MORALITY-AS-COOPERATION: HOW IT RELATES TO CONSTRUAL LEVELS AND HOW THE THEORY COULD IMPROVE

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MORALITY-AS-COOPERATION: HOW IT RELATES TO CONSTRUAL LEVELS AND HOW THE THEORY COULD IMPROVE

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DECLARATION OF ORIGINALITY

I, Zafer Kılıç, certify that

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- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
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ABSTRACT

Morality-as-Cooperation:

How It Relates to Construal Levels and How the Theory Could Improve

This thesis is composed of two main parts. The first part involves an experimental study following Alper and Yilmaz (2020), who, informed by previous findings and construal level theory, hypothesized that experimentally evoking an abstract mindset would increase moral consistency and increase the valuation of individualizing moral foundations. However, their results did not support either of their hypotheses, adding to the mixed findings accumulated by previous research. I tested the same hypotheses as Alper and Yilmaz (2020) by using a more recent and sophisticated measure of morality based on morality-as-cooperation theory instead of moral foundations theory. However, the results again did not support the hypotheses. Additionally, I examined the possible influence of trait-level abstract-mindedness on the hypothesized effects. I failed to find any interaction effects other than that mindset manipulation increased the valuation of individualizing moral foundation only in the case of characteristically abstract-minded people. When combined, these findings indicate that the mindset manipulation may be overwhelmed by trait-level abstract/concrete mindedness, thus cannot influence moral attitudes. The second part comprises a critical assessment of morality-as-cooperation theory, which I employed in the experimental study. I attempted to show that the theory falls short of explaining certain aspects of human morality because it neglects the role of conformity to social norms. Then, I offer a theoretically grounded proposal supported by relevant empirical studies to improve the theory by integrating conformity as a moral foundation into morality-as-cooperation framework.

ÖZET

İş-Birliği-Olarak-Ahlak:

Kurgulama Düzeyleriyle Nasıl İlişkilenir ve Teori Nasıl Geliştirilebilir

Bu tez iki ana kısımdan oluşmaktadır. Birinci kısım Alper ve Yılmaz'ı (2020) takip eden bir deneysel çalışma içermektedir. Alper ve Yılmaz (2020), geçmiş bulgulardan ve kurgulama düzeyi teorisinden yola çıkarak deneysel olarak tetiklenen soyut düşünce yapısının ahlaki tutarlılığı ve bireyselleştirici ahlaki temellere verilen değeri artıracağını öngörmüştür. Ancak elde ettikleri sonuçlar hipotezlerini desteklemeyip önceki çalışmalarda elde edilen farklı bulgulara eklenmiştir. Mevcut çalışmada ahlaki temeller teorisi yerine daha yeni ve nitelikli bir teori olan iş birliği-olarakahlak teorisine dayanan bir ahlak ölçeği kullanılarak Alper ve Yılmaz (2020) ile aynı hipotezler test edilmiştir. Fakat hipotezler yine doğrulanamamıştır. Ek olarak, karakteristik soyut düşünce yapısının öngörülen ilişkilerle etkileşimi incelenmiştir. Düşünce yapısı manipülasyonunun sadece karakteristik olarak soyut düşünen kişileri bireyselleştirici ahlaki temellere daha fazla değere vermeye götürdüğü bulgusunun dışında bir etkileşim bulunamamıştır. Bütün olarak bu sonuçlar uygulanan düşünce yapısı manipülasyonunun karakteristik düşünce yapısı tarafından baskılandığına ve dolayısıyla ahlaki tutumları etkileyemediğine işaret etmektedir. İkinci kısım deneysel çalışmada kullanılan iş-birliği-olarak-ahlak teorisinin eleştirel bir değerlendirmesini içerir. Teorinin toplumsal normlara uydumculuğun rolünü göz ardı ettiği için insan ahlakının belli boyutlarını açıklayamadığı savunulmuştur. Ardından, uydumculuğun bir ahlaki temel olarak iş-birliği-olarak-ahlak çerçevesine eklenerek teorinin iyileştirilmesi için kuramsal dayanakları olan ve ilgili bilimsel bulgularla desteklenen bir tasarı sunulmuştur.

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CHAPTER 1

INTRODUCTION

The enterprise of understanding morality had been confined to philosophy for centuries. This monopoly of philosophy on morality had continued well into middle of 20th century, without any involvement of the empirical sciences, as philosophers have been content with disregarding the findings coming from social sciences (Doris & Stich, 2007). In the last 50 years or so, the relationship between social and behavioral sciences and moral philosophy has become increasingly prominent. Now, many moral philosophers acknowledge the merits of experimental data and have started utilizing them as grounds for their arguments. Indeed, The Oxford Handbook of Contemporary Philosophy contains an entire chapter by Doris and Stich (2007), discussing empirical approaches concerning morality. In their view, taking empirical findings into account must be strongly encouraged and one would be intellectually irresponsible to ignore empirical findings when studying morality.

As of today, thanks to the influence of philosophical naturalism and cognitive science on philosophy, moral psychology is an inter-disciplinary enterprise in which morality is investigated scientifically (Thagard, 2019). From the start of 90's to present, an explosion of such inter-disciplinary studies has been seen, as collaboration among philosophers and scientist in various fields has been wide-spread and fruitful (see Doris, Stich, Phillips, & Walmsley, 2020 for an overview).

Following this trend of studying morality empirically, this thesis consists of two parts. The first part is a report of an experimental study that examines the relation between consistency in moral attitudes and mindset, that is thinking abstractly or concretely, corresponding to higher and lower level mental construals,

as per construal-level-theory (Trope & Liberman, 2010). As a replication and an extension of a previous study by Alper and Yilmaz (2020) the aim of this study was to help the resolution of conflicting findings regarding the said relation between mindset and morality. This is done by testing the same hypotheses as Alper and Yilmaz (2020), utilizing a recent, promising theory of morality, which is morality-ascooperation (Curry, 2016). In addition, I take into account the individual differences in characteristic mindset, in order to examine its influence on the relationships hypothesized by Alper and Yilmaz (2020)

In the second part, the said theory of morality itself is the subject of focus, as I scrutinize morality-as-cooperation theory and offer a theoretical account to remedy an important short-coming which I think the theory incurs.

I will start with a survey of the theories mentioned above, all of which are relevant to my thesis. After that, the experimental study will be described, and the results will be presented and discussed. Lastly, I will present my treatment of morality-as-cooperation theory.

1.1 Moral foundations theory

It would not be an overstatement to say that moral foundations theory (MFT) (Haidt & Graham, 2007; Haidt & Joseph, 2004) has been the forerunner among moral psychological theories. Many former studies examining morality, including the ones that focused on questions relevant to the current thesis, have drawn upon MFT. Therefore, I shall expose the theory in some detail below.

Moral foundations theory was founded upon Jonathan Haidt's (2001) social intuitionist model (to be elaborated under the next title) according to which moral thinking consists of rationalizing over intuitively formed judgments. Building on this

model and informed by evolutionary and anthropological accounts of morality, Haidt and his collaborators posed that moral intuitions amount to innate psychological mechanisms that are subject to cultural evolution (Richerson & Boyd, 2005, as cited in Graham, Haidt, & Nosek, 2009). In line with this approach that acknowledges the importance of both nature and nurture, Haidt and Kesebir (2010) defined moral systems that underlie variations in human morality as "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" (p. 800).

Starting from this these theoretical premises, Haidt and his collaborators set out to discover moral foundations, the universal pillars of human morality that are witnessed stably and universally across the world. To do this, they looked into resources that compile virtues endorsed by various cultures and ages as well as taxonomies of morality gleaned from anthropology, psychology and evolutionary theories concerning human and primate social life. Their aim was to identify culturally wide-spread moral concerns, which can be attributed to psychological mechanism that are plausibly explained by evolutionary models (Graham et al., 2011).

As a result of the above described enterprise, Haidt and his collaborators have come up with five distinct moral foundations. Those foundations are care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and sanctity/degradation (Graham et al., 2013) ¹.

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¹ The word pairs that constitute the foundation names respectively denote the generally moral and immoral behavior implied by the moral foundation. For instance, fairness is considered morally good and praiseworthy, while cheating is considered morally bad and punishable. In the literature the foundations are often referred to by using only the former word (e.g., care, loyalty, etc.), and I will do likewise.

Before explaining the foundations in more detail, I will make explicit the central claims of MFT regarding morality, since they are also endorsed by morality-as-cooperation theory (Curry, 2016) and thus exposing them would allow for a better understanding of moral foundation concept in general.

1.1.1 The central claims of moral foundations theory

The developers of MFT describe it succinctly as "a *nativist*, *cultural-developmentalist*, *intuitionist*, and *pluralist* approach to the study of morality" (Graham et al., 2013, p. 71, emphases mine). As implied by this description, MFT is theoretically committed to four central claims as explained below.

The first claim is that human morality has nativist underpinnings. However, this should not be taken to mean that all morality is innate. Because the creators of MFT carefully define nativism as they affirm that "innate means organized in advance of experience" so as to not disregard environmental effects on morality (Graham et al., 2013, p. 61). This means that the human brain holds a first-draft of morality authored by genes, then this draft is revised through cultural learning (Graham et al., 2013). The innate portion of morality has been composed by evolutionary forces to deal with recurrent adaptive problems humans have historically faced, like many other human capacities. From this it can be concluded that the human mind is more apt to adopt certain moral dispositions, and less apt to adopt others. Hence the gist of this claim is that human mind is shaped by evolution in a way that it is prepared to deal with social problems by learning norms, values, attitudes, and behavior which constitute morality.

Secondly, MFT is committed to the claim that cultural learning shapes our morality based on innate moral intuitions. This is to say that the above-mentioned

first draft is rewritten in line with the specific culture. So neither innate moral intuitions nor culturally learned morals could have produced human morality alone by themselves. The presence of an innate first draft is supported by the fact that all moral ideals are not equally learnable (Pinker, 2002, as cited in Graham et al., 2013). This would not be the case that if morality were solely shaped by cultural learning. On the other hand, if it were not for the role of cultural learning, the innate first draft would be final. But that is not true either (e.g., Haidt et al., 2013, as cited in Graham et al., 2013) as it is suggested by moral diversity observed across cultures and individuals.

Therefore, moral foundations are not ultimate arbiters of human morality, they just restrict the possible space of moral outlooks, which can (and does) vary across cultures. Graham et al. (2013) explain that this is indeed the reason why they preferred the term "foundation": Various buildings can be built based on a number of fixed foundations but the foundations themselves are not finalized buildings, they only constrain which sorts of buildings are easiest to build. Likewise, moral foundations do not define finalized moralities, but they constrain the range of moral systems that can emerge. This approach allows MFT to explain the variety in moral practices across cultures, which can be measured by various degrees of endorsement of moral foundations.

To wit, the first two claims ground MFT's commitment to the notion that people are furnished with an initial template of morality (which is constrained innately) that can be filled out to produce diverse moralities shaped in light of experiential and environmental factors.

The third claim is about the primacy of intuition in morality. The roots of this claim lie in Jonathan Haidt's (2001) social intuitionist model. The core assertion of

the social intuitionist model is that moral judgment stems from rapidly activated moral intuitions, which are only later rationalized via slow, after-the-fact moral reasoning (Haidt, 2001). Haidt (2001) defines moral intuition as moral judgment that suddenly appears in one's consciousness, accompanied by an affective valence (like good or bad), without one being conscious of any process of deliberation, evidence weighing, or inference of a conclusion. Hence, Haidt (2001) submits that moral intuition is more of a mode of cognition than a mode of reasoning. Defending this model, Haidt effectively opposed to the historically prevalent rationalist accounts of morality (e.g., Kohlberg, 1969, as cited in Haidt, 2007), according to which moral judgments are products of processes involving reasoning and reflection. Haidt also led the empirical research that lent support to the social intuitionist model, as multiple studies (e.g., Haidt, Koller, & Dias, 1993; Haidt & Hersh, 2001, as cited in Haidt, 2001) showed that people, to their surprise, persistently failed to produce reasons underlying their moral judgments elicited by stories describing offensive but harmless actions. This phenomenon was termed "moral dumbfounding" (Haidt, Bjorklund, & Murphy, 2000) and recognized as a crucial finding that drew much attention and support to the social intuitionist model.

The fourth claim asserts MFT's commitment to moral pluralism. That is to say, human morality comprises a multitude of foundations. This claim is supported by evolutionary thinking, for our mental structures (including the ones associated with moral foundations) have been driven by a variety of adaptive challenges, so it only makes sense that the moral foundations are also diversified in turn.

1.1.2 Moral foundations

Now, I will go over the moral foundations postulated in line with the pluralist approach of MFT.

The care foundation is related to the adaptive challenge pertaining to taking care of vulnerable and dependent offspring over long durations. An adaptive advantage is afforded by intuitions that drive individuals to attend to their offspring when they show signs of suffering, in turn helping them raise more babies to adulthood compared to less sensitive individuals. As such, the care foundation encompasses functional systems that facilitated the motivation for caring, nurturing, and protecting in response to signs of suffering and distress (Graham et al., 2013).

The fairness foundation is about social exchange and relationships participated by social animals like humans. Moral intuitions that allow individuals to cooperate as well as detect and punish (or avoid) non-cooperators (e.g. cheaters) provide an advantage to them over the ones that has to manage their relations utilizing general intelligence. Virtues such as being fair, just, and trustworthy are attributed to individuals who are known to be good partners for exchange and relationships (Graham et al., 2013).

The loyalty foundation is about intergroup competition and is brought about due to humans' having lived as tribal animals for an extensive period. Thus, intuitions that facilitate the formation of cohesive coalitions help individuals and their groups thrive in such competitions (Graham et al., 2013). This foundation underlies the virtues concerning being loyal to one's group (such as patriotism and supporting one's family) and not betraying it, since success in many activities important for survival require cohesive groups.

The authority foundation is related to the fact that humans have lived in dominance hierarchies. Individual with intuitions that allow them to handle dominance hierarchies successfully by constructing favorable relationships with people positioned both higher and lower than themselves in the hierarchy have an advantage over ones that fail to properly navigate such hierarchies (Graham et al., 2013). This foundation underlies the virtues delineated by respecting authority, such as deference and obedience, as well as virtues that serve to maintain authority, such as leadership.

