WHY BE MORAL? MORAL MOTIVATION ACROSS CONTEXT AND AGE

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WHY BE MORAL? MORAL MOTIVATION ACROSS CONTEXT AND AGE

by

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THESIS

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Abstract

Research on moral identity has not provided evidence for age-related trajectories in moral identity development. There has been a focus on a specific age range, particularly adolescence and emerging adulthood, ignoring older age groups and their development. In addition, research has focused on broad notions of intrinsic versus extrinsic moral motivation, without taking into consideration the various contexts in which moral behavior is expressed. There exists no current research on age differences in moral motivation. This study investigated differences in moral motivation across four consecutive age groups; adolescence (14-18 years, n = 67, 41 females), emerging adulthood (19-25 years, n = 52, 29 females), young adulthood (26-45 years, n = 66, 43 females), and middle age (46-65 years, n = 67, 35 females). In addition, moral motivation was examined across three different contexts; family, school/work, and community. Overall, 252 participants completed a semistructured interview. Results showed that internal moral motivation increased with age between adolescence and young adulthood, plateauing at middle age; while external moral motivation decreased with age across the four age groups. In addition, external moral motivation was highest in the context of school/work, than in the context of family and community; while internal moral motivation was higher in the contexts of family and community than in the context of school/work. The implications of this study are that we now have an increased awareness of the trajectory of moral identity development across the life span; as well as increased knowledge of what motivates individuals to behave morally in various contexts of life.

*Keywords*: moral motivation, moral identity, intrinsic, extrinsic, Self-determination theory
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Introduction

Moral identity has been defined as "the degree to which being a moral person is important to an individual's identity" (Hardy & Carlo, 2011, p. 212). There are various perspectives on the structure, mechanisms, and dynamics of moral identity.

The construct of moral identity was established by Blasi in the early 1980s in two separate papers published in 1983 and 1984 (Blasi, 1983; 1984). Since then the subject has been researched extensively (cf. Krettenauer & Hertz, 2015). To date, more than 100 studies are available that demonstrate how moral identity positively influences individuals in carrying out prosocial behaviours, as well as refraining from antisocial and harmful actions. Moral identity has also been shown to act as a moderating factor in resisting pressures to behave immorally (Krettenauer & Hertz, 2015).

Research has supported the idea of identity playing an integral role in moral functioning (Krettenauer & Hertz, 2015). For instance, Kohlberg (1969) outlined the cognitive developmental theory, which highlighted the role of moral reasoning in moral identity and moral motivation. Colby and Damon (1992) perceived moral identity as the merger of the self with moral systems, causing people to have a deeply rooted conception of themselves as moral agents. Blasi (1995) described moral identity as moral concerns being integrated within an individual’s emotional system. Moral concerns and moral identity create the building blocks of agentic processes, which include responsibility, philanthropy, and environmentalism.

A discussion of Piaget’s and Kohlberg’s theories of moral development will be initially presented, as they were the starting points of the field of research on moral development. However, both theories focused on moral cognition, more so than moral motivation, or moral identity.
Therefore, we next present a discussion of Rest’s theory, which is particularly relevant because he focused on examining moral behaviour, and the influence of social cognition on moral behaviour.

The research presented in the introduction reveals a need to expand research on moral identity. This is particularly relevant because moral identity is supposed to predict moral behaviour. However, empirical research on moral identity has focused on the integration of moral responsibility into the self, as well as what drives people to behave morally, in addition to moral commitment.

Following the discussion of literature, a description of the three approaches used in investigating moral personality, moral judgement and moral motivation ensues. This is relevant to the direction taken in this study. As this study investigates moral motivation, self determination theory is discussed; particularly, organismic integration theory, which gives rise to the framework of assimilating external motives to varying degrees to the self, producing different levels of self-integration in moral motivation. Finally, a section outlining hypotheses investigated is presented.

**The Role of Moral Identity in Piaget's and Kohlberg's Theories**

Past research in the domain of morality focused more strongly on moral cognition than on moral motivation. This direction in research was influenced by Jean Piaget and Lawrence Kohlberg. Piaget identified a distinction between moral thought and moral action, stating that the relationship between them is not direct. This was due to akrasia, defined as weakness of the determination to abide by moral norms. Piaget believed that children assumed moral understanding and conviction through social interactions. Following that, children integrated
their experiences into their identity. He believed it was beneficial for children to interact with peers in unsupervised settings, to practice their acquired morality (Bergman, 2002).

In Piaget’s theory, moral motivation and identity were not explicitly addressed. He proposed that children behave within social constraints out of fear, respect, and affection for adults. However, they learn cooperation through practicing the virtues of sympathy, mutuality, and role-taking by interacting with their peers. Piaget outlined the development of morality in children, proposing a 3-stage developmental progression in moral thinking. Initially, children between the ages of five and 10 years perceive the world through an other-directed lens. Their understanding of morality subscribes to unbreakable rules dictated to them by authority figures such as parents and teachers. Their reasoning for following these rules is driven by their need to avoid negative consequences. Towards the end of middle childhood, children begin viewing situations from other people’s perspectives. They begin taking the well-being of others into consideration. Their morality becomes more self-initiated, and reflective. This milestone was termed “morality of cooperation” by Piaget. At about 10 years and continuing into adolescence, children begin to perceive moral rules as socially accepted guidelines, formulated to benefit the world. These rules are complex in nature, negotiable, and are used to improve lives. At this point, there is a realization that decisions may have consequences that might benefit or hurt not just themselves but others as well (Piaget, 1997). Piaget established a framework of morality development, upon which other theories were constructed.

The developmental psychologist Lawrence Kohlberg built upon Piaget’s earlier work, resulting in the development of his well-known stage theory of moral development. Kohlberg perceived motivation to be a by-product of moral cognition; however, other psychologists criticized his excessive rationalism (Bergman, 2002). Lawrence Kohlberg’s stages of moral
development describe three levels of developing an increasingly sophisticated understanding of moral reasoning. Each level builds on the understanding and completion of the one prior. Kohlberg perceived moral development as a lifelong task. The three levels are further divided into 6 stages, containing 2 stages each. In the Pre-conventional level children understand morality through right/wrong and consequences. That is Stage 1: The punishment and obedience orientation, and Stage 2: The instrumental relativist orientation. In the punishment and obedience orientation, action is brought about to avoid physical consequences. In the instrumental relativist orientation, behaving morally brings about satisfaction of individuals’ needs as well as the needs of others. The Conventional level is divided into Stage 3: The interpersonal concordance or “good boy-nice girl” orientation, and Stage 4: The law and order orientation. During Stage 3, helpful behaviour that is commended by others is considered moral. During Stage 4, a person engages in action because of fixed rules to maintain social order. Finally, the third level, called the Post-conventional, is divided into Stage 5: The social-contract legalistic orientation, and Stage 6: The universal ethical-principle orientation. In Stage 5, an understanding of individuals’ rights and social conventions produce action. In Stage 6, individuals choose principles to abide by. These principles must appeal to their logical comprehension, universality, and consistency (Kohlberg, 1971). Kohlberg’s comprehensive stages of moral development elaborated on moral judgment. Kohlberg did not explicitly examine moral behaviour.

