Table 2 Means, Standard deviation and Pearson correlation (n=194)

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Age	20,95	4,45	-																				
2. Gender	0,89	0,31	-,247**	-																			
3. Nationality Importance	5,07	1,22	0,04	0,12	-																		
4. Religion Yes/No	0,58	0,50	0,03	,240**	,225**	-																	
5. Religion Importance	4,15	1,45	-,190*	,312**	,238*	,258**	-																
6. Political Orientation - Economy	3,79	1,11	0,01	0,08	0,03	0,10	0,06	-															
7. Political Orientation - Social	3,16	1,43	0,01	-0,07	,159*	0,13	,234*	,539**	-														
8. Moral Expansiveness Scale	4,03	0,75	,147*	0,11	0,12	-0,01	-0,01	0,09	-0,01	-													
9. Animals	3,48	1,11	,162*	0,05	0,03	-0,08	-0,12	0,13	-0,02	,927**	-												
10. Humans	5,29	0,65	0,04	,216**	,225**	0,10	0,18	0,02	0,04	,660**	,378**	-											
11. Non-living	2,58	1,03	0,03	0,00	0,10	0,11	0,18	-0,07	0,05	,421**	,263**	,319**	-										
12. Marginalized	4,10	1,25	0,09	0,09	0,13	0,00	0,04	-0,03	-0,08	,526**	,334**	,426**	0,09	-									
13. Self-Reliance	5,26	0,59	-0,05	-0,02	,186*	0,04	0,08	0,04	0,12	,163*	0,12	,172*	0,11	0,07	-								
14. Social Justice	4,46	0,78	0,05	0,00	,318**	0,07	0,11	-0,03	0,01	,227**	,160*	,240**	0,10	,207**	,346**	-							
15. Social Order	2,59	0,82	-0,14	0,03	0,13	,193**	0,17	0,05	,273**	-0,04	-0,06	-0,04	0,11	-0,01	0,07	,274**	-						
16. Self-Restrain	4,50	0,82	-0,03	0,02	,188**	,154*	,222*	,164*	,296**	-0,02	-0,09	0,08	,192**	-0,02	,489**	,331**	,307**	-					
17. Fairness	4,84	0,77	-0,10	,258**	,301**	0,11	0,11	-0,02	0,09	,208**	0,14	,251**	0,11	,145*	,288**	,353**	0,02	,142*	-				
18. Harm	5,30	0,68	0,03	,260**	,211**	0,09	,188*	-0,04	0,03	,199*	0,10	,325**	0,03	,213**	,372**	,331**	-0,02	,224**	,693**	-			
19. Ingroup	4,65	0,82	-0,03	,225**	,272**	0,12	0,14	0,06	,175*	,271**	,187**	,280**	,262**	,148*	,288**	,291**	0,13	,296**	,656**	,563**	-		
20. Authority	4,13	0,88	-0,05	,150*	,388**	,234**	,227*	0,06	,327**	,233**	0,13	,268**	,281**	,192**	,268**	,321**	,282**	,382**	,593**	,483**	,681**	-	
21. Purity	4,25	0,93	0,02	0,12	,384**	,221**	,230*	0,05	,297**	0,14	0,03	,236**	,200**	,157*	,287**	,300**	,223*	,371**	,611**	,564**	,664**	,710**	-

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Note.   *p<.05**p<.01***p<.001

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2.4.3 Hierarchical regression predicting the moral circle

A hierarchical regression was performed with the Moral Circle as the dependent variable. The purpose was to better understand whether moral motives have incremental predictive validity over and above variables that have already been shown to predict the size of the moral circle. Therefore, this regression model consisted in three steps: step 1 allowed for controlling the socio-demographic variables(age, gender, religiosity, social political orientation and economical political orientation) and step 2 added theMoral Foundationstothe regression model (Harm, Fairness, In-group, Purity, Autonomy); the final step consisted inincludingall four moral motives(self-restraint, self order, social order, self-reliance) into the model.

Differently from previous research (Crimston et al., 2016), this study found that socio-demographics (age, gender and political orientation) explained a significant amount of variance (3%)in the dependent variable and had a significant contribution to the regression model($F=$ 2.25,$p<.05$). We found that age consistently show a significant and positive relation with the dependent variable at the three steps of the hierarchical regression ($b=.19$, $p< .05$; $b=.20$, $p< .01$; $b=.18$, $p< .05$). However, it is important to emphasize that most of our participants are young adults ($M=20.98$, $SD=4.50$). At step 1, we also found a significant positive relation between Gender and the Moral circle, since in this study Female was coded as 1 and male as 0, it seems that females show greater moral circles ($b=.16$, $p< .05$).The rest of the socio-demographic such as Religion and Economic or Social Political orientation were not significant predictors of the Moral circle in this study.

After controlling for socio-demographics, the results reveal that moral foundations explained a significant amount of variance in the dependent variable in step 2 of the hierarchical regression (11%) and had a significant contribution to the regression model ($F= 4.40$, $p< .01$). But surprisingly, only the Authority/Respect foundation was a significant and positive predictor of the Moral Circle ($b= .24$,$p< .05$).