The sanctity foundation is related to concerns of spiritual and physical purity, purportedly developed in relation to feelings of disgust and fear of contamination. From these feelings, what is called a behavioral immune system (Schaller & Park, 2011, as cited in Graham et al., 2013) emerges and underlies moral reactions to actions and subjects that are deemed degraded. A potent behavioral immune system affords individuals an adaptive advantage by helping them evaluate food, peers, and mates rapidly and automatically, instead of having to evaluate them solely based on sensory information.

Of crucial importance to numerous studies which were based on moral foundations, including the experimental study I conducted for this thesis, these five foundations are grouped into individualizing (comprising care and fairness foundations) and binding foundations (comprising loyalty, authority, and sanctity foundations) (Graham et al., 2009). This distinction was made in accordance with the following account. As it can be recalled from the definition previously given (see Section 1.1), Haidt (2008) holds that the function of moral systems essentially is suppression and regulation of selfishness. In line with this notion, Haidt (2008) depicts two types of moral systems—hence two ways to suppress and regulate

selfishness—as follows. To suppress selfishness, some cultures focus on respect for individual rights to protect individuals directly. Hence this is an individualizing approach that puts the individual at the center of the moral system (Graham et al., 2009). In other cultures, the suppression of selfishness is achieved by binding individuals to roles and duties that constrain them and in turn reinforcing groups and institutions. Hence the group is taken to be the center of the moral system by this binding approach (Graham et al., 2009).

Now let us get back to the specific foundations that fall under individualizing or binding categories. The care and fairness foundations constitute the individualizing foundations because they accentuate individual rights and welfare, underpinning the moral intuitions that uphold the values delineated by liberal philosophy (Graham et al., 2009). The remaining three foundations, i.e., loyalty, authority, and sanctity, constitute the binding foundations because they accentuate loyalty, duty, and self-control, underpinning the moral intuitions that uphold the values delineated by conservative and religious moralities (Graham et al., 2009).

Before moving on, I restate that this dichotomy of individualizing/binding foundations is important because the main hypotheses I tested in the experimental study rely on the difference between these two types of foundation (see Section 1.5).

1.2 Morality-as-cooperation theory

Morality-as-cooperation is a moral psychological theory that was devised recently. Though it has similarities to MFT, it actually has emerged as a challenger to MFT, attacking it on both theoretical and empirical grounds. Therefore, before exposing morality-as-cooperation (MAC) theory itself, I will set the stage by going over the criticism targeted at MFT by O.S. Curry, the scientist who has led the theoretical and

empirical research that made up MAC. Curry's remarks concerning MFT would allow a better understanding of MAC and they are relevant to my treatment of MAC that follows the experimental study, so I will convey them below in some detail.

1.2.1 Problems with moral foundations theory

On the theoretical front, Curry (2019) takes issue with the fact that MFT does not draw upon any specific theory of cooperation, even though it regards cooperation to be a central element of human morality. Instead of revealing moral foundations guided by a theory, Haidt and his collaborators opted for an ad hoc approach, as Curry notes. After all, what they did was surveying sources that describe human morality and extracting foundations of morality based upon them, guided by the central tenets laid out in Haidt's (2001) social intuitionist theory. As Curry (2019) also mentions, this ad hoc approach is indeed admitted and defended by the founders of MFT and they are well aware that the set of foundations they proposed is not final. However, as a result of this lack of theoretical grounding, Curry (2019) argues, some of the very vital and well-acknowledged aspects of evolved cooperation are not captured by MFT, and some of MFT's foundations are not proper types of evolved cooperation. As such, Curry (2019) contends that some portion of the moral domain are left out by MFT. Elaborating on his claims, Curry (2019) first notes that kin altruism, reciprocal altruism, competitive altruism, and respect for prior possession all of which are well-established aspects of evolved cooperation—are not accounted for by MFT, as it has no dedicated foundations representing them. On top of this, Curry (2019) underlines that two distinct types of evolved cooperation are erroneously entangled within the care foundation of MFT. That is, family is regarded by MFT as though it is an ordinary group, where it should have been differentiated

from other social groups in line with kin altruism aspect of evolved cooperation. Besides, Curry (2019) points out that neither care nor purity accounts for a specific type of evolved cooperation. He remarks that care is more of a blanket category than a particular type of cooperation. Although caring for others is part of the psychology that upholds various types of cooperation, the specific types of cooperation are not distinguished by care foundation (Curry, 2019). As to purity, Curry argues that avoiding pathogens, which underpins the purity foundation according to MFT, is not about specific problem of cooperation, and does not concern interactions between people; thus, positing it as a moral foundation is a fault.

Making worse the above discussed shortcomings, Curry (2019) asserts that due to MFT's lack of theoretical basis, it is very difficult to fortify the theory or expand it to incorporate novel moral foundations in a principled way.

Moving on to the empirical problems pertaining to MFT, Curry (2019) points out that MFT is not sufficiently supported by the studies conducted using the moral foundations questionnaire—the questionnaire developed by Graham et al. (2011) to measure moral foundations based on MFT—since several studies (including some of the original studies such as Graham et al., 2011) showed that the model fit is lower than the standard levels that are deemed acceptable. As reported by Curry (2019), a typical finding of the said studies is that a two-factor model based on individualizing (care, fairness) and binding (loyalty, authority, purity) foundations makes for a better fit. Therefore, Curry (2019) concludes, instead of the intended set of five, MFT only manages to offer two robust foundations.

1.3 Overview of morality-as-cooperation theory

After identifying the above discussed deficiencies of MFT, Curry went on to develop a theory which he thinks can fare better. Morality-as-cooperation (MAC) (Curry, 2016) theory is an attempt to explain human morality based on cooperation. The theory purports that, as a result of the very long period in the evolutionary history during which humans had lived in social groups, humans were endowed with biological adaptations that helped them solve recurring problems of cooperation, and along the way they had further improved as cooperators by inventing cultural tools and rules that uphold cooperative behavior. Hence, MAC (Curry, Jones Chesters, & Mullins, 2019) asserts that what constitutes human morality is a host of biological and cultural solutions (including biological and psychological adaptations, rules, norms, institutions, etc.) to recurring problems of cooperation. As such, these biological and cultural properties motivate humans for cooperation, and afford them standards for evaluating social behavior. In light of this, Curry (2016) went on to identify the specific foundations of morality corresponding to specific problems of cooperation which he defines by drawing upon evolutionary biology and the appropriate branch of game theory (Maynard Smith, 1982; Von Neumann & Morgenstern, 1944, as cited in Curry, 2016)—namely, non-zero-sum games. In a non-zero-sum game, one party's gain is not the others' loss; hence the interactions characterized as non-zero-sum games can be beneficial to all the parties involved. Besides, such interactions are not necessarily competitive, they may feature both competition and cooperation, which justifies Curry's (2016) choice.

As there is a multitude of problems concerning cooperation suggested by game theory, MAC predicts that there will be several moral foundations corresponding to these problems—accordingly, Curry (2016) calls MAC "a problem-

centered approach". Now I shall go over the seven problem-centered moral foundations predicted by MAC.

The first foundation of MAC is called family (or kinship), which arise from the type of cooperation that concerns allocation of resources to kin. As natural selection favors genes that benefit their copies that are inhabited by genetic relatives, evolutionary theory predicts that there will be adaptations that drive organisms to detect and benefit their kin (Curry, Mullins, & Whitehouse, 2019). According to MAC, since kin altruism brings about mutual benefit across organisms, cooperative strategies that maintain kin altruism—such as caring for offspring, helping family, and incest aversion—will be deemed morally good (Curry, Jones Chesters, & Van Lissa, 2019).

The second foundation of MAC is group (or mutualism). This foundation is related to MAC's prediction that behavior which provides mutual benefit to interacting parties, i.e., serves to solve coordination problems, will be viewed as morally good (Curry, Jones Chesters, & Van Lissa, 2019). Thus, adaptations that facilitate forming coalitions and alliances, including theory of mind, representing common knowledge, in-group favoritism, and conforming to group norms, all relate to this foundation.

The third foundation is reciprocity (or exchange), which concerns the cooperative problem of social exchange. According to MAC, behavior that follow strategies of reciprocal altruism (such as tit-for-tat) are deemed morally good (Curry, Jones Chesters, & Van Lissa, 2019). That is because this sort of behavior provides solutions to free-rider problem, which arises due to some individuals' enjoying the benefits of cooperation without participating in it. Human behavior such as trade,

repaying favors, pursuing revenge, showing gratitude are explained by this foundation (Curry, Jones Chesters, & Van Lissa, 2019).

Cooperative solutions to conflicts over resources (like food and territory) underpin four of MAC's foundation. It is adaptively advantageous for humans to cooperate and solve conflicts in ways that harm each party the least (Curry, Jones Chesters, & Van Lissa, 2019). According to game theory which MAC draws upon, this can be achieved via contests, division, or possession (Curry, Jones Chesters, & Van Lissa, 2019).

A pair of MAC foundations are based on conflict resolution via contests, which are widely observed in nature and often underpin dominance hierarchies established in societies (Curry, Jones Chesters, & Van Lissa, 2019). Such contests can be sorted out by hawkish displays of dominance, discouraging opponents from challenging. Accordingly, heroic virtues that convey hawkish traits such as bravery, dominance, and competence, are regarded as morally good (Curry, Jones Chesters, & Van Lissa, 2019). As such, MAC proposes a moral foundation called heroism.

Conflicts over resources can also be solved in dovish ways, i.e. via submissive behavior such as deferring to authority or power, respecting and obeying to higher ranked or stronger parties, which are also viewed as morally good (Curry, Jones Chesters, & Van Lissa, 2019). As such, MAC proposes another moral foundation called deference.

Another way of solving conflicts is dividing (where possible) the disputed resources among opposing parties. Curry, Jones Chesters, & Van Lissa (2019) draw attention to the fact that there are universal norms concerning division of resources indicating that a sense of fairness is sought by humans. For instance, sharing equally is a culturally wide-spread norm to which people comply in economic games

(Henrich et al., 2005, as cited in Curry, Jones Chesters, & Van Lissa, 2019). Thus, the fairness foundation accounts for the fact that cooperative behavior concerning division of resources, such as being compromising, and fair are viewed as morally good (Curry, Jones Chesters, & Van Lissa, 2019).

Yet another way of solving conflicts over resources is respecting prior possession. The notion of prior possession is commonly observed in nature (Strassmann & Queller, 2014, as cited in Curry, Jones Chesters, & Van Lissa, 2019). Humans have been found to respect prior possession in various domains, such as the law, international relations, experimental games (Rose, 1985; Johnson & Toft, 2014; Kahneman & Tversky, 1979; as cited in Curry, Jones Chesters, & Van Lissa, 2019). Besides, some notion of private property is encountered almost universally across cultures (Herskovits, 1952, as cited in Curry, Jones Chesters, & Van Lissa, 2019). As such, MAC posits the property foundation in line with the expectation that cooperative behavior such as respecting prior possession are deemed morally good.

To test MAC theory empirically, Curry, Mullins. and Whitehouse (2019) looked for traces of the moral foundations purported by MAC in the ethnographic records of a broad range of societies. In 99.9% a geographically and culturally representative sample they examined, they found evidence indicating that the foundations of MAC are morally relevant.

Based on MAC theory, Curry, Jones Chesters, and Van Lissa (2019) developed a questionnaire, the morality-as-cooperation questionnaire (MAC-Q) to measure moral attitudes in a similar fashion to the moral foundation's questionnaire. This questionnaire was employed in the experimental study conducted for this thesis as a measure of moral attitudes.

All in all, MAC appears to be a promising theory for explaining human morality, and there are strong indications that it betters previously dominant MFT both theoretically and experimentally. This why I employed MAC-Q in my study instead of MFQ (the questionnaire that measures moral attitudes based on MFT) as I attempted to provide clarification regarding conflicting results by extending a recent study on morality and mindset, as I will elaborate in Section 1.5.

1.4 Construal level theory

Humans are not bounded by here and now); they can think of things that are not immediately available to them such as events happened in the past or may happen in the future, they can evaluate hypothetical situations, and picture remote people and places(Trope & Liberman, 2010). Seeking to explain how humans engage in this kind of thinking, Trope and Liberman (2010) proposed construal level theory (CLT). The main assertion of CLT is that humans form abstract mental construals to think about distal objects. These construals serve to transverse over psychological distance, which denotes experiencing something as close or far from the self, here, and now. Dimensions of this distance can be either space, time, hypotheticality, or social distance. According to CLT, what allows transversion of these different types of psychological distance is a common process of mental construal. This commonality is due to the fact that all the variations of psychological distance share the same reference point, that is, the self. Then it follows that there must be a cognitive relation among all the varieties of psychological distance (Trope & Liberman, 2010).

An important implication of CLT is that there is a distinction between highlevel and low-level mental construals. Compared to low-level construals, high-level construals comprise relatively abstract, coherent, and super-ordinate mental representations (Trope and Liberman, 2010). As such, in the scope of CLT, highlevel construals are associated with abstract mental representations (of things, events, etc.) whereas low-level construals are associated with concrete mental representations. Trope and Liberman (2010) clarify the difference between low- and high-level construals by pointing out the difference between representing an object as "cellular phone" (low-level construal) and as "a communication device" (high-level construal). Here, the abstract representation is chosen considering more relevant properties of the object regarding one's purpose. That is, when one's purpose is to contact a friend, for instance, then what is significant about a cellular phone is its function, and not its materialistic properties like size, shape, etc. Similarly, concrete representations can be replaced by different abstract representations in other contexts; e.g., a cellular phone could be as well represented as "a small object" given a context that makes its size relevant to one's purpose. Thus, generally, irrelevant details that would only be captured by a concrete representation of an object are omitted when that object is construed more abstractly. In light of this, Trope and Liberman (2010) point out that abstract representations necessarily dictate a specific interpretation among many possible interpretations of an object, and irrelevant or inconsistent details are either omitted or assimilated to the dictated interpretation. Therefore, abstract representations are "simpler, more coherent, more schematic, more prototypical, and less ambiguous than concrete representations" (Fiske & Taylor, 1991, p. 98, as cited in Trope & Liberman, 2010). Nevertheless, Trope and Liberman (2010) underline that one must not simply conclude that low-level construals are more precise and richer than high-level construals. Rather, high-level construals hold extra information about the value of the object in relation to other objects. For example, the higher level construal "having fun" captures the relation of

the activity to other concepts (like a party) that are not captured by the lower level construal "playing ball outside" (Trope & Liberman, 2010). This being the case, the employment of a higher-level construal does not solely result in losing specific information; rather, it results in recognition of novel meaning gleaned from stored knowledge and structural organization of representations.