Rest (1983), on the other hand, examined how moral behaviour is brought about. He believed that moral functioning should be examined through the observation of four inner processes. The four processes must be coordinated to lead to moral behaviour. The four components are moral sensitivity, moral motivation, moral judgement, and moral commitment.
The first component, moral sensitivity, examines the impact of individuals’ actions on others through role-taking and empathy. The second inner process, moral motivation, brings about moral action and identifies idealistic behaviours in different scenarios. The third, moral judgement, involves individuals assimilating values, chosen from an array of available choices, into their characters. Chosen values fulfil the individuals’ moral ideals. Finally, the fourth component is carrying out the moral action perceived to be the most morally-aligned with the individual’s principles. Moral sensitivity, moral motivation, moral judgement, and moral commitment are influenced by contextual circumstances in which an individual operates. Therefore, Rest believed that social cognition is an important feature influencing moral behaviour.

As shown above, Piaget outlined the development of moral action, while Kohlberg described the development of moral reasoning. Rest proceeded by examining moral behaviour. Understanding moral behaviour paved the way to understanding moral identity.

**Moral Identity and the Judgment-Action Link**

Theoretical interpretations of altruism, moral behaviour, and care for others (e.g., Blasi, 1983, 1984; Damon & Hart, 1992; Gilligan, 1982) have emphasized the importance of understanding the self-concept. A sense of self must be consistent with moral behaviour, giving rise to moral commitment in adulthood. This commitment is important when investigating moral motivation. Moral motivation stems from an integration of moral goals with the sense of self (Hart & Fegley, 1995).

There is a distinction between the actual self and the ideal self. The actual self is how a person perceives her or himself, whereas the ideal self is the person an individual aspires to be (Bybee & Zigler, 1991). In addition, research has outlined three different forms of the self that
people either possess or aspire to possess. Oughtselves are identities based on other’s expectations. The second is the temporal self, which is an identity possessed either in the past or in the future, but only for a confined period (Ogilvie, 1987). Finally, the socialself is the identity portrayed while interacting with others. These three versions of the self encompass all forms of interactions, including with parents, friends, and acquaintances (Hart & Fegley, 1995).

Researchers (Damon & Hart, 1986, 1988; Hart & Damon, 1986; Hart, Lucca-Irizarry, & Damon, 1986) have identified four developmental levels of the self. According to these models, young children describe their identity based on physical characteristics and possessions. At Level 2, individuals see themselves considering physical and social standards. A comparison is made to others and “how good” the self is in comparison to peers. At Level 3, it is important for individuals to be socially desirable and to fit in. Finally, at Level 4 an individual’s understanding of themselves is based on life-goals, values and beliefs that are supposed to be central to the self. For example, desiring to be respectful because of the belief in the importance of respect, with no ulterior motives. Therefore, Level 4 represents the developmentally most advanced form of the self (Hart & Fegely, 1995).

In short, there are three kinds of the self outlined in literature: the ought-self, the temporal-self, and the social-self. The developmental trajectory of the self encompasses 4 levels, which give rise to moral identity.

**Empirical Research on Moral Identity**

As outlined in the first paragraph, moral identity has been defined as "the degree to which being a moral person is important to an individual's identity" (Hardy & Carlo, 2011, p. 212). A description of various studies involved in researching moral identity will ensue.
Beginning with Blasi, there have been many research studies involved in investigating moral identity. In a step towards researching moral identity development, Blasi (1990) investigated the integration of moral responsibility into child's self. His research participants were three groups of children; the first group had an average age of six years, the second had an average age of 12 years, and the third had an average age of 17 years. In the study, Blasi presented each child several stories during a semi-structured interview. These stories followed 3 different scenarios. The first represented a conflict between what they wanted and obedience. The second represented a conflict between what they wanted and obligation to reciprocate. The third presented a conflict between obedience and altruism. After each scenario, each child was asked to identify their favourite choice. His conclusions were that children around the age of 6 do not possess a sense of personal responsibility towards behaving morally. However, children of approximately 12 years of age, and older understood, and personally related to the concept of moral responsibility. Most 17-year-old participants had a sense of obligation to abide by their personal beliefs (Bergman, 2002). Therefore, the study showed that individuals begin to exhibit moral responsibility around 12 years of age. Moral responsibility plays an important role in connecting moral judgement with moral behaviour.

In recent studies (Aquino, Freeman, Reed, Lim, & Felps, 2009; Lapsley & Narvaez, 2004; Monin & Jordan, 2009; Stets & Carter, 2006), researchers have claimed that schemas are integral to moral identity. Schemas are described as mental information structures that embody different characteristics of ourselves, our relationships, and our experiences (Fiske, 2000). Some have proposed that moral identity may include several morally relevant schemas that are easily accessed for social information processing (Lapsely & Lasky, 2001; Narvaez, Lapsley, Hagele, & Lasky, 2006). Lapsley and Narvaez (2004) believed that values that are important to
individuals are mentally accessible for them, making them easier to act upon. In addition, the accessibility of moral schemas differs between individuals and situational contexts (Aquino et al., 2009).

There are different ways to consider moral identity with regards to schemas. One way is viewing moral identity as one specific moral schema, which is a mental representation of an ideal moral person. Another way is viewing moral identity as having a group of mental representations; including one of the ideal moral person, and another being a representation of the individual engaging in moral action (Hardy & Carlo, 2011).

A question posed often in research is “What drives people to behave morally?” According to Campbell and Christopher (1996), a major problem with approaches taken in previous research is that they allude to people acting morally due to external obligations rather than their personal inclinations. This ideology posits human nature against moral inclinations, failing to consider the wider consideration of individualistic tendencies and situational influences. Research applying multidimensional accounts of moral functioning is lacking. Walker (2014) brought attention to the essential nature of research being conducted with moral exemplars. This would facilitate the acquisition of information and deeper understanding of the processes involved in the formation of moral identity. Using a personological approach enables researchers to examine moral identity in individuals through a multifaceted lens, taking into consideration their circumstances and individualistic development. This portrays the effects of the merging of moral personality and motivation (Walker, 2014). The following studies have aspired to fill in these gaps in literature.

McAdams, Diamond, de St. Aubin, and Mansfield (1997) conducted a study involving life-story interviews with a group of identified generative schoolteachers and community
volunteers, aged 12 to 72 years old. Generativity is defined as individuals’ concern for and commitment to the happiness and security of successive generations. The concern is expressed in parenting, teaching, and mentoring, aiming to provide a legacy for future generations, which would live on after the person is deceased (McAdams, et al., 1997). The study also involved a group of comparison participants. What became evident is that the generative adults expressed elevated redemption sequences in their life stories, meaning they perceived negative life events as having positive consequences considering resulting circumstances. McAdams (2006) identified this tendency as an important adaptive and coping strategy. The generative participants also stated an elevated deliberation of prosocial goals. When asked about their childhood years, they indicated possessing early advantages in childhood, having a strong sense of family support and a significant contact with the suffering of others. Such initial life involvements are indicative of some of the features of socialization that could be determinative in an evolving moral personality, and that could be directly applied to childhood and adolescence (Walker, 2014).

Taking the importance of the life story into consideration, participants were asked to elaborate on the underlying reasons for choosing to exhibit moral behaviour in the contexts of their family, school/work and community.