Finally at step 3, after controlling for socio-demographics and the moral foundations, we found that Moral Motives explained a significant amount of variance in the dependent variable (15%)and had a significant contribution to the regression model ($F= 2.68$, $p<.05$). Yet, contrary to the hypothesis (H1) Social Justice was not a significant predictor and only Self-Restrain showed a significant negative relation with the Moral Circle ($b=-.22$, $p< .05$).

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Table 3. Hierarchical Regression with the Moral Circle as Dependent Variable.

	Moral Circle								
Predictormeasures	Step 1			Step 2			Step 3		
$\Delta R2$	.03*			.11**			.15*		
	B	SE B	β	B	SE B	B	B	SE B	B
(Constant)	2.93	0.38	—	1.60	0.52	—	1.22	0.65	—
Age	.03	.01	.19*	.03	.01	.20**	.03	.01	.18*
Gender (female)	.38	.19	.16*	.18	.19	.07	.26	.19	.11
Religion (Yes)	-.09	.11	-.06	-.13	.11	-.08	-.12	.11	-.08
Cons.Econ.Political	.07	.06	.10	.10	.06	.15	.10	.06	.15
Cons.Soc.Political	-.04	.05	-.07	-.09	.05	-.17	-.06	.05	-.12
Moral foundations									
Harm/Care	—	—	—	.04	.11	.04	-.01	.11	-.01
Fairness/Reciprocity	—	—	—	.06	.11	.07	-.04	.11	-.04
Ingroup/Loyalty	—	—	—	.16	.10	.18	.17	.10	.18
Purity/Sanctity	—	—	—	-.14	.09	-.17	-.10	.09	-.12
Authority/Respect	—	—	—	.20	.10	.24*	.22	.10	.27*
Moral Motives									
Self-Restrain	—	—	—	—	—	—	-.20	.08	-.22*
Social Justice	—	—	—	—	—	—	.15	.08	.16
Social Order	—	—	—	—	—	—	-.04	.07	-.05
Self-Reliance	—	—	—	—	—	—	.21	.11	.16

Note. * p< .05   ** p < .01   *** p < .001; SE B = Beta Standard Deviation Error; Cons. Econ./Soc., Political = Conservative Economic/Social Political Orientation.

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Following the study, we performed a set of hierarchical regressions with each one of the factors of the moral circle, previously identified in the Principal Component Analysis (see Table 1), as dependent variables. The purpose was to better understand whether moral motives have incremental predictive validity for a specific set of entities of the moral concern span, over and above variables that have already been shown to predict the size of the moral circle. Hence, we always entered predictors in the same way as shown in Table 3.

In Table 4, we performed a hierarchical regression with the Factor *Humans* as a dependent variable. Similar to the results found in table 3,the socio-demographics explained asignificant amount of variance in the dependent variable (4%) and also show a significant contribution to the to the regression model ($F= 2.38$, $p< .05$)

In step 1 we found that gender had once more a significant positive relation with the *Humans* factor ($b= 0.24$, $p< .05$), showing that females show higher inclusiveness in their moral circle for the entities contained in this factor than males. The rest of the socio-demographic such as Religion and Economic/ Social Political orientation were not significant predictors in this study.

After controlling for socio-demographics, again we found results consistent with what found in Table 3. The Step 2 of the hierarchical regression showed that moral foundations explained a significant amount of variance in the dependent variable *Humans* (10%) and, also showed a significant contribution to the regression model ($F= 3.68$, $p< .05$). The differences we found from table 3was that here, although the Authority/Respect foundations had a positive relation with the *Humans* factor, it was not significant. In this model we also found that the Harm/Care foundations was a significant and positive predictor of the *Humans* Factor ($b= .22$, $p< .05$), which is more in line with previous research findings (Crimston et al, 2016).

Finally at step 3, after controlling for socio-demographics and the moral foundations, we found that Moral Motives did not explain a significant amount of variance in the dependent variable. Nevertheless, here the only moral motive that showed to be a positive and significant predictor of the *Humans* factor was Social Justice ($b= .19$, $p< .05$) indicating that participants who highly endorsed Social Justice motives also displayed high moral concern for the entities included in this factor, which is consistent with our hypothesis H1.

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Table 4. Hierarchical Regression with the Factor Humans as Dependent Variable.