Another key proposition of CLT concerns the relation between construal level and psychological distance, which is highly relevant to the experimental study I conducted. According to CLT, the relation is the following. People construe an object at higher levels as their psychological distance from that object becomes greater (Trope & Liberman, 2010). The reason behind this is that high-level construals tend to change less compared to low-level construals as distance from an object increases or decreases. As an example, Trope and Liberman (2010) compare the higher-level goal to contact a friend with sending them an-email, underlining that the former is more stable across time due to the fact that, unlike the former, the latter can be modified in line with contextual factors, such as the availability of the internet. Trope and Liberman (2010) note that this difference between high- and lowlevel construals remains true for other kinds of distances all the same. This example also highlights the necessity of using high-level, abstract construals for functioning in several domains such as object constancy, navigating in space, planning for future, etc., as Trope and Liberman (2010) point out. In addition, they remark that the above described relation is applicable in the reverse direction as well. That is, employment of high-level construals leads one to represent objects more distally in their mind, because high-level construals are more general than low-level construals. Regarding this, Trope and Liberman (2010) consider the representations "having fun" (abstract) and "playing basketball" (concrete). Compared to "playing basketball", "having fun"

should remind one of activities that are psychologically more distant, i.e. more distant in time, in farther locations, in more hypothetical scenarios, together with more socially distant people. Generalizing this, Trope and Liberman (2010) contend that employment of abstract concepts allow people to go beyond their immediate experience of an object by considering other social points of view and different hypothetical instances; that is to say, they can cross psychological distances by employing mental construals at different levels.

As it is understood from the above discussion, construal levels and psychological distance are closely related. Nonetheless, they should not be regarded as the same, as Trope and Liberman (2010) warns: "Psychological distance refers to the perception of *when* an event occurs, *where* it occurs, to *whom* it occurs, and *whether* it occurs. Construal levels refer to the perception of *what* will occur." (p. 4, emphases in original).

For the purposes of the current study, level of construal was manipulated via the category/exemplar task (C/ET) (Fujita, Trope, Liberman, & Levin-Sagi, 2006) in which the participant is asked to provide category labels (high-level construals) or exemplars (low-level construals) for a set of objects. This task was devised considering the fact that superordinate categorization is cognitive operation that involves high-level construals, whereas subordinate categorization involves low-level construals (Liberman, Sagristano, & Trope, 2002, as cited in Fujita et al., 2006). As such, these operations should evoke high- and low-level construals, and in line with CLT, abstract and concrete mindsets, respectively.

1.5 Current study

Current study is intended to be a contribution to the line of research that has investigated the various effects of abstract/concrete mindsets on moral attitudes by drawing upon construal level theory. Further investigation of this topic appears to be required because findings have not been compatible across studies. Regarding the relation between construal levels and moral judgement, Eyal, Liberman, and Trope (2008) found that when psychological distance is increased (temporally and socially) moral violations are more severely judged and righteous behaviors are more positively judged, Gong and Medin (2012) found reversed effects in a replication study. What is more, the effects seem to depend on the selected method of mindset manipulation. For instance, the strength of moral judgments increased when an abstract mindset is primed via psychological distance; however, when an abstract mindset is primed by asking why (vs. how) an action would be done, the strength of moral judgments decreased, as Žeželj and Jokić (2014) demonstrated.

Besides moral judgment, previous research indicated that mindset also influences the relative valuation of moral foundations, as defined by moral foundations theory. As mentioned previously, the five foundations proposed by moral foundations theory are grouped into individualizing (care and fairness) and binding (loyalty, authority, sanctity) foundations. Based on the finding that, compared to binding foundations, individualizing foundations account for moral that are more fundamental over place and time (Wright & Baril 2011), Napier and Luguri (2013) demonstrated that valuation of individualizing foundations are increased when an abstract mindset is triggered, as abstract thinking results in focusing more on core principles. Alper and Yilmaz (2020) attempted to replicate Napier and Luguri (2013) with a high-powered study, as the mixed results regarding the relation

between moral judgments and mindset appeared to go against their findings. In contrast to Napier and Luguri (2013), Alper and Yilmaz (2020) failed to find any effects.

Alper and Yilmaz (2020) also inspected another question related to mindset and morality. In a previous study, Alper (2018) found that abstract mindset increases both within-subject and between-subjects consistency in political attitudes. This finding was in line with the theoretical reasoning that adopting an abstract mindset should increase consistency as it highlights core values and hence yield more stable, less context-dependent attitudes. In Alper (2018), within-subject consistency was operationalized as standard deviation (SD), which measures how much a participant's scores differ from their mean score across different items (hence lower SDs indicate higher consistency). Between-subjects consistency was operationalized via Cronbach's alpha scores, which measures how much a participant's score differs from the sample mean across different items (hence, higher Cronbach alpha indicates higher consistency). Informed by this study, Alper and Yilmaz (2020) set out to see whether the relation between abstract-mindedness and political consistency evidenced by Alper (2018) holds for moral attitudes as well. Thus, they tested the hypothesis that an abstract mindset should increase consistency in moral attitudes. Within-subject and between-subjects consistency scores were calculated over individualizing and binding items of the moral foundations questionnaire (MFQ). But even though they employed the same experimental paradigm as Alper (2018), they did not find any significant effects in contrast to what they expected. Regarding these unexpected results, Alper and Yilmaz (2020) suggested using a different measure of moral attitudes (being aware of the documented problems of MFQ as exposed in

Section 1.3), to see if it makes a difference, like the morality-as-cooperation questionnaire (Curry, Jones Chesters, & Van Lissa, 2019).

Expanding upon Alper and Yilmaz (2020), I investigated the relation between mindset and morality further. I tested essentially the same hypotheses as Alper and Yilmaz (2020) and employed the same experimental paradigm for mindset manipulation. However, my study is novel in that I employed the morality-ascooperation questionnaire (Curry, Jones Chesters, & Van Lissa, 2019) instead of the moral foundations questionnaire which Alper and Yilmaz (2020) used, following their recommendation.

In addition, I extended Alper and Yilmaz's (2020) study by considering the possible interaction effect of characteristic abstract (vs. concrete) mindedness on the effects they hypothesized. Said interaction effect is alluded to by Alper (2018), who noted that individuals differ in trait-level abstract/concrete-mindedness (Vallacher & Wegner, 1989, as cited in Alper, 2018) and therefore characteristically abstract-minded people might be reasonably expected to be more consistent in their political views. To be able to consider the impact of individual differences in mindset, I introduced a measure of abstract/concrete-mindedness, employing the behavior identification form (BIF) (Vallacher and Wegner, 1989), and to test the hypotheses that effects of experimentally manipulated abstract mindset on moral consistency and relative valuation of moral foundations will be augmented in case of characteristically abstract minded people. I chose the BIF for this purpose because it has already been used in a previous study by Agerström and Björklund (2013) that investigated mindset and morality, finding a significant effect of characteristic abstract mindedness on severity of moral judgments.

To sum up, the main hypotheses I tested are as follows:

- 1) When the participants are led to adopt an abstract—in contrast to a concrete—mindset they will become more consistent (i.e., within-subject consistency) in their moral attitudes.
- 2) When the participants are led to adopt an abstract—in contrast to a concrete—mindset they will be more consistent (i.e., between-subjects consistency) in their moral attitudes as a group.
- 3) When the participants are led to adopt an abstract—in contrast to a concrete—mindset, they will endorse individualizing moral foundations more and binding moral foundations less.
- 4) Trait-level abstract mindedness of the subjects will moderate the effects hypothesized in 1 and 3 above. To specify:
 - a) Participants who are characteristically more abstract-minded will show higher increase in consistency of their political attitudes when led to adopt an abstract mindset compared to the participants who are characteristically less abstract-minded.
 - b) When the participants are led to adopt an abstract mindset, the participants who are characteristically more abstract-minded will show higher increase in their endorsement of individualizing moral foundations, and higher decrease in their endorsement of binding moral foundations.

After the hypotheses had been formed, the experiment was pre-registered (https://osf.io/emkbz/) prior to data collection on Open Science Foundation.

1.5.1 Individualizing and binding foundations of morality-as-cooperation

At the time I formed my hypotheses, individualizing and binding foundations (as found in moral foundations theory) of morality-as-cooperation (MAC) were not identified in the literature yet. Thus, I had to determine the individualizing and binding foundations of MAC myself. In doing that, since individualizing/binding dichotomy in moral foundations theory have already been empirically supported, I put the MAC foundations into the same categories as the foundations of MFT that are comparable to them, where that is possible. Concerning comparability, I was informed by the comments Curry (2019) made regarding the foundations of MAC and MFT. As for the MAC foundations that are not readily comparable to the foundations of MFT, my reasoning was guided by the rationale underlying the individualizing/binding dichotomy presented in Graham et al. (2009), which was conveyed in Section 1.1.2.

I will start by explaining the MAC foundations that I consider to be binding foundations. As it can be recalled from Section 1.2.1, Curry (2019) pointed out that MFT's loyalty foundation, which is a binding foundation, is roughly tantamount to MAC's group foundation, hence it only makes sense to categorize the group foundation as binding. As also explained in Section 1.2.1, Curry (2019) maintained that the family foundation of MAC is partially incorporated (and mistakenly conflated with group foundation) into MFT's care foundation, which is a binding foundation. Therefore, I judged family foundation to be a binding foundation. The deference foundation of MAC is closely related to the authority foundation of MFT; hence it can be duly put under the binding category. The heroism foundation of MAC is not included in MFT as Curry (2019) indicates. I deemed heroism as a binding foundation as well, because it concerns the same problem of cooperation (namely,

conflict resolution) as deference. As such, like deference, heroism signifies virtues that serve to bind the group by facilitating conflict resolution, rather than to protect individual rights; therefore it is a better fit for binding category than individualizing category.

As for individualizing foundations, I reasoned that the fairness and the reciprocity foundations of MAC must be placed in this category. Regarding fairness, I decided considering the fact that the fairness foundation of MFT is an individualizing foundation, and it partially overlaps with MAC's fairness foundation. Reciprocity must also be an individualizing foundation because it imposes individual responsibilities upon people, such as treating others like they treat one's self, judging from the description provided by Curry (2016). Regarding the property foundation of MAC, it must be recalled that individualizing foundations are about individual rights and welfare (Graham et al., 2009). Property rights are among the most essential of that sort of rights. Hence property must be an individualizing foundation.

As result of the above described assessment, foundations of MAC should be categorized as below:

- Individualizing foundations: reciprocity, fairness, property
- Binding foundations: family, group, heroism, deference

This arrangement of individualizing and binding foundations was confirmed via a confirmatory factor analysis (using data which had been collected for an unpublished study by Yilmaz, Harma, and Doğruyol [in press]), as the proposed two-factor model fit the data on MAC's relevance subscale (CFI = .937, TLI = .927, RMSEA = .057).

CHAPTER 2

METHODOLOGY

2.1 Participants

To determine the sample size, I assumed 80% power and a small effect size (d = .20, as per Cohen's [1988] criteria) and set alpha to .05 (one-tailed, as my main hypotheses were directional). The effect size was picked considering that Alper and Yilmaz (2020) had failed to find an effect for d = .25. Thus, the minimum sample size required to detect a difference between the two conditions of an independent-samples t-test was computed to be 620 using G*Power software (Faul, Erdfelder, Buchner, & Lang, 2009).

Taking the computed sample size as a minimum, I collected data from Boğaziçi University undergraduate students over two semesters in exchange of one course credit, starting in Spring 2019. I collected additional data from my social circles on a voluntary basis, utilizing social media to circulate the link to the online experiment. With the hope of achieving even a higher-power study than I had aimed for, I decided to collect as much data as possible until 01.08.2019 as per academic schedule constraints. The final sample size was 891 (428 females, 383 males, 90 others, $M_{\text{age}} = 24.24$, SD = 8.65) after applying the exclusions described below. As such, a power of 89% was achieved for the assumed effect size of d = .20.

The study was conducted in compliance with the ethical requirements of Boğaziçi University Social Sciences Institute Ethics Coordinating Committee (see Appendix A).

2.1.1 Data exclusions

Data exclusion procedure were as follows:

- 1) I had added a catch-item into the MAC-Q ("Being good at math", which should be normally deemed morally irrelevant) to detect careless respondents, following similar previous studies. However, in hindsight, I decided that this is not reasonable, because it is difficult decide on a threshold in a principled way.
- 2) As I collected some of the data from students (in exchange of course credit) in two separate terms, respondents who might have attended more than once could be detected based on student IDs, and only the data from the first attendance were kept. I was not able to filter non-student participants likewise, but I deemed multiple attendance by non-students very unlikely for there is no incentive to do so.
- 3) The following exclusions based on response times were applied, considering recommendations in the literature concerning online surveys (Meade & Craig, 2012; Leiner, 2019) and employing common sense regarding the specific structure of my survey. An online survey allows participants to take breaks as long and as often as they like, hence completion time of the entire survey is not an appropriate metric for data exclusion. Instead, I focused on completion time for C/ET and MAC-Q combined, because if the MAC-Q is filled too long after the C/ET is done, or very long breaks were taken during either CE/T or MAC-Q (or in between them), the manipulation would be hindered. To screen out the participants who took too much time for the manipulation to work, participants with response time (C/ET plus MAC-Q) z-scores higher than 3 or lower than -3 were eliminated. However, this was done after the extreme outliers (e.g., more

than 10 hours) had been deleted, since participants who took very long breaks can drastically skew the response time distribution.