Midlarsky, Jones, and Corley (2005) and Fagin-Jones and Midlarsky (2007) carried out a study comparing the moral personality of non-Jewish Holocaust rescuers to non-Jewish spectators, as well as pre-war immigrants who were used as a comparison group. In this study, participants were given self-report measures of personality. The main aim of the study was to address the question of whether these personality dispositions were present at the time of moral action or developed after. Their analyses showed two major themes, rescuers were more inclined to take risks, and had a heightened philanthropic incentive (altruistic moral values, social
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responsibility, and empathic concern for others). The two themes mentioned are examples of coactivation of both agentic and communal motivation, respectively.

Matsuba and Walker (2004; 2005) conducted research with young adult moral exemplars. They were chosen based on their extraordinary involvement with social service agencies, and ranged in age between 18 and 30 years of age. They found that they were different from other participants in their moral personality, affecting several variables which were “stronger traits of agreeableness, advanced ego-identity status, greater ideological depth, more developed epistemic and moral reasoning, more prosocial goals for the future, greater childhood awareness of others’ suffering, and more themes of agency in their life stories.” (Walker, 2014, p.510). What became evident from this study is that the participants, due to their age, were just starting on their moral path.

In a ground-breaking study by Colby and Damon (1992) a diverse panel of ethical experts contrived a list of criteria and adjectives of moral exemplarity, as well as nominated individuals who were suited for this title. Colby and Damon then chose a sample of these nominated exemplars and performed case-study analyses on them. The qualitative analyses identified components in the lives of moral exemplars that seemed to distinguish them from ordinary people. These components are “(a) a continuing capacity for change; (b) certainty about moral values and principles, balanced by open-mindedness and truth seeking; (c) positivity, humility, love, and an underlying faith; and (d) an identity that fused the personal and moral aspects of their lives” (Walker, 2014, p.509). In another noteworthy study, Hart and Fegley (1995) recognized that moral exemplarity is not confined to adulthood, and can be identified throughout all age groups. Adolescents identified as moral exemplars easily incorporated their moral values
with their ideal selves, and exhibited heightened notions and moral themes in their goal motivation. They also portrayed a unique commitment to achieving self-understanding, which is telling of their prevalent desire to assimilate morality into their identity.

According to Walker (2014), “Within social psychology, a contrary perspective contends that situational forces are the primary processes driving moral behaviour” (p.511); stemming from that is the belief that contextual factors play a role in causing action, and individuals may formulate their personality to reflect their moral identity. Considering that, we perceived it essential to examine three specific contexts: family, school/work, and community in the proposed study. Researchers have studied moral exemplars to analyze the features influencing moral behaviour.

**Theoretical Conceptualizations of Moral Identity**

In an overview chapter, Walker (2014) identified the three major approaches used in investigating moral identity. These approaches are trait-based, sociocognitive, and personological approaches. The trait-based approach considers cross-situational consistency, and stability across time in behavioural dispositions giving rise to an individual’s moral behavior. Whereas the sociocognitive approach emphasises the relevance of situation-specific schema that produce moral action. The personological approach employs an integrative framework, which was provided by McAdams and Pals (2006). They argued that moral personality should be considered with regards to different heuristic layers, equally important in describing a moral person. These layers include dispositional traits, characteristic adaptations, and life narratives (Krettenauer & Hertz, 2015).

**Trait-based approach.** Trait-based accounts of identity propose that moral identity functions similar to personality traits. In other words, having morally relevant traits as part of an
individual’s identity predicts their moral functioning. The possession of these traits should appear consistently across contexts and unchanging over time (Walker, 2014).

Researchers were first interested in identifying the morally relevant traits that make up moral identity. Traits identified in mature moral identities allowed them to investigate emerging forms of moral identity and the processes involved in its development. In a study by Walker and Pitts (1998), adults between 17 and 94 years of age were asked to generate moral traits, then rate the extent to which these traits are prototypical of a highly moral person. They then organized the traits into clear groups. This produced six groups of moral traits: principles/ideals, dependability/loyalty, integrity, care/trustworthiness, fairness, and confidence. Walker and Pitts (1998) found that when people discussed their conceptions of morality, they first considered how their notions of themselves related to their notions of others. They then considered the importance of external expectations and standards, and internal drives and desires (Walker, 2014).

In another study by Walker (1999), these moral traits were analyzed with regard to the five-factor model of personality, and the author found that the traits of conscientiousness and agreeableness were typical dimensions of moral character. One of the limitations of these studies was that they were conducted only with adults, and failed to distinguish developmental patterns. Hardy, Walker, Olsen, Skalski, and Basinger (2011) addressed this limitation by examining adolescents’ understanding of moral functioning, by applying once again a free-listing, prototypicality-rating, and similarity-sorting procedure. This showed again that their understanding was also divided into self/other, and internal/external dimensions as found by Walter and Pitts (1998).
So far moral identity has not been considered in the discussion of trait-based accounts, since the focus has been on conceptions of moral traits. Research has identified moral traits characteristic of moral identity in adolescence and adulthood. It has also suggested that self-appropriation of the traits predicts moral behaviour. Research using the trait-based approach has not investigated the acquisition and nature of moral traits in childhood. Evidence of accessible, differentiated, and coherent understanding of moral traits is present in older individuals. This is said to highlight that there is a progression in both cognitive processing and relational experiences with age. Having said that, there is very little empirical evidence supporting consistency of trait-based behaviour in individuals and across contexts. The trait-based approach does not take into consideration developmental processes.

Also, trait-based approaches in research assume that behavioural dispositions are consistent across context. It also assumes that individuals’ moral behaviours are unchangeable. However, moral traits should be pre-activated considering context specificity. Flanagan (2009) noted that feeling, thinking, judging and acting are carried out in ways that are appropriate to the situation. The sociocognitive approach of moral identity considers situation- and context-specificity.

**Sociocognitive approach.** The sociocognitive approach emphasises an individuals’ abilities to evaluate and exhibit different moral actions depending on the situation in which they are placed. An individual must first evaluate the moral issue at hand, and its impact on them and on others, creating action plans for a specific situation (Whitaker & Godwin, 2013).

Walker (2014) explains that trait-based accounts of moral identity describe the “having” side of personality, while the sociocognitive accounts describe the “doing” side. That is because sociocognitive accounts stress the importance of contextual influences, and cognitive
mechanisms, which cause people to react to them. Sociocognitive accounts consider moral identity as changeable by situational factors. These situational factors have the potential to activate various aspects of moral identity, and the centrality of moral concerns (Walker, 2014).

Lapsley and Narvaez (2004) discussed the term moral chronicity, which is the extent to which an individual assimilates moral terms into their understanding of the world, as well as the extent to which moral traits are considered pivotal to their self-understanding. They concluded that those with well-developed moral identities possess moral schemas that are easily primed and accessed. However, researchers have not examined developmental trajectories of the accessibility of moral schemas (Frimer & Walker, 2009).

Moral salience is an important concept in socicognitive accounts. It pertains to the activation of moral identity by contextual factors. Aquino, et al., (2009) investigated the effect of dispositional factors on situational factors. Their study involved undergraduate business students with an average age of 20 years old. They initially assessed moral centrality, how central moral values are to an individual, using a measure they had devised of moral identity, and they then altered the salience of moral identity by providing participants with either a moral prime or a neutral prime.