	Humans								
Predictormeasures	Step 1			Step 2			Step 3		
ΔR2	.04*			.10**			.12		
	B	SE B	B	B	SE B	B	B	SE B	B
(Constant)	4.53	0.33	—	3.21	0.46	—	3.13	0.58	—
Age	.01	.01	.10	.01	.01	.08	.01	.01	.05
Gender (female)	.50	.16	.24**	.30	.16	.15	.38	.17	.18*
Religion (Yes)	.05	.10	.04	.03	.10	.02	.04	.10	.03
Cons.Econ.Political	-.03	.05	-.05	.00	.05	.00	-.01	.05	-.02
Cons.Soc.Political	.03	.04	.06	-.01	.04	-.02	.02	.04	.05
Moral foundations									
Harm/Care	—	—	—	.21	.10	.22*	.16	.10	.17
Fairness/Reciprocity	—	—	—	-.03	.10	-.04	-.11	.10	-.13
Ingroup/Loyalty	—	—	—	.07	.09	.09	.07	.09	.09
Purity/Sanctity	—	—	—	-.04	.08	-.05	-.01	.08	-.01
Authority/Respect	—	—	—	.10	.08	.14	.11	.08	.15
Moral Motives									
Self-Restrain	—	—	—	—	—	—	-.07	.07	-.09
Social Justice	—	—	—	—	—	—	.16	.07	.19*
Social Order	—	—	—	—	—	—	-.10	.07	-.13
Self-Reliance	—	—	—	—	—	—	.08	.10	.07

Note. * p< .05   ** p < .01   *** p < .001; SE B = Beta Standard Deviation Error; Cons. Econ./Soc., Political = Conservative Economic/Social Political Orientation.

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     In Table 5, we show the results for the hierarchical regression performed with the Factor *Animals* as a dependent variable. The results in step 1 show that there was an considerable increase in the amount of variance explained when entering socio-demographics (5%) and again there was a significant contribution to the regression model ($F = 2.95$, $p < .05$). In this regression, both age and political orientation regarding economical issues, had a positive and significant relation with the *Animals* Factor throughout the 3 steps of the model, regarding the age variable ($b = .19$, $p < .01$; $b = .21$, $p < .01$; $b = .20$, $p < .01$) and about the liberal political orientation for economical issues ($b = .18$, $p < .05$; $b = .22$, $p < .05$; $b = .22$, $p < .01$). These results indicate that older adults and those with a conservative political orientation regarding economical issues display higher moral concern for entities included in the *Animals* Factor.

     In step 2 of the hierarchical regression we found that moral foundations explained a significant amount of variance in the dependent variable *Animals* (10%) and had significant contribution to the to the regression model ($F = 2.89$, $p < .05$). Differently from the results found in the previous regressions, here none of the foundations showed a significant relation with the *Animals* Factor and surprisingly the Harm/Care foundation showed to have negative relation, although not significant.

     In step 3, we found that Moral Motives explained a significant amount of variance in the dependent variable (13%), had a significant contribution to the to the regression model ($F = 2.73$, $p < .05$). Consistent with the results found in Table 3, Self-restrain showed a significant negative relation with the Animals factor ($b = -.25$, $p < .05$) and surprisingly, only Self-reliance showed a significant positive relation ($b = .19$, $p < .05$).

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Table 5. Hierarchical Regression with the Factor Animals as Dependent Variable.

Predictormeasures	Animals								
	Step 1			Step 2			Step 3		
$\Delta R2$	.05**			.10*			.13*		
	B	SE B	B	B	SE B	B	B	SE B	B
(Constant)	1.90	0.55	—	.53	.78	—	-.08	.97	—
Age	.05	.02	.19**	.05	.02	.21**	.05	.02	.20**
Gender (female)	.36	.27	.10	.13	.28	.04	.25	.28	.07
Religion (Yes)	-.26	.17	-.12	-.27	.17	-.12	-.26	.17	-.12
Cons.Econ.Political	.18	.08	.18*	.22	.08	.22*	.22	.08	.22**
Cons.Soc.Political	-.09	.07	-.12	-.14	.07	-.18	-.11	.07	-.14
Moral foundations									
Harm/Care	—	—	—	-.05	.17	-.03	-.12	.17	-.07
Fairness/Reciprocity	—	—	—	.16	.16	.11	.02	.17	.01
Ingroup/Loyalty	—	—	—	.23	.15	.18	.24	.14	.18
Purity/Sanctity	—	—	—	-.24	.13	-.21	-.18	.13	-.16
Authority/Respect	—	—	—	.23	.14	.19	.27	.14	.22
Moral Motives									
Self-Restrain	—	—	—	—	—	—	-.34	.12	-.25**
Social Justice	—	—	—	—	—	—	.16	.12	.12
Social Order	—	—	—	—	—	—	-.01	.11	-.01
Self-Reliance	—	—	—	—	—	—	.35	.16	,19*

Note. * p< .05   ** p < .01   *** p < .001; SE B = Beta Standard Deviation Error; Cons. Econ./Soc., Political = Conservative Economic/Social Political Orientation.

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In Table 6, we show the results found for the hierarchical regression performed with the Factor *Marginalized* as the dependent variable. Differently from the previous results, in step 1, socio-demographics did not have a significant impact on the dependent variable nor did they explain a significant amount of variance. However, after controlling for socio-demographics, in step 2 moral, we found a significant and positive relation between the liberal political orientation for economical issues and the Marginalized Factor ($b = .19$, $p < .05$).

Here moral foundations explained a significant amount of variance in the dependent variable *Marginalized* (5%) and had a significant contribution to the to the regression model ($F = 2.76$, $p < .05$). Similarly, to the results found in Table 3, the Authority/Respect foundation was the only foundation to show a significant positive relation with the dependent variable ($b = .26$, $p < .05$).