2.2 Materials and procedure

To take part in the study, participants were directed to an online questionnaire. The entire questionnaire is in Turkish. It starts with a consent form in which relevant information about the study is provided. At the end of the study a debriefing is given. The online questionnaire was prepared by using PsyToolkit (Stoet, 2010, 2017), which is a web-based tool for designing experiments. Upon agreeing to take part in the study, the participant is randomly assigned to one of the two conditions: abstract (n = 428) or concrete (n = 415). For the manipulation of abstract-concrete mindset, the category versus exemplar task (C/ET) (Fujita et al., 2006) was employed after being translated into Turkish (see Appendix B and C). In this task, the participant is presented with 40 words. In the abstract condition, for each target word, the participant is asked to provide a word denoting a category that contains the target word. For instance, if the target word is "rabbit", an appropriate answer is "animal", since the category animal contains rabbit. In the concrete condition, for each target word, the participant is asked to provide a word denoting an example of the category denoted by the target word. For instance, if the target word is "food", an appropriate answer is "ice-cream", since ice-cream is a member of the category food.

In the next stage, the participant took the morality-as-cooperation questionnaire (Curry, Jones Chesters, & Van Lissa, 2019) (See Appendix D). The questionnaire was adapted to Turkish by Yilmaz et al. (in press) (see Appendix E). MAC-Q includes two subscales of 21 questions (three questions for measuring each one of the seven foundations): the relevance subscale and the judgment subscale.

Having employed the MAC-Q in a study with Turkish participants, Yilmaz et al. (in press) found that only the relevance subscale (but not the judgment subscale) of MAC-Q gives good indices of fit, hence they recommend employing it alone. I followed their recommendation in this study. In the relevance subscale the participant is requested to rate how morally relevant they think the given item is on a scale of 0-100 (0: absolutely irrelevant, 100: absolutely relevant).

Next, the behavior identification form (BIF), which was developed by Vallacher and Wegner (1989) (see Appendix F) and adapted to Turkish by Öğülmüş (1991) (see Appendix G), was administered. By asking the participant to pick one of two descriptions (one abstract and one concrete) of a given action, this questionnaire serves to measure characteristic abstract/concrete mindedness. The BIF score is calculated by adding one point for each abstract choice, and zero for concrete, over 25 questions. Hence the score range is 0-25, with 25 indicating the most abstract mindset.

Lastly, participants were asked to specify their age and gender. Also, they were requested to indicate their political views in terms of "left" and "right" on a seven-point Likert scale (1: very leftist, 7: very rightist). Left-right scores were collected to be used in exploratory analyses. The study ends with the post-attendance information form, in which a debriefing is given.

2.3 Results

To test Hypothesis 1, the *SD* values for individualizing and binding foundations were computed using SPSS software. In contrast to what I hypothesized, construal level manipulation did not change the level of within-subject *SD*s for either

individualizing, t(841) = .80, p = .424, 95% CI [-.88, 2.10], d = .055, or binding foundations, t(841) = .65, p = .519, 95% CI [-.89, .1.77], d = .044.

For Hypothesis 2, firstly Cronbach's alpha scores were calculated for items concerning individualizing and binding foundations. Following Alper and Yilmaz (2020), the comparison of independent alpha scores were done according to a procedure involving F-test, developed by Feldt and Kim (2006). In contrast to what I expected, construal level manipulation did not affect between-subjects consistency for either individualizing F(283, 414) = .76, p = .994 or binding foundations F(311, 414) = .99, p = .535.

Regarding Hypothesis 3, as opposed to what I expected, the construal-level manipulation did not have any effect on endorsement of either individualizing, t(841) = .87, p = .385, 95% CI [-1.50, 3.88], d = -.060, or binding foundations, t(841) = .58, p = .560, 95% CI [-1.99, 3.66], d = -.040.

As for Hypothesis 4, the expected moderation effect was observed only on individualizing foundations for subjects that are characteristically abstract-minded (as indicated by their BIF scores) t(831) = 2.033, p = .042, 95% CI [.01, 1.01].

I also did some secondary analyses that could be of future interest as they show the relations between MAC's foundations and political orientation. I found significant correlations between left-right score and family (r = .146, p < .001), group (r = .072, p = .036), reciprocity (r = .118, p = .001), heroism (r = .100, p = .004), deference (r = .177, p < .001), and property (r = .169, p < .001) foundations of MAC; that is all the foundations except fairness (r = .026, p = .444). Besides, left-right score correlates significantly with both individualizing (r = .124, p < .001) and binding (r = .164, p < .001) foundations of MAC.

To explore the relation between trait level abstract/concrete mindedness on moral foundations, I checked the correlations between BIF scores and scores on each MAC foundation. The results show significant correlations between BIF score and family (r = .189, p < .001), group (r = .152, p < .001), heroism (r = .163, p < .001), and deference (r = .108, p = .001) foundations. Notably, those are the binding foundations (as I identified them prior to the study) of MAC. The correlations were not significant for any of the individualizing foundations, which are reciprocity (r = .018, p = .605), fairness (r = .038, p = .261), and property (r = .013, p = .689). Besides, BIF score correlates significantly with binding (r = .188, p < .001) foundations but not with individualizing foundations (r = .027, p = .426). (All the significance tests regarding correlations were two-tailed.)

To make sure that mindset manipulation did not bias the measures of trait-level abstract/concrete-mindedness, I verified that construal level manipulation had no effect on BIF scores as there was no significant difference among the two groups (abstract vs. concrete), t(829) = -.401, p = .689, 95% CI [-.87, .57], d = .027.

2.4 Discussion

There were three main questions this pre-registered experiment was designed to address by testing the following hypotheses. When manipulated to adopt an abstract mindset, participants will (i) be more consistent in their moral judgments and (ii) endorse individualizing foundations more and binding foundations less. The third, novel, hypothesis was, (iii) for participants who are characteristically more abstract minded, the above hypothesized increase in consistency and endorsement of individualizing foundations would be higher, as well as the decrease in endorsement of binding foundations.

Regarding the first and the second hypotheses, I measured within-subject consistency through *SD*s of individualizing and binding foundation scores, and between-subjects consistency through Cronbach's alpha scores, as did Alper and Yilmaz (2020). These hypotheses were not supported by the results, replicating the results of Alper and Yilmaz (2020). The only difference between their study and the current one was that I employed MAC-Q instead of MFQ to measure valuation of moral foundations. Then the current findings strengthen the possibility that the previously discussed problems pertaining to MFQ cannot be considered a key reason behind the lack of support for the hypothesis in question. Hence, another possibility suggested by Alper and Yilmaz (2020) remains on the table (and maybe even strengthened, considering the current high-powered study also failed to yield supporting results); that is, the previously evidenced relation between political consistency and mindset (see Alper, 2018) might just not apply to other scales that draw upon latent core values, like MAC-Q and MFQ.

Regarding the third hypothesis, again I followed Alper and Yılmaz (2020). Their study was an attempt to contribute to the solution of the controversy regarding the true relation between construal levels and moral judgment, as there the results obtained by previous studies were mixed (Eyal et al., 2008; Gong & Medin, 2012; Žeželj & Jokić, 2014). Like the results of Alper and Yilmaz (2020), the current results go against the findings indicating that CLT can play a role in explaining relative valuation of moral foundations (e.g., Luguri & Napier, 2013; Napier & Luguri, 2013), since construal level manipulation did not cause any significant effects on valuation of either individualizing or binding foundations.

As per the fourth hypothesis I examined the possible influence of trait-level abstract-mindedness on the predicted effect by the other three hypotheses. I

hypothesized that the predicted effect of primed abstract mindset would be reinforced for the subjects that are characteristically more abstract-minded. I failed to find any interaction effects other than that mindset manipulation increased the valuation of individualizing moral foundation only in the case of characteristically abstract-minded people, and not in the case of concrete-minded people. When combined with the results of other hypothesis tests, these findings indicate that the mindset manipulation may be overwhelmed by trait-level abstract/concrete mindedness, thus cannot influence moral attitudes. That is, in the case of concrete-minded people the manipulation fails to trigger an abstract mindset to the degree that it can affect moral consistency or relative valuation of moral foundations.

Consequently, concerning the first three hypotheses, the results of the current study, together with those of Alper and Yilmaz (2020), arrests the establishment of the conclusion that the characteristics related to moral foundations are made more salient when an abstract-mindset is assumed, which leads to higher internal consistency. Besides, it should be noted that the current study is even more powerful than that of Alper and Yilmaz (2020), as it is sensitive enough to detect an effect size as low as d = .17 with 80% power. Then the probability of this study's being a false non-replication is even lower than that of Alper and Yilmaz (2020). To investigate this question more thoroughly, I conducted equivalence tests (as described by Lakens, Scheel, and Isager, 2018) for the analyses conducted to test the first hypothesis (t-tests for comparing differences in SDs of individualizing and binding foundation across abstract vs. concrete conditions), assuming small effect sizes (d = .20 as per Cohen, 1988). For SD of individualizing foundations the equivalence test was significant, t(839.4) = -2.102, p = .0179, given equivalence bounds of -2.211 and 2.211 (on a raw scale) and an alpha of .05. For SD of binding foundations the

equivalence test was significant, t(837.58) = -2.258, p = .0121, given equivalence bounds of -1.966 and 1.966 (on a raw scale) and an alpha of .05. Thus, it can be concluded that the observed effects are statistically not different from zero and statistically equivalent to zero, for both individualizing and binding foundations based on the equivalence tests and the null-hypothesis tests combined.

The current findings can be taken to suggest that the null results obtained by Alper and Yilmaz (2020) were not due to shortcomings of the MFQ. It can be the case that theoretical and psychometrical advantages of MAC over MFT do not make a difference with regard to the nature of the examined relationship between moral attitude and mindset. After all, the relationships evidenced between MAC foundations and political attitudes are not very different from relationships consistently observed between MFT foundations and political attitudes.

These considerations lead one to think that the issue has more to do with the difference among psychological mechanisms underlying moral and political attitudes. The exact nature of this difference remains unclear. Still, a factor which I suspect can underlie the null results obtained by myself and Alper and Yilmaz (2020) is the causal relationship between political and moral attitudes. Hatemi, Crabtree, and Smith (2019) found consistent evidence over three studies suggesting that it is political attitudes that are causally prior to moral attitudes and not the other way around. Specifically, their findings indicate that political orientations are more stable over time compared to moral attitudes (as measured by MFQ). When considered in the context of CLT, this implies that political attitudes are based in higher level construals compared to moral attitudes. This can be the reason why construal level manipulations made sizable effects on political consistency as showed by Alper

(2018), and not on moral consistency as found by Alper and Yilmaz (2020) as well as the current study.

CHAPTER 3

MORALITY-AS-COOPERATION AND CONFORMITY

In this chapter, having employed the MAC-Q (Morality-as-Cooperation Questionnaire) (Curry, Chesters, & Van Lissa, 2019) in an experimental study and being acquainted with the underlying Morality-as-Cooperation (Curry, 2016) theory, I will offer a treatment regarding a shortcoming I think the theory incurs and argue for respective improvements and/or extensions.

To reiterate, MAC theory is an attempt to explain human morality based on cooperation (Curry, 2016). The theory purports that, a as a result of the very long period of our evolutionary history during which humans had lived in social groups, they were endowed with biological adaptations that helped them solve recurring problems of cooperation, and along the way they had further improved as cooperators by inventing cultural tools and rules that uphold cooperative behavior. Hence, as MAC (Curry, Jones Chesters, & Van Lissa, 2019) asserts, what constitutes human morality is a host of biological and cultural solutions to recurring problems of cooperation. In light of this, Curry (2016) went on to identify the specific foundations of morality corresponding to specific problems of cooperation which he identifies by drawing upon evolutionary biology and the appropriate branch of game theory (Maynard Smith, 1982; Von Neumann & Morgenstern, 1944; as cited in Curry, 2016)—namely, non-zero-sum games.

Among the cultural inventions of the above mentioned sort are social norms, which are, generally speaking, informal rules regarding how people should behave in social groups (Bicchieri, Muldoon, Sontuoso, 2018). My contention is that MAC fails to adequately capture the role conformity to social norms plays in human

morality. Not only morality-as-cooperation fails to directly accommodate conformity, but also it ignores its import for human morality that goes beyond the scope of cooperation, at least as delineated by non-zero-sum games.

Defending my case, I will not entirely reject the understanding of human morality adopted MAC. Indeed, despite the limitation that I will propose it incurs, I concede that MAC does a rigorous job of mapping some part of the moral domain, but it can do better. What I will do then is to argue for the necessity of addition of a new foundation exclusively representing the role of conformity (to social norms) in human morality, since I think none of the seven present foundations is up to this task. Actually, addition of new foundations informed by relevant game theoretical branches is already anticipated and welcome by Curry (2016); by no means does he take the set of moral foundations he identified to be exhaustive. Nonetheless, as per the above repeated depiction of the theory, MAC strictly implicates that a moral foundation should concern a solution to a specific problem of cooperation. Then, to the extent that it involves multiplying the foundations in line with the underlying theory of cooperation, what I offer here shall be regarded as extension. But to the extent that this extension cannot be theoretically grounded in accordance with Curry's (2016) cooperation-based approach, what I offer shall be regarded as revisal.

To give an overview, I will argue for the following points:

- Conformity to social norms is relevant to human morality; hence an account of human morality should capture conformity to social norms.
- 2) The aspect of human morality that is related to conformity cannot be fully explained via cooperation alone.

- 3) MAC does not have a dedicated foundation for conformity, and none of its present foundations—individually or collectively—adequately account for role of conformity in human morality.
- 4) Therefore, inclusion of conformity in the theory can broaden the moral domain that is already mapped by MAC.

In unpacking these points, I provide a feasible account of how conventional rules can be moralized and an account of the psychological mechanism according to which these conventions drive moral behavior.

But first, let me elaborate on what should be understood of conformity in the context of the current discussion.