Participants were presented with virtual tasks involving people struggling with investment decisions. The individuals they were considering had a conflict between their own good and the collective good. They found that cooperative behaviour was constantly present over time, in the selfinterested context, by those indicating high moral centrality. This provided evidence that situational factors and dispositional factors interacted. If, hypothetically, situational influences did not affect moral identity, it would not be prone to being formed by socialization. Research using the sociocognitive approach lacks studies on moral identity with younger children and
adolescent participants. Therefore, it has failed to take developmental processes into consideration (Walker, 2014).

Research on sociocognitive approaches built on trait-based accounts of moral identity. The research has demonstrated that people interpret the social context with regards to different cognitive mechanisms and the salience of their moral identity. In addition, these two factors give rise to moral attitudes and behaviour, which are influenced by situational factors that either suppress or activate moral functioning. However, both the trait-based and the sociocognitive accounts are dependent on one level of personality description, behaviour traits, without much regard for moral motivation. To delve into moral motivation, a deeper understanding is required, one that goes beyond dispositional traits and situational influences. Other aspects of personality relevant to moral functioning need to be examined. In addition, both approaches do not explain the systematic development of moral identity over the life course. Those limitations are better addressed in the personological approach.

**Personological approach.** Using a personological perspective, McAdams (1995, 2009) came up with a three-layer model of personality description. This model includes different aspects needed in understanding an individual. The first layer is termed dispositional traits, and involves broad, decontextualized traits. The second layer, characteristic adaptations, involves motivational and strategic aspects of personality. The third layer, integrative life narratives, is the psychosocial manifestation of identity. It delivers a sense of coherence, meaning and purpose to an individual’s life. It involves peoples’ life stories, and either overtly or covertly displays moral stances with regards to self and society (Walker, 2014).

Research conducted by Walker and Frimer (2009), using moral exemplars, showed that moral exemplars and a matched comparison group did not differ with regards to dispositional
traits. However, they did differ with regards to characteristic adaptations and integrative life narratives (Walker, 2014).

McAdams (2013) proposed that the integrative theory of the psychological self is understood as the developing dynamic of a person’s concept of “I” and “me”. The psychological self is a configuration of actor, agent, and author. This arrangement allows the formation of conceptions of the self. Social contexts, personality, and cognitive functioning influence conceptions of the self. As actors, agents, and authors, the three layers correspond to three developmental layers of the psychological self, which surface at different milestones in an individual’s life and follow their own trajectories over the human life span. The social actor is the first layer, which possesses representations of traits and social roles. The actor arises from performing social cues repeatedly. The second layer is the motivated agent, which produces personal goals, motives, values, hopes, and fears. Those are the features behind important decisions and choices driven by the desire to explore and commit to life projects. The self begins as a social actor and by middle or late childhood develops into a motivated agent. Layered on top of both the actor and the motivated agent is the self as a storyteller, which expresses episodic information regarding the self. The storyteller as an individual can integrate episodic information with the life story. Beginning in emerging adulthood, the individual becomes the autobiographical author, driving meaning from the narration of their life constructed from the episodic past and projecting into the imagined episodic future, justifying behaviour and what the individual wants, who they are, and how they are developing as an individual (McAdams, 2013). We have focused on the second level of the personological approach, characteristic adaptations.
Development of Moral Identity

Moral identity is a construct suggested to develop over time. Recent discussions on moral identity propose that despite the stability of individuals’ moral traits, moral identity can fluctuate from moment to moment, dependent on circumstances. This is due to different situational triggers activating different moral schemas. Therefore, moral identity is influenced by both personality traits and contextual circumstances (Hardy and Carlo, 2011). It is important to consider both factors when investigating moral identity. This study sought to implement this approach.

Moral identity has been popular in research; specifically, as a predictor of moral behaviour. However, the concept of moral identity development across the lifespan has rarely been investigated. Studies conducted on age-related change in moral identity have focused on a comparison between adolescence and early adulthood (Hardy, 2006; Hardy, Walker, Olsen, Woodbury, & Hickman, 2014; Hardy, Walker, Rackman, & Olsen, 2012; Krettenauer, 2011; Pratt, Hunsburger, Pancer, & Alisat, 2003). These studies do not provide sufficient evidence to support views of the presence of significant growth in moral identity development between the specified age groups. Consequently, there is minimal empirical evidence for age-related changes in the framework of the trajectory of development despite frequently being considered essential for moral identity formation. In addition, according to researchers (e.g., Hardy & Carlo 2011) developmental research is lacking empirical evidence and knowledge on precursors of moral identity and developmental paths. As discussed above, research in developmental psychology has largely neglected the issue of moral identity development. In addition, previous moral identity research has profoundly neglected context-dependent differentiation and integration of moral values. In addition, the progression in internal moral motivation across the lifespan, and
personal integration of moral responsibility across various age groups, has not been researched (Krettenauer & Hertz, 2015).

The Current Study

As seen in the above discussion, there are several gaps and limitations in research, beginning with Piaget and Kohlberg up to and including recent studies. Piaget did not explicitly discuss moral motivation and identity. As for Kohlberg, there are two main limitations to his theory: first, the difficulty of predicting moral action from moral judgement; and second, that his model focuses exclusively on moral cognition. Research requires moral identity as a construct to bridge the gap between moral judgement and moral action.

The standard model of moral identity development assumes that moral identities arise during adolescence and early adulthood (Krettenauer & Hertz, 2015). However, research in moral identity consistently fails to provide evidence of age-related change with respect to this developmental period. A top-down logic approach, placing emphasis on the moral identity construct as a predictor of moral action, has been followed in research. This approach is responsible for the lack of empirical evidence for age-graded change in adolescence and young adults with regards to moral identities. This is because the top-down approach neglects the developmental features of the moral identity construct. Consequently, the measures developed to investigate moral identity were not sensitive to detect developmental changes to this construct.

The commonly used measures follow either trait-based or sociocognitive approaches. However, the personological approach is arguably the most suited to detect developmental change in moral identities (Krettenauer & Hertz, 2015).

It is commonly assumed in research that traits do not change with context, and self-descriptions are equally applied to all areas of life. However, there is empirical evidence that
individuals make decisions that are context-specific, depending on their social role (Diehl & Hay, 2007). Morality is not confined to a specific context, and it seeps into all areas of life (e.g. family, school, friends etc.). It was therefore expected that moral motivation would vary across social contexts (Krettenauer & Hertz, 2015).

A cross-sectional study by Krettenauer, Murua, and Jia (2016) covered an age range from 14 to 65, and investigated context dependency of self-importance of moral values. The contexts examined were family, school/work, and community. Cross-context differentiation was found to increase from adolescence to early adulthood, peaking at the age of 25 years. While the present study examines moral motivation, the concept is closely related to self-importance of moral values.

Studies that have employed either trait-based or sociocognitive approaches lack discussion of developmental trajectories across time with regards to adult identity formation. The personological approach takes both stability and change into consideration. In addition, the personological approach provides a description of the progression of personality and how it changes across the lifespan. Therefore, when examining moral identity, the most plausible and promising approach appears to be a personological approach. That is because it considers moral identity development across various contexts, an area that has been neglected so far in academic research (Krettenauer & Hertz 2015).