In step 3, after controlling for socio-demographics and the moral foundations, we found that Moral Motives did not have a significant impact on the dependent variable nor did they explain a significant amount of variance. Nevertheless, consistent with our hypothesis H1, we found a significant and positive relation between the Social Justice moral motive and the dependent variable Marginalized, indicating that those who endorse Social Justice motive also display larger moral circle, including the entities, usually marginalized by society, in their moral concern.

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Table 6. Hierarchical Regression with the Factor Marginalized as Dependent Variable.

Predictormeasures	Step 1			Marginalized Step 2			Step 3		
ΔR2	.00			.05*			.06		
	B	SE B	B	B	SE B	B	B	SE B	B
(Constant)	3.27	0.64	—	1.36	0.91	—	1.40	1.15	—
Age	.03	.02	.12	.03	.02	.11	.02	.02	.09
Gender (female)	.46	.31	.12	.21	.32	.05	.28	.33	.07
Religion (Yes)	-.03	.19	-.01	-.13	.19	-.05	-.13	.19	-.05
Cons.Econ.Political	-.01	.10	-.01	.06	.10	.05	.07	.10	.06
Cons.Soc.Political	-.07	.08	-.08	-.17	.08	-.19*	-.13	.09	-.15
Moral foundations									
Harm/Care	—	—	—	.27	.19	.15	.27	.20	.15
Fairness/Reciprocity	—	—	—	-.05	.19	-.03	-.18	.20	-.11
Ingroup/Loyalty	—	—	—	-.07	.17	-.05	-.06	.17	-.04
Purity/Sanctity	—	—	—	-.01	.16	-.01	.03	.16	.02
Authority/Respect	—	—	—	.36	.16	.25*	.36	.17	.26*
Moral Motives									
Self-Restrain	—	—	—	—	—	—	-.22	.14	-.14
Social Justice	—	—	—	—	—	—	.27	.14	.17*
Social Order	—	—	—	—	—	—	-.02	.13	-.01
Self-Reliance	—	—	—	—	—	—	.01	.19	.01

Note. * p< .05   ** p < .01   *** p < .001; SE B = Beta Standard Deviation Error; Cons. Econ./Soc., Political = Conservative Economic/Social Political Orientation.

Finally, In Table 7, we show the results for the hierarchical regression performed with the Factor *Nonliving* as a dependent variable. In step 1, socio-demographics did not have a significant impact on the dependent variable nor show to explain a significant variance.

In step 2, after controlling for socio-demographics, moral foundations, showed once more a significant amount of variance explained in the dependent variable the *Nonliving* factor (9%) and had significant contribution to the regression model ($F=4.47$, $p< .05$). Specifically, we found two foundations that showed a significant positive relation with the dependent variable *Nonliving*, the Ingroup/Loyalty foundation ($b= .26$, $p< .05$) and the Authority/Respect foundation ($b= .24$, $p< .05$).

In step 3, the Authority/Respect foundation had still a positive relation with the dependent variable ($b= .21$) but was no longer significant. Regarding the incremental value of moral motives in step 3, after controlling for socio-demographics and for the moral foundations, we found that moral motives did not have a significant impact on the dependent variable nor show to explain a significant variance.Surprisingly, the Social Justice motive showed a negative relation with the dependent variable ($b= -.02$) although it was not significant.

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Table 7. Hierarchical Regression with the Factor Nonliving as Dependent Variable

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Predictormeasures	Nonliving								
	Step 1			Step 2			Step 3		
ΔR2	.01			.09**			.09		
	B	SE B	B	B	SE B	B	B	SE B	β
(Constant)	2.63	0.53	—	2.12	0.73	—	1.54	0.94	—
Age	.01	.02	.03	.01	.02	.04	.01	.02	.05
Gender (female)	.00	.26	.00	-.08	.26	-.02	-.06	.27	-.02
Religion (Yes)	.25	.16	.12	.15	.16	.07	.15	.16	.07
Lib.Econ.Political	-.14	.08	-.15	-.11	.08	-.11	-.12	.08	-.13
Lib.Soc.Political	.07	.06	.09	-.02	.07	-.03	-.04	.07	-.05
Moral foundations									
Harm/Care	—	—	—	-.27	.16	-.18	-.32	.16	-.21
Fairness/Reciprocity	—	—	—	-.09	.15	-.07	-.03	.16	-.02
Ingroup/Loyalty	—	—	—	.33	.14	.26*	.31	.14	.25*
Purity/Sanctity	—	—	—	-.01	.13	-.01	-.04	.13	-.03
Authority/Respect	—	—	—	.27	.13	.24*	.24	.14	.21
Moral Motives									
Self-Restrain	—	—	—	—	—	—	.17	.12	.13
Social Justice	—	—	—	—	—	—	-.03	.11	-.02
Social Order	—	—	—	—	—	—	.00	.11	.00
Self-Reliance	—	—	—	—	—	—	.04	.15	.02

Note. * p< .05   ** p < .01   *** p < .001; SE B = Beta Standard Deviation Error; Lib. Econ./Soc., Political = Liberal Economic/Social PoliticalOrientation.