3.1 Conformity: Definition and relevance to morality

The comprehensive entry on social norms in the Stanford Encyclopedia of Philosophy (Bicchieri et al., 2018) mentions that social norms have been scrutinized by researchers working in a variety of social sciences, which points to the fact that they are central to understanding of considerably extensive social phenomena. A notion of social norms that is neutral with respect to discipline given in Bicchieri et al. (2018) involves thinking of social norms as a sort of grammar governing social interactions, as arbiters of what is acceptable or unacceptable in a group or a society.

Now, to get a clear grasp on the connection between social norms and conformity, I turn to philosopher Christina Bicchieri, a leading scholar of norms and cooperation. Bicchieri (1990, p. 840) describes social norms as "a cluster of expectations", which highlights the fact that social norms do not only regulate people's behavior, but also their expectations of other people's behavior. Thus, the said cluster of expectations comprise one's expectations of others to conform to

norms and one's expectation that the others expect of oneself to conform to norms as well (Bicchieri, 1990). Hence conformity to social norms operates through both empirical and epistemic expectations adopted by people. As such, social norms cannot be spotted by tracking observable behavior alone and they cannot be associated solely with normative beliefs (Bicchieri et al., 2018).

The proposition that there is a connection between conformity to social norms and morality should be fairly uncontroversial given the central role they play in governing human behavior in group settings. Still, not all social norms are necessarily moral norms, and as noted by Bicchieri et al. (2018), there is no precise, agreed-upon distinction among moral, social, and legal norms. Then again, MAC theory, which is the subject of the present inquiry, provides a specific criterion to be respected for making such a distinction: since morality must concern solutions to problems of cooperation, moral norms should be norms of cooperation. (However, accounts of how various norms and arbitrary conventions can be moralized will be discussed in due course). Regarding the relation between social norms and cooperation (and, by extension, morality, if morality-as-cooperation theory is correct) Bicchieri et al. (2018) note that many studies about norms have been concentrated on cooperation and they attribute this to the fact that norms generally serve to solve the problem of preserving social order, and cooperation is a key requirement for social order. Consequently, if one accepts that morality is either entirely (as construed by MAC) or partly (as it is clear) based in cooperation, one must readily acknowledge the relevance of conformity to social norms to human morality. Regardless of what the correct classification of norms is, it is enough for my case that some norms induce moral behavior, and conformity to those norms, along with expecting of others to conform, will affect moral attitudes and behavior.

Some support for the proposed relation between conformity and human morality can indeed be found in the article where Curry, Jones Chesters, and Van Lissa (2019) describe how they developed the MAC-Q. There they compared each foundation of MAC to set of other measures to demonstrate external validity. One of those measures is the widely cited Schwartz's Value Survey (SVS) (Schwartz, 1992). In this study, Schwartz aimed to reveal personal values which are stable over cultures, discerned by considering biological needs of individuals, requirements of coordinated social living, and requirements of group welfare and survival. Conformity emerges as one of the ten universal (since the beforementioned requirements are most likely universal) personal values identified as a result of this investigation. Schwartz makes the distinction among personal values based on the goals and motivations behind them. Regarding conformity, Schwartz (1992, p. 40) asserts that "[t]he motivational goal of conformity . . . was restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms." As such, it again seems clear that cooperation and morality (whether underpinned by cooperation or not) is a part of the motivation underlying conformity. Notice that "expectations" are turned up again, reminding of Bicchieri's (1990) definition of conformity referred to above. The role of expectations with regard to conformity is further explicated by Schwartz (1992) as he remarks that conformity prompts individuals to meet ongoing expectations of others.

Conformity is then regulating one's behavior to match what shared expectations for the group, considering the information that others have the same knowledge of what is expected as well. In the end, I will treat social norms as did Tomasello (2016). He states that, in the face of inconsistent use of the term, he will take social norms (and also moral norms) to refer to not only ways of doing things in

conventional way, but also the ways of doings which group members deem necessary for cooperation, and violations of which are deserving punishment. I will do likewise. Therefore, it is this notion of conformity that should be considered when I say "conformity" hereafter. (And it is in this sense I will argue in due course that conformity is not captured by MAC.)

Coming back to the use of SVS in Curry, Jones Chesters, and Van Lissa (2019), the analyses they did showed that there are correlations between conformity (as measured by SVS) and each moral foundation (as measured by the MAC-Q). Although Curry, Jones Chesters, and Van Lissa (2019) used the conformity measure of SVS to validate deference foundation, their results reveal that conformity scores of SVS is related to every MAC foundation. Moreover, according to my own examination², conformity score gives the highest average correlation (r = .32) over seven foundations (the greatest value was found for deference foundation as Curry, Jones Chesters, and Van Lissa [2019] expected, r = .45, but the correlation with family foundation is almost as high, r = .43) among all the external measures used (r = .23 is the average calculated for all the items obtained from external measures). Furthermore, among all the external measures, conformity score shows the highest minimum correlation (r = .23 for property foundation) across seven MAC foundations. This suggest that conformity—as construed and measured by Schwartz (1992)—has some degree of relation (as indicated by small to moderate correlations as per Cohen, 1988) to all the foundations of MAC, and even the lowest correlation found between them is no less than the average of all tested measures.

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² I extracted the average and minimum correlations from the values given in Table 6 of Curry, Jones Chesters, and Van Lissa (2019, p. 118), in which the correlation values between SVS conformity score and MAC foundations were provided.

The relationship indicated by those correlations is not surprising, since, as I underlined before, it is an important function of social norms to uphold cooperative behavior. Still, neither these correlations nor the theoretical relevance of conformity to morality alone can vindicate my case for a distinct foundation for conformity; in fact, they imply that the import of conformity is already accommodated by the present foundations of MAC. Thus, to bolster my case I am to show that conformity meets the relevant criterion for constituting a distinct moral foundation next.

3.2 Conformity and criteria for foundation-hood

I will defend the case for conformity being a moral foundation as follows. Firstly, I will assume that the approach followed by MFT, including the improvements brought about by MAC are valid framework. Although MAC is partly motivated by improving upon MFT, there is considerable continuity between them. Both theories acknowledge the central import of cooperation regarding morality, and they both attempt to explain moral variation by means of innate moral intuitions backed by evolutionary models, which were then shaped by cultural influences. In case of MAC, the criteria for foundation hood is grounded in formal theory of cooperation. But I will deviate from that strict reduction. On the other hand, the criteria explicitly purported by MFT are more general and capture the essential properties shared by both theories.

Therefore, I should show that conformity as a foundation should meet the criteria of foundation-hood put forth by Graham et al. (2012) to justify foundations of MFT. They claim that any proposed additional moral foundation, be it an ability, sensitivity, or inclination should meet these criteria. I will address each one of the five criterion asserted and, drawing upon the relevant theoretical discussions and

empirical evidence, show that conformity qualifies as a foundation and is distinct form the existing foundations identified the most current and evidently more successful theory of morality, MAC.

3.2.1 Criterion 1

The fist criterion offered by Graham et al. (2012, p.37) requires a moral foundation to be "a common concern in third-party normative judgments". In explaining this, they refer to what Tomasello (2016) calls "shared intentionality", which denotes the capacity of humans (and to some degree, other primates) for holding shared mental representations of actions conducted together with others. This capacity is what made humans apt to judge behavior of others regardless of how they are affected by them, i.e., make third-party normative judgments. Hence, Graham et al. (2012) submitted that moral foundations should be associated with third-party violations to which members of society react.

This criterion is intrinsically about conformity, as underpinned by the reference to normative judgment. However, I contend that conformity meets this criterion even when the norms that are conformed to are not related to cooperation; that is, as Tomasello (2016) affirms, conformity concerns third-party normative judgments however context-specific or arbitrary the norms in question may be. The evidence in support of this also comes from Tomasello's experimental studies.

Tomasello and his collaborators showed that young children not only step in to prevent others from appropriation or destruction of someone else's property (Rossano, Rakoczy, & Tomasello, 2011; Vaish, Missana, & Tomasello, 2011; as cited in Tomasello, 2016), but also attempt to intercede when mere conventions are not followed as in when someone not abide by the rules of a game they observed to

be played in a certain way (Rakoczy, Warneken, & Tomasello, 2008; Rakoczy, Hamann, Warneken, & Tomasello, 2010; as cited in Tomasello, 2016).

3.2.2 Criterion 2

According to the second criterion, a moral foundation should induce "automatic affective evaluations" (Graham et al., 2012, p. 37) in people upon witnessing moral violations. Thus, Graham et al. (2012) assert that a moral foundation should concern moral reactions that are evoked rapidly and effortlessly.

To establish that conformity meets this criterion, then, the reactions concerning conformist behavior should be evoked automatically. To this end, I will refer to the comprehensive account laid out by Joseph Henrich (2017), who examines the role of culture, including social norms and conventions, in humans' success as a species. Henrich (2017) posits that humas have been furnished with a norm psychology, as a result of what he calls a process of self-domestication. Self-domestication has been driven by the practices of rewarding of norm compliance and sanctioning of norm violation. Endowed with a norm psychology, humans effectively grasp local norms, assuming the society is governed by rules, and transgressing these have unfavorable consequences. In addition, norm psychology comes with cognitive abilities that allow humans to recognize norm violations, avoid or exploit those who violate norms, and accordingly monitor and maintain their own reputations.

Coming back to the criterion in question, Henrich's (2017) elaboration of norm psychology illuminates how conformity fulfils it. Henrich (2017) explains that people internalize the norms they learn as goals in themselves. He proposes that the advantage of such internalization is that it provides people with a means of more effective navigation of social world as, since it affords them heuristics that save them

the trouble of continually weighing the costs and benefits of their actions. Crucial to the fulfilment of the present criterion, he remarks that "our automatic and unreflective responses come to match the normatively required ones" (Henrich, 2017, p. 189; emphasis mine), which can be taken to mean that norm psychology disposes humans to automatically conform to norms. It should also be noted that this account proposed by Henrich (2017) is not pure theoretical speculation. Justifying his case, Henrich aptly refers to the set of experimental findings obtained by Tomasello and his collaborators (Schmidt, Rakoczy, & Tomasello, 2012; Schmidt & Tomasello, 2012; Rakoczy et al., 2009; Rakoczy, Wameken, & Tomasello 2008; as cited in Henrich, 2017), which collectively demonstrate that young children figure out context-specific rules governing social life and accept them as norms, to which not only themselves but everyone should comply. Violation of these norms evoke in them anger and motivation to enforce others to behave appropriately. Henrich (2017) stresses that in these experiments, children do not need any teaching or direction from adults to enforce norm compliance, which I deem is indicative of automaticity of behavior driven by norm psychology.

3.2.3 Criterion 3

The third criterion is that a moral foundation must be culturally widespread, with the proviso that this does not entail the respective moral phenomena to be observed in every culture (Graham et al., 2012). I contend that conformity readily meets this requirement as it has been already evidenced by Schwartz (1992) to be among the universal human values. As mentioned previously, Schwartz (1992) deemed the basic values he identified universal (i.e., robust across cultures) as they help humans deal with the following universal requirements of existence: biological needs of

individuals, requirements of coordinated social living, and requirements of group welfare and survival. Thus, it can be concluded without controversy that conformity fulfils the current criterion. Besides, the universality of conformity is rather discernible by common sense; if conformity to norms was not culturally widespread, any of the existing norms (including norms of morality and cooperation) that are supposed to be universal would not persist as they have done. Because all of them, at least partly, depend on compliance to norms that instigate them.

3.2.4 Criterion 4

The fourth criterion requires that there be evidence of innate preparedness for a moral foundation (Graham et al., 2012). Graham et al. (2012) advance that if behavior associated with a given moral foundation is found in primates other than humans and in children prior to teaching or external reinforcement, then there would be a strong case for innateness preparedness regarding that foundation.

Evidence in both of these respects are available and hence lend support to my case for conformity foundation. To revisit Henrich's (2017) remarks on Tomasello's experimental findings discussed in relation to the second criterion, it was highlighted that young children engage in norm-enforcing behavior despite no outside intervention from adults. This is directly in line with the demanded evidence as per the current criterion. In addition, although Graham et al. (2012) do not require evidence involving brain regions or specific genes to grant innateness, there is recent evidence coming from a twin study (Chen et al., 2018) that indicates moderate genetic influence on conformity (but see Li, Zhang, Huang, Xu, Liu, 2013 for another twin study suggesting otherwise).

As for conformist behavior in non-human primates, a prominent study by van de Waal, Borgeaud, and Whiten (2012) experimentally showed that wild vervet monkeys conform to group norms. Specifically, they observed that the monkeys adjusted their foraging practices in line with newly introduced group norms; specifically, males migrated to a new group adopted the local norm and new infants unfamiliar to foods followed maternal preferences.

Consequently, there is sufficient reason to concede that conformity fulfils the current criterion.

3.2.5 Criterion 5

The fifth and the last criterion requires a moral foundation to afford adaptive advantage as demonstrated by evolutionary models. Being one of the cornerstones of cooperative behavior, it is a priori plausible to expect that conformity meets this criterion, but there is also evidence for it.

Evidence from studies that employ agent-based models indicate that conformity offers adaptive advantage. To mention a fairly recent one, Szolnoki and Perc (2015) demonstrated that the presence of a certain rate of conformists in a network facilitates the spread and establishment of cooperative strategies (reciprocity, in their case), in addition to allowing for an interface for new successful strategies to be adopted. It is one way how conformity contributes to solutions of social dilemmas by increasing cooperation. Szolnoki and Perc (2015) comment that what underlies this dynamic at the individual level is that it is safer for individuals to opt for the most commonly employed strategy within their interaction range (this can be translated as complying with the attitudes that are culturally common ground,

recalling Tomasello's [2016] remark) since this eliminates the risk of ending up with a payoff that is too little compared to the average.

I think it is noteworthy that conformity as a foundation should differ from the existing ones with regard to current criterion, in that the evolutionary advantages conformity it brings about are not exclusively grounded by its being a solution to a specific problem of cooperation. Rather, what I take to be suggested by the sort of studies mentioned is that conformity serves to maintain the stability and spread of adaptively beneficial moral intuitions (as I will elaborate later).