The first research problem that needs to be discussed is contextualization of moral motivation. Trait-based approaches assume a consistency in morality across all contexts, while sociocognitive approaches involve schema actualization and emphasize the effect of context and circumstance on moral behaviour. Research has not been informative with regards to context differentiation of moral motivation. Therefore, this study applies the second layer of McAdams
framework, characteristic adaptations. The second research problem addressed in this study is the trajectory of moral motivation across the lifespan. Taking into consideration characteristic adaptations and age of participants, motivation, as a component of characteristic adaptations, is better described considering self-determination theory (SDT).

**Self-Determination Theory**

According to self-determination theory, types of motivation can be explained along a continuum, held between extrinsic versus intrinsic motivation. Individuals initially integrate the desire to meet social expectations and/or cultural norms to varying extents. This integration gives rise to different levels of self-regulation along the continuum defined by SDT. These levels are called introjected, identified, and integrated motivation (Ryan, 1993). The introjected level drives individuals to behave in compliance with social expectation, thus it is independent of external motives but the rules are subjectively experienced as dictated by societal norms. The identified level gives rise to motivation that is driven by a basic personal agreement of societal norms, therefore it is a step closer to intrinsic motivation than introjected. Finally, the integrated level is reached when individuals experience self-ideals as the ones they desire to achieve (Ryan, 1993).

Ryan and Deci (2000) emphasized that, “To be motivated means to be moved to do something” (p.1). People vary in both the extent and type of motivation they express when engaging in an activity. These are termed the level and orientation of motivation respectively. SDT (Deci & Ryan, 1985) differentiates between several forms of motivation, centred on the reasons and aspirations driving the action being investigated. The two main forms of motivation are intrinsic motivation, which is engaging in action due to being inherently interested in the activity, and extrinsic motivation, which is engaging in action because of circumstantial factors.
producing an independent result. The two forms of motivation influence the quality of experience and performance of an action. Intrinsic motivation is associated with displaying high-quality learning and creativity (Deci & Ryan, 1985). On the other hand, extrinsic motivation is described as the impoverished form of motivation that pales in comparison to intrinsic motivation. Human beings display pure forms of intrinsic motivation when they partake in active, inquisitive, and occupied behaviour (Deci & Ryan, 2008). Observations of toddlers and infants have highlighted that they are internally motivated to learn and grow. This form of motivation is the driving force in cognitive, social, and physical developmental domains. SDT is formulated to illustrate intrinsic motivation. Intrinsic motivation influences behaviour when it is completely autonomous and not influenced by external pressures, rewards, and possibilities. Deci and Ryan (1985) define self-determination as “the capacity to choose and to have those choices, rather than reinforcement contingencies, drives, or any other forces or pressures, be the determinants of one’s actions” (p.38). They also emphasize that self-determination is conceptualized as more than just a capacity for action, but also a need. There is a need in organisms to partake in behaviours that are beneficial to the development of the organism and useful in their accommodation within their social environment. This occurs when individuals attempt to assimilate into an environment, adopting individualistic self-determination influenced by extrinsic motivation. Self-determination is evident when an individual chooses to act because of choice rather than an external influence such as obligation, coercion, or reward (Deci & Ryan, 1985).

SDT has its application in the domain of human functioning. Identity is either sustained or stalled by environmental factors, therefore it is integral that self-determination be examined under the lens of environmental influences. Deci and Ryan (1985) outlined possible variables
influencing intrinsic motivation. These include the drive to fulfill independent needs and to reduce anxiety. Another plausible driving force of self-determination could be the need to reduce uncertainty and dissonance between behaviour and conviction. Self-determination is portrayed by psychological flexibility and personalization of choice. It uniquely portrays intrinsically motivated behaviour. However, it is also perceived in certain externally motivated behaviours, by being motivated by external rewards.

Both serve purposes in an individual’s accommodation to their social world (Deci & Ryan, 1985).

**Organismic integration theory.** SDT leads into a sub-theory termed Organismic Integration Theory (OIT). It is used to differentiate between various forms of extrinsic motivation. It specifies the contextual conditions that either prevent or encourage internalization of the regulatory factors of behaviour. Extrinsic motivation is divided into several forms. The theory operates on the concept of individuals naturally gravitating towards integrating personal contemporary experiences as part of their identity. Internalization is viewed as a continuum in terms of OIT; the more a process is internalized, the more it becomes ingrained in a person’s identity, leading to self-determined behaviour. Convictions not integrated into a person’s identity would not result in autonomous self-regulation. This is then termed an extrinsic motivator. The OIT model is divided into different levels. These levels constitute external regulation, introjected regulation, identified regulation, and integrated regulation. Amotivation is the frame of mind in which an individual lacks the motivation to act. Consequently, amotivation produces either no action, or largely passive behavior, where people go through the motions without expressing a desire. This results from a perception of futility in achieving desired outcomes, or a perceived notion of incompetence on behalf of the individual involved (Ryan & Deci, 2002).
In organismic integration theory, external regulation is the least autonomous type of extrinsic motivation, in which behaviour is carried out to meet or placate an external demand, as well as to gain an external reward. This is the type of motivation which was used predominantly by theorists of operant learning. Introjected regulation is another type of extrinsic motivation. Due to introjected regulation people engage in behaviours driven by the need and desire to avoid guilt and anxiety. This leads to the achievement of ego-enhancement and pride. Identification is the form of extrinsic motivation in which an individual recognizes the importance of engaging in behaviour with a personal importance attached to it. For example, if someone takes a course in calculus recognizing that they will need it to study pharmacy, and thus achieve their life goal, he/she would be demonstrating identification motivation. Finally, integrated regulation is the most autonomous sub-type of extrinsic motivation, and takes place in circumstances when an individual identifies a process, identifies its value, and integrates it with their existing values and needs. They internalize the importance of the process and the relevance of integrating it as part of their own identity. The behaviour is still considered extrinsic because the integration of the value lies in a secondary process, the benefit of integrating it, rather than the value itself (Ryan & Deci, 2000).

People may adopt any level of internalization in terms of the regulations discussed thus far. The factors involved in the choice of adoption and stage of integration include relevant experience, present circumstances, and the interpersonal climate that surrounds the person. Based on such findings and notions, Ryan and Deci (2002) stipulated that “…the range of behaviours that can be assimilated to the self does increase over time as a function of greater cognitive and ego development” (p.18).
According to Sheldon and Elliot (1998) when an individual pursues a goal independently, out of their own accord, it is predictive of successful goal achievement. This implies that the reasons people pursue certain goals influence the success they achieve in their pursuit. Goals driven by willingness and choice are achieved at higher rates of success than those resulting from control and pressures. Thus, literature has shown that people invest more effort and time into achieving their autonomous goals (Sheldon & Elliot, 1998). Studies investigating the depth of information processing, task persistence, and motivational autonomy have focused on external vs. internal motivators and their effect on success and achievement (Sheldon & Elliot, 1998). Such studies have investigated these operations, regarding autonomy and control, also assessing the quality of the social and interpersonal environments.