CHAPTER III – General Discussion

3.1 Summary and interpretation of the main findings

Focusing on our research question, "Are moral motives related to greater moral concern for different entities?", we were able to find evidence that show that having approach oriented motivations focused on providing for the welfare of others, translates into larger moral circles and broader moral boundaries. Our results showed a positive and significant correlation between the Social Justice motive and the moral circle, specifically, we found positive and significant correlations with the *Humans*, *Animals* and *Marginalized* factors. Moreover, when further exploring the incremental predictive validity of the moral motives over and above other variables that have been proven to be related to the size of the moral circle, we found that moral motives explain a statistically significant amount of variance in the moral circle model and specifically, for the Animals factor. Regarding the relation with categories of different entities, we found significant and positive relations between Social Justice and the *Humans* and *Marginalized* Factors.

Although our hypothesis H1was not strongly supported, overall the findings mentioned above show a tendency pointing in that direction. Overall, this findings confirm our hypothesis H1, in the sense that it seems that having motivations to help others that activate behaviors to ensure their welfare, shows to be related with having more expansive moral boundaries by embracing in the moral concern not only entities that belong to the in-group but, also entities that are normally marginalized by the communities and even animals. In consonance with our hypothesis H2, we found that the Social Order motive had a negative correlation with the moral circle and with all the different categories of entities, with the exception of the Nonliving factor. Although these findings might indicate that people with high endorsement of Social Order motivations display smaller moral circles, the results were not significant, so it does not allow us to draw reliable conclusions.

Regarding the self-focused moral motives (Self-Restrain and Self-Reliance), although we did not expect them to be related with the moral circle, we found some interesting results.

Surprisingly, when exploring the incremental predictive validity of the moral motives for Animals category the model showed a positive and significant relation with Self-reliance,

meaning that those who score high on self-reliance motive also showed high moral concerns for the entities included in the Animals category. In this case is important to remember that Self-reliance is related with activation of the need to provide for the self to achieve autonomy and independence with we would not expect to be related with more inclusive moral circles, one could argue, that these results could be related with the idea that if we are responsible for providing for ourselves we are also responsible for providing for others in society, but this does not explain the positive relation specifically with the animals category,

Another interesting fact is that, the same model also show a positive and significant relation between the conservative economical political orientation and the Animals factor. Considering that, Janoff-Bulman et al, (2007) research found a consistent results that indicated conservatives to show a strong emphasis on individualism and on the belief that is our responsibility to provide for ourselves alone, it is difficult to make sense or draw conclusion on this findings,further research is necessary to verify that this result are not a statistical artifact.

The same could be said, for the results found when exploring the incremental predictive validity of the moral motives for different categories and Self-reliance showed a positive and significant relation with Animals Factor which was also significantly and positive related with Liberal political orientation for economical issues.

On the other hand, Although we did not find a significant correlation between Self-Restrain and the moral circle, when further explored and after controlling for socio-demographic and moral foundations variables, Self-restrain showed to have significant and negative relation with the moral circle, and specifically with the Animals factor. Showing that, those who score high on self-restrain motive also display a smaller moral circle and stricter moral boundaries. These findings are more aligned with our expectations, taking into consideration that that self-restrain is focus on avoiding personal negative outcomes and self-protection.

In this study we found that the moral circle varies as in function of socio-demographic characteristics. Contrary to previous research results (e.g. Crimston et al, 2016), the current research showed that socio-demographic variables such us Age and Gender are significantly related with the moral circle, nevertheless is important to note that the majority of our participants were relatively young and mostly female, so maybe if we had a more diversified sample, we would have found different results.

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Regarding other constructs that have been related with the moral circle in previous research, consistently with the results found by Crimston, et al (2016) our findings showed that moral foundations were significantly correlated with the moral circle and that moral foundations were able to explain a statistically significant amount of variance in the moral circle model.

Moreover, Crimston, et al (2016) found a significant negative correlation between the MES and the "binding foundations" (In-group/Loyalty, Authority/Respect and Purity/Sanctity), and a significant positive correlation between the MES and the Harm/Care foundation, which was not consistent with our findings. Our results showed that the most consistent predictor of all foundations was the Authority/Respect foundation, being the only one to have a significant positive relation with the moral circle, and especially with the Marginalized and Nonliving categories.

Is this result a clear indication that Authority/Respect foundations are related with a larger moral circle, that include not only in-group entities but also, those normally marginalized by the community and not living entities, or is this result a mirror of a specific characteristic of our participants? Taking into consideration that Authority/Respect foundation is conceptually related to life within structured societies and the endorsement and respect of the society's values and hierarchies (Haidt & Graham, 2007), it might be that that this result reflects a culture-specific finding in regard to Portuguese culture.