In case conformity fulfils all the purported criteria of foundation-hood, it follows that it is at least an eligible candidate to represent an intuitive and foundational facet of human morality as affirmed by Graham et al. (2012). Indeed, my contention is that it would be bewildering if conformity failed to meet those criteria, given the key role it plays. Hence, I think the more challenging issue is the other requirement posed by Graham et al. (2012), that is, any candidate foundation should be sufficiently distinct from the existing ones (in the current case, those postulated by MAC) to be granted foundation-hood. This being the case, in what follows I will first examine the existing foundations of Mac which are most likely to make inclusion of conformity unnecessary. Then I will attempt to show that conformity is not only qualified for being a distinct foundation of morality, but also it is a necessary foundation for a complete account of human morality.

3.3 Conformity as a distinct moral foundation

As stated previously, MAC theory predicts that moral foundations will be about solutions to problems of cooperation. By extension, it also predicts that behavior and emotions that are not problems of cooperation will not be deemed relevant for

morality. Having established that conformity does qualify as a moral foundation with respect to criteria advanced by Graham et al. (2012) I will first go through the existing foundations to see if they imply or contain conformity. Out of the seven foundations, I hold that only two can promise to capture or inhere conformity, and the rest of them are clearly cannot, and hence are not addressed explicitly.

The first foundation I want to focus on is group (or mutualism). This foundation results from MAC's prediction that behavior that provides mutual benefits, i.e., serves to solve coordination problems, will be viewed as morally good. I treat this foundation separately, because in the paper where the development of MAC theory is exposed (Curry, 2016), "conformity" is only mentioned as one of the resulting morals associated with group foundation. While it is evident that conformity facilitates mutualism in groups, I claim that there is more to conformity than just being a moral intuition that bolsters mutualism. What justifies this view the previously exposed account offered by Henrich (2017) (recall the discussion regarding above regarding criterion 2). Henrich convincingly theorized that humans are equipped with a norm psychology that underlies human capacity to absorb and enforce norms quite unselectively. Thus, norm psychology cannot be restricted to group loyalty, as norm-enforcing tendences are triggered by even arbitrary, context-specific rules. Resultingly, conformity should be distinct from group foundation.

Besides, if one inspects the items of the MAC-Q concerning the group foundation (can be found in Appendix D), all one will see are items asking whether behaving in ways that benefit one's group are morally relevant (in relevance subscale) and whether one endorses acts that increase the welfare of the group (in judgment subscale). No explicit questions are present which are targeted to assess whether one endorses conformist behavior per se.

One can say the MAC dimension that gets closest to capture conformity is deference, which is one of the moral foundations that emerged as a solution to cooperation problem of contests over resources. However, conformity is not captured by deference (to authority) foundation either, since conformity implies deferring to norms and conventions endorsed by majority, rather than obeying or respecting a hierarchical authority, which is all deference items of the MAC-Q are aimed to measure. In the case of conformity, unlike deference to authority, the subject that begets compliance is not hierarchically established; it is enough to instigate conformity that one's peers have expectations regarding certain behavior.

The remaining foundations (family, reciprocity, fairness, heroism, and property) do not hold any reasonable potential to account for conformity as well. Thus, conformity is not a part of the framework as a distinct domain and there are good reasons that it should be. In what follows, I will bring forward the relevant empirical evidence, along with theoretical reasons, as to why conformity should be part of this picture.

3.4 Conformity as a necessary moral foundation

As I have already admitted, Morality-As-Cooperation maps a large and significant portion of the moral domain. However, leaving out conformity as a moral foundation, one will end up with uncharted territory in the moral domain, and miss out on potential to refine the already identified foundations.

Here is the gist of what I will argue. I contend that conformity has such a role in human morality that it helps stabilization and wide-spread application of every moral value implied by MAC. Conformity is not limited to norms concerning mutualism or deference or etc. alone but all the moral norms that are related to the

other foundations of MAC. Moreover, I will try to show, it goes beyond them to also account for conventional norms that do not seem morally relevant according to MAC.

There are non-zero-sum that are widely played out in society games which MAC draws upon to ground morality in cooperation. But there are other "games" humans play in group settings which cannot be fully explained by non-zero-sum games; those games have no tangible sums, and conforming to some local norms, people may behave in ways that clearly do not serve to bolster cooperative norms and may end up with negative sums. One must take part in those games nevertheless if one wants to show that one is a worthy member of one's group.

In explaining the importance of conformity to human morality that goes beyond cooperation, I will primarily look to works of Michael Tomasello and Joseph Henrich, which I have already exposed in some detail when it was called for. I find the accounts given by the two are very much reconcilable as they both interpret the relevant empirical findings in similar a manner to arrive at plausible outlines for a moral psychological account. In addition, experimental evidence collected by Tomasello and his collaborators (which were also previously mentioned) also support my view. Thus, I think theoretical and empirical contributions by these two scholars can be used as a guideline to enhance MAC framework to become a more comprehensive and accurate theory of human morality. In turn, the resulting improvements may help extending MAC-Q to become a more complete measure of moral values.

I will start with Tomasello, who laid out an illustrating account as to what underlies morality in his book "A Natural History of Human Morality" (2016) (last chapter of which happens to be titled "Human Morality as Cooperation-

Plus"). Tomasello's (2016) account of human morality is especially relevant to my case, as he aims to explain morality based on cooperation without reducing it to cooperation.

I will now go over the relevant details of Tomasello's account that support my claims regarding MAC's shortcoming. Critically, Tomasello (2016) addresses the question of how seemingly arbitrary norms and conventions had become moralized, even though they do not necessarily concern cooperation, at least not as it is framed in MAC theory. Hence, the main respect I think MAC can be enhanced is that it mostly encapsulates what Tomasello (2016) calls second-personal morality and falls short of fully accounting for what Tomasello calls objective morality.

As human societies got more complex, the reach and effectiveness of secondpersonal protest (which is the basis of second-personal morality) grew insufficient as
a way of controlling non-cooperative group members. To meet this requirement in
larger-scale societies, social norms emerged as a result of gradual evolution of a
culturally shared set of expectations. This way, evaluation of non-cooperators was
conventionalized as they were made to be applicable on group level, helping society
to function seamlessly as a whole. Consequently, a cultural common ground was
established, constituting what Tomasello (2016) calls objective morality. As such,
Tomasello (2016) describes social norms as conventionalizations that aim to instigate
conformity in the members of a society.

Objective morality makes it possible for merely conventional behavior to become moralized in line with evaluative attitudes that members of a cultural group commonly share (Tomasello, 2016). And I further submit that this is true regardless of these behaviors' being moral or not as per the criteria of being cooperative, taken in the game-theoretical sense MAC is concerned with. As such, what this shows to

be problematic about MAC is that mere conventions (like dress codes for feasts) can become moral norms as they are established in the common cultural ground and start to elicit similar and stable reactions in group members, despite having nothing to do with "problems of cooperation and conflict recurrent in human social life" (Curry, 2016, p. 29), solutions to which constitute entire human morality according to MAC.

By way of example, consider this scenario depicted by Tomasello (2016), of a man wearing unconventional clothes to a feast. (Incidentally, the example I thought of prior to reading Tomasello was a male student walking around the campus without wearing a shirt.) It is difficult to say that this man is uncooperative (hence immoral) according to moral foundations of MAC. If we go through MAC's moral foundations: he did not treat anyone unfairly (fairness), did not neglect/harm his family (family values), did not put his interests before those of his group (mutualism), did not fail to return a favor (reciprocity), did not revolt against authority (deference), did not act cowardly (heroism) or damage anyone's property (property rights). But nonetheless, what he did is punishable enough since he knowingly deviated from the cultural common ground which dictates what one normally wears to a feast for the members of his group. So, others would conclude, given he knows our norms and our expectations (and that he knows that we know them), he either does not care about the norms, or our evaluations, or identifying himself with our culture/group, or all at once; all of which are bad. Because these indicate he is not a conformist, and it is dubious that he can be depended on to fulfil his role as a good member of the society. Importantly, I contend that this does not mean that it is just bad for group mutualism (or any other single moral value purported by MAC), but bad for seamless functioning and success of a moral community overall, whatever set of social norms that happens to hinge on..

As noted by Tomasello (2016) giving in to this sort of self-regulation features a strategic dimension, but it also features a moral dimension. The moral dimension is rooted in individuals' acknowledgment that the regulations imposed by group or society are legitimate and inherent to individuals' moral identities. Self-regulation imposed by society is legitimate because each and every individual is licensed, on the same basis, to expect self-regulation from others. Tomasello underlines that this understanding underlies a cooperative rationality upheld by what he calls self-other equivalence, the notion that everyone bears equal responsibility as others who they deal with when it comes to cooperative obligations. A crucial point regarding all this is that objective morality results from scaling up of this self-other equivalence (due to emergence of large-scale societies) to constitute a fully agent-independent understanding of moral judgment, hence the subjects of moral judgment are "viewed from a perspectiveless nowhere" as Tomasello (2016) puts it.

I could say, then, that the essence of my criticism against MAC is that it misses this "view from nowhere", and this is why it needs to incorporate conformity. Indeed, Tomasello (2016) also hints at this problem concerning theories of moral psychology. As Tomasello's book predates MAC, it does not address it specifically, he only addresses moral foundation theory (MFT). Still, I think the criticism he targeted at moral psychological accounts are relevant to what I regard as the shortcomings of the MAC theory. As do I, Tomasello (2016) grants that moral psychological theories like moral foundations theory—which takes cooperation as a central element of morality, like MAC—have helped us explain a considerable portion of human morality that depend on intuitive judgments. (MAC is a step forward in this way, bettering MFT in some respects, as Curry [2019] claims and I agree.) However, he asserts that this sort of theories falls short of addressing the part

of morality that is underpinned by humans' rational understanding of the social world (Tomasello, 2016).

In my view, not admitting conformity as a moral foundation is a result (maybe one of the results) of such neglect. That is to say, there is a moral psychology which makes people better cooperators, but there is also a norm psychology that underlies a portion of morality aimed to make people well suited for group settings, including but not limited to cooperation. It is also telling that even though MAC does not allow sanctity foundation of MFT to be a moral foundation (since it is not associated with a particular problem of cooperation), sanctity has repeatedly turned up as morally relevant over several studies as also attested to by developers of MAC (Curry, Jones Chesters, & Van Lissa, 2019).

Therefore, my contention is that when combined, Tomasello's and Henrich's theoretical accounts and the related experimental evidence as interpreted by them support my main claim that conformity transcends morality-as-cooperation, that it functions as a mechanism that works to ensure stability and maintenance of all sorts of socially established conventions. In this manner, conformity is a meta-dimension relative to dimensions of MAC. Conformity is not just a proxy for cooperative behavior, in certain contexts it can be more essential as measure of appropriate behavior in a group setting, hence a measure of morality. It is only at the level of second personal morality that cooperation can be the sole arbiter of morality, not at the level of objective morality, which is a product of cultural common ground. There is more to cooperation than MAC purports when it is not strictly taken in the gametheoretical sense. Then, in light of the above discussion, it is possible for someone to be deemed immoral by the group for doing such and such behavior even though it

does not hinder cooperation. Sometimes you just have to do what the majority sees fit to be deemed moral—for whatever ultimate reason.

On a related note, there is a behavioral study which I find worth mentioning, for it corroborates my claim that conformity transcends cooperation. Adapting the Asch paradigm for moral judgments (instead of visual judgments as in Solomon Asch's [1951] original experiment), Kundu and Cummins (2013) showed that one's moral judgment is significantly influenced by converging judgment of other group members. In one of the experiments, the subjects are presented with moral dilemmas, which they have to answer alongside three other subjects (who were confederates). The arrangement of participants was such that the subject always answered the last (after the all the confederates). In the control condition, the confederates picked the obviously wrong answers and the subject complied with them regardless of what he or she actually thinks is the right answer. What is more, in line with their expectations Kundu and Cummins (2013) found that the subjects are more likely to conform to majority answer when the answer to the moral dilemma was not so clear. So, even when moral values themselves are at stake, the tendency to conform prevails, even more so if the moral decision involves high uncertainty. I consider this result to support my claim that conformity plays a more fundamental role in morality than specific moral values, having an overreaching impact on them.

Conformity to social norms are also crucial in that social norms set the boundaries of right and wrong ways to behave across cultures. Conformity is the "virtue" imposed by this pillar of morality, and the degree to which people care about conforming to norms provides a measure of morality which is related to all other possible foundation that are underpinned by social norms (or moral norms, or norms of cooperation). But the function of conformity does not reside in other foundations;

trying to locate the role of conformity in those would be the wrong way to go across the levels of moral domain, as supported by the beforementioned finding showing that norm psychology takes over even when moral judgment is at stake (Kundu and Cummins [2013], as exposed above). That is because conformity is associated with the portion of morality that has only recently (in terms of our evolutionary history) emerged as a result of humans' living in large group settings, thus our morals have long ceased to be based in agent-level. As forcefully demonstrated by Tomasello's (2016) experiments, when norms come into the picture, people naturally assume "the view from nowhere", and act in accordance with it.

Based on what I presented so far, my conviction is that the role of conformity is not so different in the case of morality than in the case of other cultural tools that helps us succeed collectively. When a practice (or an institution, or a technology, or a tradition, or etc.) has proved to be useful for the society over time, then the members of the society must be motivated to protect and maintain them by not only being conformists themselves, but also being norm-enforcers towards others to make them conformists as well. Recall from Henrich (2017) that norms psychology does not distinguish norms with respect to whether they "technically" (i.e., gametheoretically) serve to facilitate cooperation, it furnishes people with a more general propensity to be conformists. That is why I think a universal account of morality, as MAC claims to be, should be expansive enough to include the role of conformity.

All in all, if my account is reasonable, then incorporating conformity into MAC framework could improve its explanatory power, allowing us to make more sense of moral differences among people and societies. As I hinted previously, conformity should supplement the cooperative moral foundations as a "meta" foundation of sorts, which drives one's propensity to conform to the norms

concerning all the other foundations. Nonetheless, in another sense conformity is of the same class as the existing foundations, for it contributes, at least indirectly, to solution of various cooperative problems. As such, conformity is just not dedicated to a particular cooperation problem; it rather upholds and stabilizes the established norms that help sustaining moral attitudes. I contend that this is what affords conformity as a moral foundation the "meta" quality I mentioned.