Deci and Ryan (1991) demonstrated that a parenting style rooted in control and authoritarianism negatively predicted children’s level of academic achievement. Another study conducted by Williams, Grow, Freedman, Ryan, and Deci (1996) showed that controlling health care providers negatively impacted patients’ adherence to a weight loss program, in turn negatively impacting the achievement of desired results. Since control is not only a state of mind but also a factor of environmental influences, the effect of contexts on motivation is undeniable. Motivation appears very strongly when it stems from a strong sense of core self. A behaviour that is intrinsically motivated stems from an individual’s interests and is perceived as inherently enjoyable, autonomous, and self-integrated. When intrinsic reasons drive goals, they are sustained. Identified motivation, on the other hand, results from personal convictions and a desire to remain true to one’s own beliefs. Controlled motivation is divisible into the previously discussed two categories, extrinsic and introjected. Environmental contingencies influencing one’s motivation include incentives, payoffs, guilt, and anxiety (Sheldon & Elliot, 1998).
Several studies, conducted to investigate the connection and affiliation between moral identity and moral behaviour, demonstrated a correlation between moral behaviour and core moral values. Eagerness to engage in prosocial action and avoidance of immoral behaviours was stronger when they possessed moral convictions congruent with their perceptions of their identity (Krettenauer & Hertz, 2015). In addition, moral identity was repeatedly found to offset situational pressure and affordances for behaving immorally. These findings all bolster evidence of an individual’s moral identity significantly branching from psychological origins, specifically when the goal is to arrive at an explanation of moral behaviour (Krettenauer & Hertz, 2015).

Studies investigating context-dependent moral convictions across the lifespan have not been carried out. Therefore, the proposed study seeks to fill the gaps in this domain. In addition, as is evident in the above discussion, investigating approaches in the domain of moral identity have been dominated by trait-based or sociocognitive approaches. However, arguably the personological approach is the most appropriate form of research in investigating and identifying aspects of the developmental changes and factors involved in moral identities.

**Research Goal and Hypotheses**

The proposed study aims to answer two questions. The first addresses whether internal moral motivation increases with age. The second question aims to clarify whether internal moral motivation is expected to be context-specific, which means that it would be higher in contexts where morality is more central to individuals (family and community) in comparison to other contexts (work and school). The research conducted in this proposed study aims at filling the gaps discussed by Walker (2014). It employs the second layer of the personological approach: characteristic in adaptations. This approach was also chosen since trait-based and sociocognitive
approaches fail to examine developmental trajectories. The study takes into account the progression of moral identity from adolescence into middle age.

Two hypotheses are examined in this study.

(1) Starting in adolescence, internal moral motivation is expected to increase with development, becoming more internally-driven with age across all contexts (family, school/work and community). This trend is predicted to continue into adulthood.

(2) Internal moral motivation is expected to be context-specific. It is proposed to be higher in contexts where morality is more central to individuals such as family and community, in comparison to the contexts of school and the workplace. This is due to the predominant external factors such as deadlines, rewards, competitiveness, and pressures to succeed, which might undermine intrinsic motivation in the workplace.
Method

Participants

The sample comprised 252 participants from four different age groups: adolescence (41 women, 23 men, 14-18 years) ($M = 16.97$, $SD = 1.56$), emerging adulthood (29 women, 22 men, 19-25 years) ($M = 22.49$, $SD = 2.34$), young adulthood (43 women, 18 men, 26-45 years) ($M = 33.28$, $SD = 5.56$) and middle-age (35 women, 26 men, 46-65 years) ($M = 58.70$, $SD = 6.46$). The age groups corresponded to developmental phases in the human life that bring about significant milestone transitions. Participants across all age-groups were recruited through advertisements in local newspapers and online posts (e.g., kijiji), as well the Psychology Research Experience Program (PREP) for university students. Adolescents were compensated an honorarium of $30, and university students were awarded course credit(s); whereas all other participants were rewarded $50. Informed consent from legal guardians was required for adolescents 16 years and younger. Participants older than 16 years of age provided informed consent themselves. Overall, mean age was 33.48 years, $SD = 16.98$; age-group was unrelated to gender, $\chi^2 = 2.54$, $df = 3$, $p = .45$.

All participants who took part in this study resided in South-West Ontario, which is a culturally diverse region with an array of ethnic backgrounds. The majority of participants were born in Canada, while 24.5% were immigrants to Canada, originating from many different countries in Africa (8.20%), Asia (45.90%), Europe (19.67%) and South-America (8.20%). Of those who were not born in Canada, the average time lived in Canada was 15.94 years, $SD = 12.64$. Country of origin (born in Canada, $1 = yes$ vs. $0 = no$) was unrelated to agegroup, $\chi^2 = 5.98$, $df = 3$, $p = .11$. 
The majority of participants identified themselves as Canadian, of European descent (76.1%). While 14.9% of the participants self-identified as Canadian of Asian, or East-Asian descent, this encompassed the following countries: India, Pakistan, China and Vietnam. 9% were of Middle-Eastern ethnic background. Ethnic background (European-Canadian, 1 = yes vs. 0 = no) was unrelated to age-group in the present sample, $\chi^2 = 5.93$, $df = 3$, $p = .11$.

Participants were of varying educational backgrounds, with 40.8% enrolled in a secondary or post-secondary educational institution (high school, college, university), when data were collected. Of participants who were not enrolled in an academic institution ($n = 150$) 21.7% had completed high school. Those who had completed a college diploma or undergraduate degree encompassed 47.1% of participants, and 30.3% had completed a graduate or professional program.

Individuals’ socio-economic status (SES) was assessed by asking participants to provide descriptions of their current occupation (most recent occupation, if unemployed or retired). Those who were not employed and were enrolled in an educational institution at the time were asked to provide descriptions of their parents’ (mother’s and father’s) occupations. The International Standard Classification of Occupations (ISCO-88) was used in coding job descriptions and transferred into the International Socio-Economic Index of Occupational Status (ISEI). The ISEI is a well-validated measure of SES (Ganzeboom, De Graaf, & Treiman, 1992). Parents’ ISEI scores were averaged for those enrolled in an academic institution and not employed. Theoretically, ISEI scores range from 10 to 90 with a midpoint of the scale at 50. In the present sample, participants' ISEI score was $M = 50.46$, $SD = 14.69$. Thus, the SES was middling. More importantly, the four age-groups did not differ with regard to SES, $F(3, 219) = 0.29$, $p = 0.83$. There was no significant correlation between participants’ age (in years) and their
SES, $r = .085, p = .21$.

**Measures and Procedures**

The present study’s assessment of moral motivation was based on the procedure developed by Krettenauer, Murua, and Jia (2016). The procedure was a modified version of the Good Self-Assessment developed by Arnold (1993). The modifications applied on the GoodSelfAssessment Interview were carried out in (a) the value-attributes individuals were presented with to express their moral identity, and (b) in the context-specific assessment of moral identity. The Good Self-Assessment uses a standard compilation of eight moral values to evaluate an individual’s moral identity (fair, truthful, kind, respectful, loyal, compassionate, sincere, and generous). However, in the present study, participants were presented with a longer list of 80 value-attributes (for a full list see Table 1). These attributes were derived from studies that had investigated individuals’ prototypical descriptions of a moral person (Hardy, Walker, Olsen, Skalski, & Basinger, 2011; Lapsley & Lasky, 2001; Smith, Smith & Christopher, 2007; Walker & Pitts, 1998). These studies used the free listing method, where participants were asked to produce characteristics to describe a moral person.

The 80 attributes encompassed a wide range of values and characteristics, and included dependability (e.g., sincere, honest and reliable); care (e.g., generous, selfless, and altruistic); concern for fairness and tolerance (e.g., accepting, open minded); and conformity (e.g., law abiding). Words were presented in a statistic random order.