Another intriguing result that we found regarding moral foundations is that we only found a significant positive relation between the Harm/Care foundations and the moral circle and it was only related with the Humans category. This results contradicts Crimston, et al (2006) argument, that those high in moral expansiveness are more likely to base their moral judgments on Harm/Care foundations, because our results seem to indicate that the majority of our participants that display a higher endorsement of the Harm/Care foundations have stricter moral boundaries, showing only high moral concern for entities consider in their in-group or that are at least similar to them. One possibility that could explain these findings could be Bastian Costello et al, (2012) that showed the significant impact that perceived similarity have on individual moral expansiveness, but it would need further exploration and research to understand the underlines of these results.

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3.2 Limitations

The present study has some limitations that should be taken into consideration when discussing our findings. First, our sample is relatively small (N=194), and has some homogeneity regarding age and gender, because the majority of our participants were relatively young female adults. Taking into consideration that in our study this factors show to explain a significant amount of variance in our analysis, we consider the possibility that a larger and more diverse sample of participants regarding these characteristics could show different results or allow us to understand better the implications that socio-demographic variables have to this model.

Another important limitation is related with the fact that in our study we only use Portuguese participants, knowing from previous studies in the field of moral psychology that culture specifics can have a significant impact on people's moral concern; therefore our results cannot be understood outside of this factor nor can be extrapolated to other cultures.

We also found some limitations regarding the materials used in this study, more specifically, the Moral Circle Scale (Loughnan, S., Bastian, B., &Vauclair, C.-M., 2011) which is composed only by 22 different entities. The scale allowed us to identified 4 different entity categories with incremental validity, but two of the categories were only compose by 2 items each (Marginalized and Nonliving) which consequently show relatively small reliabilities.

Moreover, the use of larger scale, with higher number of different entities, would allow us to identify more specific and detailed categories, for instance, it could allow us to understand the impact of in-group/out-group perspectives for the moral concern inside the Humans category, or to identified the different breath of moral concern given to considered high sentient animals or low sentient animals.

3.3 Implications and future perspectives

A few centuries ago, people to believe that women should have the same rights as man, or that black people should have the same rights as white people, for most of people would be a crazy idea, but nowadays everyone (hopefully!) would agree. Today, there are movements for securing legal rights for chimpanzees and elephants, like the Nonhuman Rights Project, or people that argue we should grant legal rights and secure the welfare of all living beings and entities that supports living things, as the Community Environmental Legal Defense Fund is doing, also beyond the Wanganui River gaining legal rights as a person, other ecosystems have seen rights

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granted, like rivers and forests in Colombia and India, or the Lake Erie in North America that won legal personhood in February of 2019.

Such situations might illustrate a social tendency for moral progression and that moral sensibilities have altered and expanded over time, but it is not possible to globalize this idea because, whereas some people engage in public protest against animal farming and meat production with the aim to reveal the bad conditions in which animals are being kept, transported and killed, others keep producing meat in such conditions for a large amount of consumers. Some people like the Maori, Jains from India or the Quechua from the Andes, for centuries have considered that nature has inhered value and has its own inalienable rights, but only recently they have been able to gain "battles" against the current exploitation of nature. Therefore, the expansion of our moral sensibilities is by no means linear and people's reactions to granting moral concern for different entities are likely to differ widely.

Pizarro, Detweiler-Bedell, & Bloom (2006) explained that in regards of the moral circle it is not only a matter of inclusion or exclusion but there different moral circles, since we do not grant de same grade of moral concern to every entity that we consider, for instance, our moral concern can vary from the entities that we consider entitled of life but is not our primary concern, to the entities that we feel obligated to protect and provide for. That being said, there is not only one boundary to our moral concern, there are several moral boundaries that differ across individuals. Therefore, studying the breadth and depth of our moral circle, understanding the individual and social differences in regards or attributing moral concern to different kind of entities has proven to be a very helpful approach in identifying the different barriers that affect our moral considerations which allow us to suggest ways in which these barriers can be overcome.

The motivational approach to moral psychology, has helped in identifying motivational factors that inform about variability in moral expansiveness. Janoff-Bulman, et al, (2007) model applies fundamental distinctions already well recognized in psychology (i.e. approach versus avoidance) into creating a explanatory framework for understanding different moral motives Hence, exploring the relation of the Moral Motives Model with the moral circle allow us to further understand the mechanisms that are responsible for moral consideration.

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Although our hypotheses were not strongly supported, for example, we did not find a strong correlation and relation between Social Justice and the moral circle nor with every set of entity category, overall this research showed that the motivational perspective brings important contributions to the study of moral psychology, more specifically, we found that the model of moral motives can inform about our moral circle and therefore provide better understanding in regards of moral concern decision making. Having found some significant results that confirms that moral motives with an approach orientation and other focus can have the ability to inform about our moral circle, opens new possibilities for further studies in same direction.

In 2013 Janoff-Bulman & Carnes, developed further the Moral Motives Model (MMM) taxonomy, to include prescriptive vs. proscriptive dimensions to the approach vs. avoidance orientations, emphasizing that approach orientations involve a prescriptive regulation (to provide) and avoidance orientation involves a proscriptive regulation (to protect), the authors also added a group focus level related with moral motivation focused on the collective. For future reaseraches, it would be interesting to explore if this new model can provide further insights in regards to understanding the moral circle, especially if this new distinction between the *Other* focus level and the *Group* focus level can further explain differences in the moral circle,

In order to draw more detail an specific conclusions for our study, we believe that would be beneficial to do a experimental research exploring the relations between the full MES (Crimston et al, 2016) and the new MMS presented by Janoff-Bulman & Carnes (2016) that assesses the six Moral Motives.