I have an example that I think supports this explication. According to a 2014 report by Humane Research Council and Harris International, who surveyed a representative sample of 11,000 people in the US, 84% of vegans and vegetarians go back to consuming meat within a year. The people who became vegans usually have strong moral reasons, as it is a rather inconvenient practice to take up otherwise. But apparently that does not stop them from going back to eating meat. Moral philosopher Michael Huemer—a vocal defender of ethical vegetarianism (e.g., Huemer, 2019)—considers this finding to indicate that people do not care about morality so much as they care about conforming to social norms (M. Huemer, personal communication). As implied here, there is no established norm of not eating meat; if anything, it is an exceptional position. So, although eating meat is in principle immoral, there are no obligations enforced by established local norms, thus no cost for being immoral. Likewise, many moral judgments and attitudes cooperation-related or otherwise—rely on people being conformists to be instigated by local norms. That is why I contend that conformity operates on a meta-level relative to other foundation of MAC.

As MAC also affirms (Curry, Jones Chesters, & Van Lissa, 2019) unusual moral behavior can be explained based on one foundation's overwhelming another (e.g., heroism is so important in one culture that the value given to fairness is

reduced). My view is that conformity is also relevant here for maintenance of an established distribution of endorsement of cooperation-based moral foundations, hence preventing moral conflicts among members of a society as conformist individuals are disposed to comply with the commonly accepted distribution.

So, perhaps a new row can be added to Curry's (2016, p.38-39) "periodic table of ethics", the columns of which are problem, theory, human examples, animal examples, and morals. According to the preliminary case I argued for here, if conformity were to be an element of this table;

- The problem would be stability and spread of moral norms and in maintenance of established arrangement of moral foundations,
- The theory would include Henrich's (2017) norm psychology and Tomasello's (2016) objective morality,
- Human examples would consist of enforcement and sanctioning of seemingly conventional norms, such as dressing codes as discussed previously,
- The morals would be manifestations of conformist behavior, such as
 complying with majority, valuing conventions and rules, etc. (The Turkish
 adage "The sheep that leaves the herd gets eaten by the wolves," comes to
 mind.)

I disregarded the "animal examples" column of the table because the portion of human morality that is underpinned by conformity critically resulted from large-scale societies of common culture that are exclusive to human species—as per Tomasello's (2016) account described above—and thus animal examples would not be readily found.

Ultimately, if MAC was updated in line with what I have proposed, we would end up with additional items attached to MAC-Q (Curry, Jones Chesters, & Van

Lissa, 2019), which will serve to measure conformity as a part of morality. Coming up with the appropriate items would require a thorough investigation of conformity, so that we can have items that measure both relevance of conformist behavior to morality and judgments that properly capture the role it plays in morality.

Thus, I think my case is concluded. What I hope I have achieved is to show that in the much-favored enterprise of "mapping the moral domain" (Graham et al., 2011), relying completely on cooperation leaves us with some uncharted territory. Not only that, incorporating conformity will afford us a more refined map of the territory already mapped by cooperation-based accounts.

APPENDIX A

ETHICS COMMITTEE APPROVAL

T.C.

BOĞAZİÇİ ÜNİVERSİTESİ

Sosyal ve Beşeri Bilimler Yüksek Lisans ve Doktora Tezleri Etik İnceleme Komisyonu

Say1: 2019- 54

9 Mayıs 2019

Zafer Kılıç

Bilişsel Bilim

Sayın Araştırmacı,

"Kurgulama Seviyesinin Ahlaki Tutumlara Etkilerinin İncelenmesi" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2019/52 sayılı başvuru komisyonumuz tarafından 9 Mayıs 2019 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Dr. Öğr. Üyesi İnci Ayhan

Prof. Dr. Feyza Çorapçı

Doc. Dr. Mehmet Yiğit Gürdal

Doç. Dr. Ebru Kaya

PAPORLY

Dr. Öğr. Üyesi Şebnem Yalçın

APPENDIX B

CATEGORY VERSUS EXEMPLAR TASK

CATEGORY TASK

In this task, you will be provided with a series of words. Your task will be to write a word that you think each provided word is an example of. That is, ask yourself the question, "[Provided word] is an example of what?" and then write down the answer you come up with. For instance, if we gave you the word "POODLE," you might write down "DOGS" or even "ANIMALS," as a poodle is an example of a dog or animal. Be creative and come up with the most general word for which the provided word is an example.

- 1. SODA is an example of what?
- 2. COMPUTER is an example of what?
- 3. NEWSPAPER is an example of what?
- 4. PROFESSOR is an example of what?
- 5. PASTA is an example of what?
- 6. BOOK is an example of what?
- 7. SPORT is an example of what?
- 8. TABLE is an example of what?
- 9. SHOE is an example of what?
- 10. MOVIE is an example of what?
- 11. PEN is an example of what?
- 12. SENATOR is an example of what?
- 13. LUNCH is an example of what?
- 14. TRAIN is an example of what?

- 15. MAIL is an example of what?
- 16. ACTOR is an example of what?
- 17. BEER is an example of what?
- 18. PHONE is an example of what?
- 19. SOAP is an example of what?
- 20. FRUIT is an example of what?
- 21. COIN is an example of what?
- 22. RESTAURANT is an example of what?
- 23. TREE is an example of what?
- 24. GAME is an example of what?
- 25. PAINTING is an example of what?
- 26. BAG is an example of what?
- 27. WATER is an example of what?
- 28. COLLEGE is an example of what?
- 29. DANCE is an example of what?
- 30. CANDY is an example of what?
- 31. GUITAR is an example of what?
- 32. MOUNTAIN is an example of what?
- 33. POSTER is an example of what?
- 34. SOAP OPERA is an example of what?
- 35. RIVER is an example of what?
- 36. MATH is an example of what?
- 37. KING is an example of what?
- 38. WHALE is an example of what?
- 39. SINGER is an example of what?

40. TRUCK is an example of what?

EXEMPLAR TASK

In this task, you will be provided with a series of words. Your task will be to write down a word that is an example of this word. That is, ask yourself the question, "An example of [provided word] is what?" and write down the answer you come up with. For example, if we gave you the word "DOGS," you might write down the category "POODLE" or even "PLUTO" (the Disney character). Be creative and try to think of as specific an example of the category as you can.

- 1. An example of SODA is what?
- 2. An example of COMPUTER is what?
- 3. An example of NEWSPAPER is what?
- 4. An example of PROFESSOR is what?
- 5. An example of PASTA is what?
- 6. An example of BOOK is what?
- 7. An example of SPORT is what?
- 8. An example of TABLE is what?
- 9. An example of SHOE is what?
- 10. An example of MOVIE is what?
- 11. An example of PEN is what?
- 12. An example of SENATOR is what?
- 13. An example of LUNCH is what?
- 14. An example of TRAIN is what?
- 15. An example of MAIL is what?
- 16. An example of ACTOR is what?

- 17. An example of BEER is what?
- 18. An example of PHONE is what?
- 19. An example of SOAP is what?
- 20. An example of FRUIT is what?
- 21. An example of COIN is what?
- 22. An example of RESTAURANT is what?
- 23. An example of TREE is what?
- 24. An example of GAME is what?
- 25. An example of PAINTING is what?
- 26. An example of BAG is what?
- 27. An example of WATER is what?
- 28. An example of COLLEGE is what?
- 29. An example of DANCE is what?
- 30. An example of CANDY is what?
- 31. An example of GUITAR is what?
- 32. An example of MOUNTAIN is what?
- 33. An example of POSTER is what?
- 34. An example of SOAP OPERA is what?
- 35. An example of RIVER is what?
- 36. An example of MATH is what?
- 37. An example of KING is what?
- 38. An example of WHALE is what?
- 39. An example of SINGER is what?
- 40. An example of TRUCK is what?

APPENDIX C

CATEGORY VERSUS EXEMPLAR TASK (TURKISH)

KATEGORİ GÖREVİ

Bu görevde, size bir dizi kelime gösterilecektir. Yapmanız gereken, verilen her bir kelimenin örneği olduğu bir kelime yazmaktır. Şöyle ki, kendinize "[Verilen kelime] neyin bir örneğidir?" sorusunu sorup aklınıza gelen cevabı yazmalısınız. Örneğin, size verilen kelime "PAPAĞAN" ise, "KUŞ" yahut "HAYVAN" yazabilirsiniz; çünkü papağan bir kuş veya hayvan örneğidir. Yaratıcı olunuz ve verilen kelimenin örnek teşkil ettiği en genel kelimeyi bulmaya çalışınız.

- 1. KOLA neyin bir örneğidir?
- 2. BİLGİSAYAR neyin bir örneğidir?
- 3. GAZETE neyin bir örneğidir?
- 4. PROFESÖR neyin bir örneğidir?
- 5. MAKARNA neyin bir örneğidir?
- 6. KİTAP neyin bir örneğidir?
- 7. SPOR neyin bir örneğidir?
- 8. MASA neyin bir örneğidir?
- 9. AYAKKABI neyin bir örneğidir?
- 10. FİLM neyin bir örneğidir?
- 11. KALEM neyin bir örneğidir?
- 12. MİLLET VEKİLİ neyin bir örneğidir?
- 13. ÖĞLE YEMEĞİ neyin bir örneğidir?
- 14. TREN neyin bir örneğidir?
- 15. POSTA neyin bir örneğidir?

- 16. AKTÖR neyin bir örneğidir?
- 17. BİRA neyin bir örneğidir?
- 18. TELEFON neyin bir örneğidir?
- 19. SABUN neyin bir örneğidir?
- 20. MEYVE neyin bir örneğidir?
- 21. BOZUK PARA neyin bir örneğidir?
- 22. RESTORAN neyin bir örneğidir?
- 23. AĞAÇ neyin bir örneğidir?
- 24. OYUN neyin bir örneğidir?
- 25. RESİM neyin bir örneğidir?
- 26. ÇANTA neyin bir örneğidir?
- 27. SU neyin bir örneğidir?
- 28. ÜNİVERSİTE neyin bir örneğidir?
- 29. DANS neyin bir örneğidir?
- 30. ŞEKER neyin bir örneğidir?
- 31. GİTAR neyin bir örneğidir?
- 32. DAĞ neyin bir örneğidir?
- 33. POSTER neyin bir örneğidir?
- 34. TV DİZİSİ neyin bir örneğidir?
- 35. NEHİR neyin bir örneğidir?
- 36. MATEMATİK neyin bir örneğidir?
- 37. KRAL neyin bir örneğidir?
- 38. BALİNA neyin bir örneğidir?
- 39. ŞARKICI neyin bir örneğidir?
- 40. KAMYON neyin bir örneğidir?

ÖRNEK GÖREVİ

Bu görevde, size bir dizi kelime gösterilecektir. Yapmanız gereken, verilen her bir kelime için o kelimeye örnek olan bir kelime yazmaktır. Şöyle ki, kendinize "[Verilen kelime]nin bir örneği nedir?" sorusunu sorup aklınıza gelen cevabı yazmalısınız. Örneğin, size verilen kelime "HAYVAN" ise, "KUŞ" yahut "PAPAĞAN" yazabilirsiniz; çünkü kuş ve papağan, hayvan kategorisindedir. Yaratıcı olunuz ve verilen kelimenin olabildiğince özgün bir örneğini düşünmeye çalışınız.

- 1. KOLA için bir örnek nedir?
- 2. BİLGİSAYAR için bir örnek nedir?
- 3. GAZETE için bir örnek nedir?
- 4. PROFESÖR için bir örnek nedir?
- 5. MAKARNA için bir örnek nedir?
- 6. KİTAP için bir örnek nedir?
- 7. SPOR için bir örnek nedir?
- 8. MASA için bir örnek nedir?
- 9. AYAKKABI için bir örnek nedir?
- 10. FİLM için bir örnek nedir?
- 11. KALEM için bir örnek nedir?
- 12. MİLLET VEKİLİ için bir örnek nedir?
- 13. ÖĞLE YEMEĞİ için bir örnek nedir?
- 14. TREN için bir örnek nedir?
- 15. POSTA için bir örnek nedir?
- 16. AKTÖR için bir örnek nedir?
- 17. BİRA için bir örnek nedir?

- 18. TELEFON için bir örnek nedir?
- 19. SABUN için bir örnek nedir?
- 20. MEYVE için bir örnek nedir?
- 21. BOZUK PARA için bir örnek nedir?
- 22. RESTORAN için bir örnek nedir?
- 23. AĞAÇ için bir örnek nedir?
- 24. OYUN için bir örnek nedir?
- 25. RESİM için bir örnek nedir?
- 26. ÇANTA için bir örnek nedir?
- 27. SU için bir örnek nedir?
- 28. ÜNİVERSİTE için bir örnek nedir?
- 29. DANS için bir örnek nedir?
- 30. ŞEKER için bir örnek nedir?
- 31. GİTAR için bir örnek nedir?
- 32. DAĞ için bir örnek nedir?
- 33. POSTER için bir örnek nedir?
- 34. TV DİZİSİ için bir örnek nedir?
- 35. NEHİR için bir örnek nedir?
- 36. MATEMATİK için bir örnek nedir?
- 37. KRAL için bir örnek nedir?
- 38. BALİNA için bir örnek nedir?
- 39. ŞARKICI için bir örnek nedir?
- 40. KAMYON için bir örnek nedir?

APPENDIX D

MORALITY-AS-COOPERATION QUESTIONNAIRE

RELEVANCE ITEMS

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? (0-100; not at all relevant, not very relevant, slightly relevant, somewhat relevant, very relevant, extremely relevant)

Family

- 1. Whether or not someone acted to protect their family.
- 2. Whether or not someone helped a member of their family.
- 3. Whether or not someone's action showed love for their family.

Group

- 4. Whether or not someone acted in a way that helped their community.
- 5. Whether or not someone helped a member of their community.
- 6. Whether or not someone worked to unite a community.

Reciprocity

- 7. Whether or not someone did what they had agreed to do.
- 8. Whether or not someone kept their promise.
- 9. Whether or not someone proved that they could be trusted.