Participants were first asked to rate all 80 attributes on a Likert scale from 1 = *not descriptive of a highly moral person* to 5 = *extremely descriptive of a highly moral person*. 
Participants then chose 12 to 15 attributes from the list that they felt defined the core of a highly moral person from their point of view. The number 12-15 was selected after conducting a pilot study and determining that 12-15 items did not require extreme effort or contemplation for participants. Participants were then provided with the attributes they selected on printed magnetic strips. Along with the magnetic strips the interviewers presented the participants with one of three diagrams on a magnetic whiteboard. The three diagrams reflected the three contexts of investigation: family, school/work, and community (for an example see Figure 1). Participants were asked to produce visual representation of their self-portraits akin to the technique developed by Harter and Monsour (1992). They were told to “imagine this is a diagram of yourself, the inner circle is your core self, all the characteristics that are very important to you belong to this area, followed by the second circle which is important to you, then somewhat important to you, and the outer part of the diagram is where characteristics belong that are not important to you in this specific context. Please arrange the characteristics that you have chosen across this diagram, for this specific context, remembering this is why it is important for you to embody those attributed in this context.” They were encouraged to utilize the whole diagram, placing attributes across the four layers. Each participant was presented with all three diagrams representing the three different contexts. The order of presentation of contexts was randomized.

Once the diagram was completed participants were asked to elaborate only on the qualities that they had placed within the “very important” circle of the diagram (e.g. “you put honest, trustworthy and loving in the center of the diagram. All these qualities are very important to you. The questions referred to the qualities as a group, not the individual characteristics. Why are these qualities very important to you in the context of family?”) Participants were then asked about their emotions if they failed in any of their most important qualities to draw on
motives driving their moral behaviours (e.g. “If it happened that you failed to be honest, trustworthy and loving in the context of family how would you feel about this? What makes you feel [bad] about it?

**Coding Categories**

Interviews were transcribed verbatim and files were uploaded into the software program ATLAS to facilitate coding. Interviews were read, and reoccurring themes were identified. The coding scheme was developed by initially randomly selecting 60 interviews (approximately 25% of the total sample). Nine primary codes were initially defined: self-interest, reputation, consequences others/relationships, role-model, self-ideals, relationship-ideals, unanswered, unclassified, and unscorable. These coding categories were developed inductively as the most appropriate representations of the array of interview responses, refraining from imposing a specific theoretical perspective on the data. The codes are representations of participants’ motivations in implementing their moral identity in the three contexts of family, work or school and community/society. A second subset of 60 interviews was randomly selected to validate the initial coding categories. Finally, intercoder agreement for two independent coders (MA candidate and her academic supervisor) was determined using a third subset of 60 randomly chosen interviews. For the context of family, intercoder agreement was $\square = .80$, for the context of work or school it was $\square = .85$ and for community/society $\square = .75$. Discrepancies between coders were discussed and resolved.

**Self-interest.** The Self-interest code appeared 241 times (see Table 2 for breakdown by context). This code was used when participants expressed the opinion that acting morally was instrumental for staying out of trouble, and getting ahead in life.

“Well, for hardworking, you have to be hardworking **in order to get good grades**, obviously, **which can then depict what you/ the rest of your life is going to look like**,
and so it's very important to be hardworking because you don't want to like be a dropout and then your life goes nowhere. You need to make the right choices because there's lots of like there's lots of peer pressure in school and so you need to know what's like you need to be able to make good decisions. You need to be respectful like towards your teachers and towards the other students, because obviously your teachers because they're your elders and they're there to teach you, and even you're the other students because you're all sort of there together and if you're not being respectful towards them, then it's just going to create a very negative vibe for you and your education. And then you need to follow the rules because if you don't you could get expelled or something which isn't very helpful towards your career. And you need to be responsible because you need to/ because it's leading up to a job or something, you need to learn how to be responsible so you can take responsibility for your own actions and sort of be prepared for the future when it/ like you don't have parents or whatever to just be/ take all the responsibility on them, like you need to learn how to be responsible for later in life when you're going to be all on your own and having to take responsibility for your own actions.”
(Female, 15 years)

“I think that would make it difficult to do my job because without knowledge I feel inadequate. I don’t have the same education as everybody else does because I haven’t gone to university or college or whatever it is, that would make me feel inadequate. If I’m not a listener then I’m going to be deemed a difficult employee because I don’t take instruction well … And if I act one way and then another in the next shift I come in and people can’t figure me out, then I’m not being genuine, I’m not being myself, true to myself. If I’m not trustworthy then that makes me a very poor employee, unable to be trusted with any kind of information. … And if I’m crabby all the time and not fun, then nobody wants to work with me in a team environment, as well as if I’m impatient, there’s too much of a level of frustration. And so all of those things I think are important in the workplace, particularly these days, to be able to keep up with the pace that we’re expected to do.” (Female, 55 years).

Reputation. The reputation code appeared 71 times (see Table 2 for breakdown by context). This code was used when participants expressed the opinion that acting morally was important for demonstrating virtue, leaving a good impression on others, and showing what type of person one is. There was no mentioning of positive consequences for oneself in this code.

“Personally I care a lot about what I project to other people, like what they think of me, so I definitely want people to think that I’m a nice person and that I’m going to be like honourable in terms of like if they really need me to be there, I will definitely be there for them, it doesn’t matter what the context is … Ethical: I’m religious and I want them to think that I do have a high sense of what’s right and what’s wrong. (Female, 18 years).
“I think, yes. It's very important to be this way, cause I think that now in society, this is how people perceive you to be. So if you're very open about not following the rules, and like, not being open, but if you don't follow the rules, aren't being ethical, then people will think differently about you. Think that you're a less genuine person. (I: Ok. So, why is it, if you could me an example, why you want to be genuine? Why do you want that people know that you have these attributes? Why is it important for you?) I think it's important because then people will feel that they can have more trust in you, I think that they can then have greater (---) sense of that you're someone who cares about doing things correctly. If you don't/ If you want to follow the rules, and not break laws, and be ethical, and I think it shows you want to do things correctly, not just do them.” (Male, 18).

**Consequences for others/relationships.** The consequences for others/relationships code appeared 215 times (see Table 2 for breakdown by context). This code was used when participants expressed opinion that acting morally is important for establishing and/or maintaining good relationships with others, reciprocity of benefits was emphasised. The response also reflected a concern for the functioning of a group or team.

“Well because to me those are the things that how society function, and how a good society, or a developed society work is by people following the rules and abiding by laws which are there in place to make sure that everything goes smoothly. So that's why it's so important, because that's the reason why if you live in a country like Canada, it functions properly, because generally these are followed and that's why it's such a good place to live.” (Male, 18 years).

“I just - I think it’s just important for people to not judge people and it’s just an important characteristic or someone to have. (I: Okay, so to rephrase that, why is it important for you to be non-judgemental?) I think it’s important so that other people aren’t hurt if someone’s judging them for whatever reason.” (Female, 14 years).

**Role-model.** The role-model code appeared 65 times (see Table 2 for breakdown by context). This code was used when participants expressed the opinion that acting morally was important to setting a good example for others, and/or teach others. The individuals the participant talked about were those with whom they had fostered a relationship.