We would also recommend for future studies that a larger and more diverse sample of participants is gathered, in order to better understand the incremental impact that socio-demografhic factor can have in the study of the moral circle and moral motives.

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Appendices

CCMP Questionnaire

This questionnaire asks you to think about a variety of different issues and concepts. In **all** cases, we are interested in your opinion. There are no right or wrong answers, nor are there any correct or incorrect responses.

When we think about all the entities in the world, we might feel a moral obligation to show concern for the welfare of some of those entities. Below is a list of entities. Please indicate the extent to which you feel **morally obligated to show concern for** the welfare of each of them.

Less Concern 1	2	3	4	5	More Concern 6

1. A man	1	2	3	4	5	6
2. A dog	1	2	3	4	5	6
3. A bird	1	2	3	4	5	6
4. A drug addict	1	2	3	4	5	6
5. A robot	1	2	3	4	5	6
6. A chimpanzee	1	2	3	4	5	6
7. A tree	1	2	3	4	5	6
8. A man in a coma (a permanent vegetative state)	1	2	3	4	5	6
9. A beetle	1	2	3	4	5	6
10. A woman	1	2	3	4	5	6
11. A dead person	1	2	3	4	5	6
12. A fish	1	2	3	4	5	6

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13. A frog	1	2	3	4	5	6
14. A horse	1	2	3	4	5	6
15. A violent criminal	1	2	3	4	5	6
16. A lizard	1	2	3	4	5	6
17. A foetus (an unborn child)	1	2	3	4	5	6
18. A cow	1	2	3	4	5	6
19. A homeless person	1	2	3	4	5	6
20. A baby	1	2	3	4	5	6
21. A disabled person	1	2	3	4	5	6
22. A worm	1	2	3	4	5	6

The following statements are about how you think about **good** and **evil**. There are **no right or wrong answers**. We are simply interested in how much you *agree* with each of the following statements. We are interested in your first responses, so please do not take too much time to think about each question. Please use the following scale to indicate how strongly you *agree* or *disagree* with each statement.

Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6

1. There are underlying forces of good and evil in this world.	1	2	3	4	5	6
2. Either the forces of good or the forces of evil are responsible for most of the events in the world today.	1	2	3	4	5	6
3. The forces of good and evil often motivate human behaviour.	1	2	3	4	5	6
4. Good and evil are human constructions.	1	2	3	4	5	6
5. People need to be aware of the good and evil that are in this world today.	1	2	3	4	5	6

6. Things happen and sometimes they have good or evil consequences, but there is nothing that is truly good or truly evil.	1	2	3	4	5	6
7. There is nothing that is really good or really evil in this world, it's all a matter of perspective.	1	2	3	4	5	6
8. Good and evil are aspects of the natural world.	1	2	3	4	5	6

The following statements are about yourself and your personal opinion. Please use the following scale to indicate how strongly you *agree* or *disagree* with each statement. There are no correct or incorrect reactions, so please be as honest as possible in responding.

Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6

1. It's particularly important to me to demonstrate self-control in the face of temptation.	1	2	3	4	5	6
2. We should all be responsible for improving the welfare of others beyond our immediate circle of friends and family.	1	2	3	4	5	6
3. Giving people the freedom to choose the way they live threatens the societal bonds that hold us together.	1	2	3	4	5	6
4. I'm willing to put the necessary time and effort into providing for my own well-being and success.	1	2	3	4	5	6
5. It's an obligation, not a matter of personal preference, to provide for people worse off even if we're not close to them.	1	2	3	4	5	6
6. I value hard work and personal commitment when it comes to making decisions in my life.	1	2	3	4	5	6
7. People should not be completely free to express themselves through their own choice of lifestyle, even if they don't harm others.	1	2	3	4	5	6
8. When things get tough, I apply myself and work even harder to overcome difficulties.	1	2	3	4	5	6

9. Self-discipline in the lifestyle I choose is an important way for me to feel like a decent person.	1	2	3	4	5	6
10. It's important for those who are better off in society to work hard to provide more resources for those who are worse off.	1	2	3	4	5	6
11. By bucking tradition and choosing new lifestyles, people are actually threatening the wider society.	1	2	3	4	5	6
12. I demonstrate I'm a better person every time I exercise self-restraint rather than give in to my desires.	1	2	3	4	5	6
13. I think it's important to take responsibility for my failures and setbacks rather than blame other people.	1	2	3	4	5	6

Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6

14. It's not always easy to avoid temptations, but for my own good I feel I really have to try my best.	1	2	3	4	5	6
15. If we look after ourselves, we still need to look after others in society.	1	2	3	4	5	6
16. Whether or not I have others to lean on, I think it's important for me to try to provide for myself.	1	2	3	4	5	6
17. When we try to get people to abide by our own code of behavior, we are not invading other people's privacy and right to choose for themselves.	1	2	3	4	5	6
18. In the healthiest societies those at the top feel responsible for providing better lives for those at the bottom.	1	2	3	4	5	6
19. Life is full of unhealthy attractions, so it's important for me to develop a strong sense of self-discipline and control.	1	2	3	4	5	6
20. In a decent society, people should not be free to make their own choices about how to live their lives, but should attend to community standards.	1	2	3	4	5	6

Please read the statement in bold carefully and then use the scale provided to rate the relevance of the considerations listed below:

"When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?"