Heroism

- 10. Whether or not someone acted heroically.
- 11. Whether or not someone showed courage in the face of adversity.
- 12. Whether or not someone was brave.

Deference

- 13. Whether or not someone deferred to those in authority.
- 14. Whether or not someone disobeyed orders.
- 15. Whether or not someone showed respect for authority.

Fairness

- 16. Whether or not someone kept the best part for themselves.
- 17. Whether or not someone showed favoritism.
- 18. Whether or not someone took more than others.

Property

- 19. Whether or not someone vandalized another person's property.
- 20. Whether or not someone kept something that didn't belong to them.
- 21. Whether or not someone's property was damaged.

JUDGMENT ITEMS

To what extent do you agree with the following statements? (0-100; strongly disagree, disagree, neither agree or disagree, agree, strongly agree)

Family

- 1. People should be willing to do anything to help a member of their family.
- 2. You should always be loyal to your family.
- 3. You should always put the interests of your family first.

Group

- 4. People have an obligation to help members of their community.
- 5. It's important for individuals to play an active role in their communities.
- 6. You should try to be a useful member of society.

Reciprocity

7. You have an obligation to help those who have helped you.

8. You should always make amends for the things you have done wrong.

9. You should always return a favor if you can.

Heroism

10. Courage in the face of adversity is the most admirable trait.

11. Society should do more to honor its heroes.

12. To be willing to lay down your life for your country is the height of bravery.

Deference

13. People should always defer to their superiors.

14. Society would be better if people were more obedient to authority.

15. You should respect people who are older than you.

Fairness

16. Everyone should be treated the same.

17. Everyone's rights are equally important.

18. The current levels of inequality in society are unfair.

Property

19. It's acceptable to steal food if you are starving. (R)

20. It's okay to keep valuable items that you find, rather than try to locate the

rightful owner. (R)

21. Sometimes you are entitled to take things you need from other people. (R)

Note: (R) = reverse coded

APPENDIX E

MORALITY-AS-COOPERATION QUESTIONNAIRE (TURKISH)

ALAKA MADDELERİ

Bir şeyin doğru veya yanlış olup olmadığına karar vermenizde aşağıda verilen düşünceler ne derecede etkilidir? Lütfen cevaplarınızı yandaki skalayı kullanarak derecelendiriniz (0-100; hiçbir şekilde alakalı değildir, pek alakalı değildir, biraz alakalıdır, orta derecede alakalıdır, çok alakalıdır, kesinlikle alakalıdır).

Aile

- 1. Birisinin ailesini korumak için hareket edip etmediği
- 2. Birisinin ailenin bir üyesine yardım edip etmediği.
- 3. Birisinin hareketinin ailesine olan sevgisini yansıtıp yansıtmadığı

Grup

- 4. Birisinin kendi grubuna yardımcı olacak bir şekilde davranıp davranmadığı
- 5. Birisinin kendi grubunun bir üyesine yardım edip etmediği.
- 6. Birisinin bir topluluğu birleştirmek için çalışıp çalışmadığı.

Karşılıklılık

- 7. Birisinin daha önceden yapmayı kabul ettiği bir şeyi yapıp yapmadığı
- 8. Birisinin verdiği sözü tutup tutmadığı
- 9. Birisinin güvenilebilecek biri olduğunu kanıtlayıp kanıtlamadığı

Kahramanlık

- 10. Birisinin kahramanca davranıp davranmadığı
- 11. Birisinin sıkıntılı bir durum karşısında cesaret gösterip göstermediği
- 12. Birisinin cesur olup olmadığı

İtaat

- 13. Birisinin otorite sahibi kişilere saygı gösterip göstermediği
- 14. Birisinin emirlere itaatsizlik edip etmediği
- 15. Birisinin otoriteye saygı gösterip göstermediği

Adalet

- 16. Birisinin en iyi parçayı kendisi için ayırıp ayırmadığı
- 17. Birisinin kayırmacılık yapıp yapmadığı
- 18. Birisinin diğerlerinden daha fazla alıp almadığı

Mülkiyet

- 19. Birisinin başka birinin malına zarar verip vermediği
- 20. Birisinin kendisine ait olmayan bir şeyi alıp almadığı
- 21. Birisinin mülkiyetinin zarar görüp görmediği

YARGI MADDELERİ

Lütfen aşağıdaki cümleleri okuyunuz ve bunlara katılıp katılmadığınızı yandaki skalayı kullanarak belirtiniz (0-100; kesinlikle katılmıyorum, katılmıyorum, ne katılmıyorum, katılıyorum, kesinlikle katılıyorum).

Aile

- İnsanlar ailesinin bir üyesine yardım etmek için her şeyi yapmaya istekli olmalıdır.
- 2. Ailene her zaman sadık olmalısın.
- 3. Her zaman önce ailenin çıkarlarını gözetmelisin.

Grup

- 4. İnsanlar her zaman grubunun üyelerine yardım etmekle yükümlüdürler.
- 5. Bireylerin gruplarında aktif bir role sahip olmaları önemlidir.
- 6. Topluma yararlı biri olmak için çaba sarf etmelisin.

Karşılıklılık

- 7. Sana yardım edenlere yardım etmekle yükümlüsün.
- 8. Yanlış yaptığınız şeyleri her zaman telafi etmelisiniz.
- 9. Mümkünse her zaman size yapılan bir iyiliğe karşılık vermelisiniz.

Kahramanlık

- 10. Sıkıntılı bir durum karşısında cesaret göstermek en takdire değer özelliktir.
- 11. Toplum, kahramanlarını onurlandırmak için daha fazlasını yapmalıdır.
- 12. Ülken için canını feda etmeye istekli olmak cesurluğun en yücesidir.

İtaat

- 13. İnsanlar her zaman üstlerine (amirlerine) saygı göstermelidir.
- 14. İnsanlar otoriteye daha fazla itaat etselerdi toplum daha iyi olurdu.
- 15. Senden yaşça büyük olanlara saygı göstermelisin.

Adalet

- 16. Herkesin aynı şekilde muamele görmesi gerekir.
- 17. Herkesin hakları eşit derecede önemlidir.
- 18. Toplumdaki mevcut eşitsizlik düzeyi adil değildir.

Mülkiyet

- 19. Eğer açlıktan ölüyorsan yemek çalmak kabul edilebilirdir. (T)
- Sahibini bulmaya çalışmak yerine bulduğunuz değerli bir eşyayı kendinize ayırmakta yanlış bir şey yoktur. (T)
- 21. Bazen başkalarından istediğiniz şeyleri almaya hakkınız vardır. (T)

Not: (T) = tersten kodlanmış

APPENDIX F

BEHAVIOR IDENTIFICATION FORM

Any behavior can be described in many ways. For example, one person might describe a behavior as "writing a paper," while another person might describe the same behavior as "pushing keys on the keyboard." Yet another person might describe it as "expressing thoughts." This form focuses on your personal preferences for how a number of different behaviors should be described. Below you will find several behaviors listed. After each behavior will be two different ways in which the behavior might be identified.

For example:

- 1. Attending class
 - A) Sitting in a chair
 - B) Looking at a teacher

Your task is to choose the identification, A or B, that best describes the behavior for you. Simply place a checkmark next to the option you prefer. Be sure to respond to every item. Please mark only one alternative for each pair. Remember, mark the description that you personally believe is more appropriate for each pair.

- 1. Making a list
 - A) Getting organized*
 - B) Writing things down
- 2. Reading
 - A) Following lines of print
 - B) Gaining knowledge*

- 3. Joining the Army
 - A) Helping the Nation's defense*
 - B) Signing up
- 4. Washing clothes
 - A) Removing odors from clothes*
 - B) Putting clothes into the machine
- 5. Picking an apple
 - A) Getting something to eat*
 - B) Pulling an apple off a branch
- 6. Chopping down a tree
 - A) Wielding an axe
 - B) Getting firewood*
- 7. Measuring a room for carpeting
 - A) Getting ready to remodel*
 - B) Using a yard stick
- 8. Cleaning the house
 - A) Showing one's cleanliness*
 - B) Vacuuming the floor
- 9. Painting a room
 - A) Applying brush strokes
 - B) Making the room look fresh*
- 10. Paying the rent
 - A) Maintaining a place to live*
 - B) Writing a check
- 11. Caring for houseplants

- A) Watering plants
- B) Making the room look nice*
- 12. Locking a door
 - A) Putting a key in the lock
 - B) Securing the house*
- 13. Voting
 - A) Influencing the election*
 - B) Marking a ballot
- 14. Climbing a tree
 - A) Getting a good view*
 - B) Holding on to branches
- 15. Filling out a personality test
 - A) Answering questions
 - B) Revealing what you're like*
- 16. Toothbrushing
 - A) Preventing tooth decay*
 - B) Moving a brush around in one's mouth
- 17. Taking a test
 - A) Answering questions
 - B) Showing one's knowledge*
- 18. Greeting someone
 - A) Saying hello
 - B) Showing friendliness*
- 19. Resisting temptation
 - A) Saying "no"

- B) Showing moral courage*
- 20. Eating
 - A) Getting nutrition*
 - B) Chewing and swallowing
- 21. Growing a garden
 - A) Planting seeds
 - B) Getting fresh vegetables*
- 22. Traveling by car
 - A) Following a map
 - B) Seeing countryside*
- 23. Having a cavity filled
 - A) Protecting your teeth*
 - B) Going to the dentist
- 24. Talking to a child
 - A) Teaching a child something*
 - B) Using simple words
- 25. Pushing a doorbell
 - A) Moving a finger
 - B) Seeing if someone's home*
- * Higher level alternative.

Total score is the sum of higher level alternative choices.

APPENDIX G

BEHAVIOR IDENTIFICATION FORM (TURKISH)

Herhangi bir davranış, birbirinden farklı pek çok ifade ile betimlenebilir. Örneğin, "daktilo kullanma" davranışı hem "yazı yazma" hem de "daktilonun tuşlarına basma" olarak betimlenebilir. Aşağıda buna benzer bazı davranışlardan oluşan bir liste verilmiştir. Listedeki her davranış, birbirinden farklı iki seçenekle betimlenmiştir. Sizden yapmanızı istediğimiz şey, yukarıda verilen davranışı bu iki seçenekten hangisinin daha iyi betimlediğini (yani daha iyi ifade ettiğini) belirtmenizdir. Örneğin:

- Sınıfta bulunma
- A) Sandalyede oturma
- B) Tahtaya bakma

Size göre "sınıfta bulunma" davranışını A ve B seçeneklerinde verilen ifadelerden hangisi daha iyi betimliyorsa, Cevap Formu'nda o seçeneği işaretleyerek tercihinizi belirtiniz.

Cevaplarınızın doğru veya yanlış olması söz konusu değildir. Önemli olan, sizin kişisel tercihinize göre bu iki seçenekten hangisinin yukarıdaki davranışı daha iyi betimlediğidir.

ÖLÇEK

- 1. Bir kişiye iyilik etme
- + A) Bir kişinin mutlu olması için çalışma
- B) Bir kimsenin yapacağı işlere yardım etme
- 2. Alışveriş yapma

- A) Mal alıp karşılığında para verme
- + B) İhtiyaçları karşılama
- 3. Orduya katılma
- + A) Milli savunmaya yardım etme
- B) Askere gitme
- 4. Çamaşır yıkama
- + A) Çamaşırların kir ve kokularını giderme
- B) Çamaşırları deterjanlı su ile çitileme
- 5. Elma toplama
- A) Yiyecek bir şeyler edinme
- B) Elmayı dalından koparma
- 6. Ağaç kesme
- A) Balta veya testere kullanma
- + B) Odun elde etme
- 7. Halı döşetmek için odanın ölçüsünü alma
- + A) Odanın görünümünü değiştirmeye hazırlanma
- B) Metre veya başka bir ölçme aracı kullanma
- 8. Bir kitap veya defteri ciltleme
- A) Kitap veya defteri ciltle kaplama
- + B) Kitap veya defteri koruma
- 9. Odayı boyama
- A) Fırçayla duvarlara ve tavana boya sürme
- + B) Odaya yeni bir görünüm verme
- 10. Kira ödeme
- A) Ev sahibine para verme

- + B) Aynı evde oturmaya devam etme
- 11. Evde çiçek yetiştirme
- A) Saksıda çiçek büyütme
- + B) Odayı güzelleştirme
- 12. Kapıyı kilitleme
- A) Anahtarı kilide sokup çevirme
- + B) Evi emniyetle alma
- 13. Evlenme
- + A) Aile kurma
- B) Bir kadınla veya bir erkekle nikahlanma
- 14. Ağaca tırmanma
- + A) Yükseklere çıkma
- B) Dallara tutunma
- 15. Kişilik testi doldurma
- A) Testteki soruları cevaplama
- + B) Nasıl bir kişi olduğunu gösterme
- 16. Diş fırçalama
- + A) Diş çürümelerini önleme
- B) Diş fırçası ile dişleri temizleme
- 17. Sınava girme
- + A) Bilgi düzeyini gösterme
- B) Sınav sorularını cevaplandırma
- 18. Birisiyle selamlaşma
- A) "Merhaba" deme
- + B) Arkadaşlığını gösterme

- 19. Sobayı yakma
- A) Sobaya odun-kömür koyarak tutuşturma
- + B) Odayı veya evi ısıtma
- 20. Yemek yeme
- + A) Beslenme
- B) Ağızdaki lokmayı çiğneme ve yutma
- 21. Odanın ışığını yakma
- A) Işığın düğmesine basma
- + B) Odayı aydınlatma
- 22. Zengin olma
- + A) Daha rahat (iyi) yaşama
- B) Çok para sahibi olma
- 23. Dişçiye dolgu yaptırma
- +) A) Dişi koruma
- B) Tedavi olma
- 24. Çocukla konuşma
- + A) Çocuğa bir şeyler öğretme
- B) Çocuğa, anlayabileceği basit kelimelerle hitap etme
- 25. Kapının zilini çalma
- A) Parmakla kapı ziline basma
- + B) Evde birisinin olup olmadığına bakma

Not: + işareti bulunan seçenekler üst düzeydedir.

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