Never relevant					Always relevant
1	2	3	4	5	6

1. Whether or not someone was harmed.	1	2	3	4	5	6
2. Whether or not someone suffered emotionally.	1	2	3	4	5	6
3. Whether or not someone did something disgusting.	1	2	3	4	5	6
4. Whether or not someone cared for someone weak or vulnerable.	1	2	3	4	5	6
5. Whether or not an authority failed to protect his/her subordinates.	1	2	3	4	5	6
6. Whether or not someone was denied his or her rights.	1	2	3	4	5	6
7. Whether or not someone did something unnatural or degrading.	1	2	3	4	5	6
8. Whether or not someone ended up profiting more than others.	1	2	3	4	5	6
9. Whether or not someone was able to control his or her desires.	1	2	3	4	5	6
10. Whether or not the action was done by a friend or relative of yours.	1	2	3	4	5	6
11. Whether or not someone showed a lack of loyalty.	1	2	3	4	5	6

Never					Always

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relevant					relevant
1	2	3	4	5	6

12. Whether or not someone showed a lack of respect for legitimate authority.	1 2 3 4 5 6
13. Whether or not someone put the interests of the group above his/her own.	1 2 3 4 5 6
14. Whether or not the people involved were of the same rank or status.	1 2 3 4 5 6
15. Whether or not someone failed to fulfil the duties of his or her role.	1 2 3 4 5 6
16. Whether or not the action affected your group.	1 2 3 4 5 6
17. Whether or not some people were treated differently than others.	1 2 3 4 5 6
18. Whether or not someone respected the traditions of society.	1 2 3 4 5 6
19. Whether or not someone used violence.	1 2 3 4 5 6
20. Whether or not someone violated standards of purity and decency.	1 2 3 4 5 6
21. Whether or not someone acted unfairly.	1 2 3 4 5 6
22. Whether or not someone did something to betray his or her group.	1 2 3 4 5 6

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The next questionnaire asks about the things you personally value in life. Please answer in the space to the left of each item. First read the list of values below and choose the value that is most important to you and rate it **7**. Next, choose the value that is opposed to what you value and rate it **-1**. If there is no such value, choose the value least important to you and rate it **0** or **1**, according to its importance. **Then rate the rest of the values in the list.**

AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

-1	0	1	2	3	4	5	6	7
Opposed to my principles	**Not important**			**Important**			**Very important**	

_____ **POWER**, that is, social power, authority, wealth.

_____ **ACHIEVEMENT**, that is, success, capability, ambition, and influence on people and events.

_____ **HEDONISM**, that is, to have pleasure, enjoy life (food, sex, leisure, etc.), and to do pleasant things.

_____ **STIMULATION**, that is, to have an exciting life, a varied life, and to be daring (seeking adventure, risk).

_____ **SELF-DIRECTION**, that is, freedom, creativity, independence, curiosity, and to choose your own goals.

_____ **UNIVERSALISM**, that is, equality, a world at peace, wisdom, social justice, broadmindedness, to enjoy the beauty of nature and the arts, to feel unity with nature and to protect the environment.

_____ **BENEVOLENCE**, that is, to be loyal, honest, helpful, responsible, and forgiving.

_____ **TRADITION**, that is, to have respect for tradition, to be moderate, humble, devout, and to accept your portion in life.

_____ **CONFORMITY**, that is, politeness, self-discipline, to honour parents and elders, and to be

obedient.
_____ **SECURITY**, that is, social order, national security, family security, cleanliness, and to reciprocate other people's favours.

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Demographics

Age (in years): _____

Gender: _____

Nationality: _____

How long have you lived in the nation which you currently reside (in years)? _____

To what extent do you feel that the nation in which you live is an important part of who you are?

23. *Not at all important to who I am*	1	2	3	4	5	6	7	24. *Extremely important to who I am*

Do you follow a religion? If so, please write in your religion below. If not, please

write 'no':_____

If you do follow a religion, how important is that religion in your daily life?

25. *Not at all important*	1	2	3	4	5	6	7	26. *Extremely important*

Please indicate your political beliefs from left/liberal to right/conservative on issues of the economy (e.g., social welfare, government spending, tax cuts):

27. *Left/Liberal*	1	2	3	4	5	6	7	28. *Right/Conservative*

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Please indicate your political beliefs from left/liberal to right/conservative on social issues (e.g., immigration, homosexual marriage, abortion):

29. Left/Liberal	1	2	3	4	5	6	7	30. Right/Conservative