“Because those things I want to instil in my kids, because I have three kids. I guess it would be different if I was younger just with my parents, but it's this way because I'm
married with kids. So I want them to see my example to be all of these things, and I think/ I don't know what else to say about this (laughs).” (Female, 35 years)

“So if you want others to do the same thing then I guess it’s something that you need to display yourself, live by the same things that you want others to live by.” (Female, 19 years).

**Self-ideals.** The self-ideals code appeared 121 times (see Table 2 for breakdown by context). This code included responses where a personal connection between moral values and the self was explicitly made.

“When I prove my skills at work, these are MY skills. And so it's important for me to be the person that is reliable, to be the person that has integrity, because fundamentally these things are important to me. Fundamentally, these things are important to the people that I work with. And I don't work for jerks, so. Because that I care so much about not being unfair, or unjust, or unethical towards others, that I, I've rated all of them as important.”

(Female, 29 years)

``Because I feel that's what makes a moral person and I want to be a moral person.” (Female, 35 years).

**Relationship-ideals.** The relationship ideals code appeared 22 times (see Table 2 for breakdown by context). This code was used when participants expressed opinion that acting morally was an essential part of what it means to live in a good relationship with others (family, work, or community). The participant expressed that these were the ideals that constitute a good relationship.

“For they sort of encompass what I believe a good family member is, and how I or he or whoever interacts with his or her family. To be honorable, to be respectful, be it your elders or your brother or your siblings, uncles and aunts, to be a helpful, help family when they need it and when you can.” (Male, 25 years).

“I think that the heart of the community is, it's a community that cares for one another. It's also open-minded to all possibilities. Particularly if you're trying to have a community that is inclusive, you have to be open to all possibilities and not to marginalize minorities and so forth.” (Male, 63 years)
Unanswered. The unanswered code appeared 6 times (see Table 2 for breakdown by context). This code was used when participants were not able to articulate what motivates them to behave in ways in line with notions of morality. They repeatedly said "I don't know" or "this is hard".

“I really don't know. I ---“ (I: That's okay, we could always go back to the question. ) You know I really don't know, and --- I kind of feel like I'm supposed to. I feel like that's in the context of community, I definitely feel like I'm supposed to. If I'm not like that and I don't satisfy those needs, I'd feel like---feel badly about it, but why do I feel that way? Because I feel like any other way as well, basically.” (Male, 24 years)

“Because… because there’s so many people, like, it’s kind of nice for people to help you out or be generous about things. and if you do stuff for other people, it’s nice when they’re grateful for it. (I: Okay, so, why is it important for you to be that though?) Because… it’s so hard to explain, because” (Female 16 years).

Unclassified. The unclassified code appeared 25 times (see Table 2 for breakdown by context). This code was used when participants expressed the opinion that clearly voiced a particular idea, but did not fit into the existing coding scheme. Answers were idiosyncratic.

“For me personally it’s knowing how much money my parents put into me. I guess sometimes I don’t feel like I’m really working as hard as I should and I should know that I’m worth it. I want to come out of here with a good mark and hopefully get a better job or a job. Don’t have a job. Get a good job. If I don’t do these things, I feel like I wasted my parents’ effort and well, time with working and even my time. It’s about what I’ve - what I’m learning. If I don’t - like if I don’t pass a course that’s a good amount of money gone. That’s time gone. (Male, 22).

“I think some of them would make my parents proud of me and some of them would make give me would be good for my family, like good things for me, like it’s good for me to be compassionate to my family. (I: Okay.) But I also want my family to see I’m hardworking. (I: Okay, great. So do you have these qualities or you'd like to have them?).I think I have them. I hope so. (I: Great. Okay. And why is it important for you in the family context, for instance say, to be hardworking?) Why? (I: Yeah.) Because I think my parents would expect that of me, for me to be hardworking. They raised me to work hard and not be lazy and work you know, go after what I want... (Female, 26 years).
Unscorable. The Unscorable code appeared 85 times (see Table 2 for breakdown by context). This code was used when there was not enough material to code. This was mainly due to technical difficulties, or insufficient probing by interviewer.

(I: Why is it very important for you to be those characteristics in your community and larger society?) To me these qualities - these attributes are important no matter where I would be and no matter what I would be doing, so that's something that's very important no matter what. So right in the community or in the world at large, it's something that's really important to me no matter. (I: So if you failed at being any of those characteristics, how would that make you feel?) It wouldn't make me feel good. (I: Why?) Again, because I would feel like I somewhat failed in the way I think and the way I live.”

(Female, 59 years).

(I: in the context of work, the most important attributes for you is to distinguish right from wrong, to listen, to be rational, wise, truthful, have integrity, and to be understanding. Why are these attributes important to you in this context of work?) My work (doesn't circle) a lot about people, so I'm more talking about work itself. (I: Ok.) I want to be very integral, like to be as honest as I can be. So a lot It has a lot to do with doing it well, doing it right. Without all the emotion behind it. So. (I: Ok.) Again, in work, like, listening is always important to, to doing it right. Having wisdom and understanding, just trying to know what I'm doing and doing it well. (I: Ok, so you want to do things well at, at work, and that's why important for you to be listener and rational, and to distinguish right from wrong, and to be understanding). Yeah.(I: And wise. What about truthful? Why is it important?) Truthful, I think that in the sense that, if things go wrong, you need to back that up honestly. (I: Ok, great. So how will you feel if you failed to have these attributes that are very important to you in this context?). To me, if, if you lack certain things like wisdom or understanding, I, I get stressed. If I don't know what I'm doing, or how I'm doing, or if I'm doing it properly, if I haven't taken directions properly, if I haven't don't understand all the aspect, I, I think it stresses me out. So I, I it builds up.``

(Female, 36 years).

Theoretical Grouping of Codes

According to Self-Determination Theory (Ryan & Deci, 2000), different levels of selfintegration define a continuum on which people’s motives lie. This spectrum spans external, introjected, identified and integrated, with introjected on the external end of the spectrum and integrated on the internal end of the spectrum. This interview aimed at identifying participant’s motivational moral strivings, as being external, which is closer to the introjected end,
relationship, which would be considered closer to the middle of the spectrum, thus neutral, and internal, which would be on the other end of the spectrum abiding by integrated reasons. The external reasons described external consequences as the driving causes behind their behaviour (e.g. getting into trouble, or getting fired). External reasons provide explanations outlining social consequences, such as leaving a negative impression on others. Identified codes expressed reasons behind their moral actions, portraying an assimilation of their values as their conceived moral norm. Finally, integrated reasons driving moral actions will be expressed by participants believing in the importance of congruency between their principles and their notions of their ideal self. Therefore, according to the SDT, the codes were grouped under the three main categories of internal, external and relationship.

Self-interest and reputation were grouped together to represent external moral motivation; consequences for relationships/others was categorized as relationship; and role model, self ideals and relationship ideals were categorized as internal. Each participant had each context (family, school/work, community) crossed with each of the three codes (external, relationship and internal).

Interviews from all 252 participants were coded for each of the three contexts (family, school/work, community). Each participant interview had the possibility of up to two codes per context. This resulted in 283 coded statements within the family context, 281 coded items within the school/work context and 287 coded items within the community context for a total of 851 coded items.

To calculate the score for each category group, the codes were tallied. This was repeated for each of the three contexts, family, school or work, and community. Each context could hold multiple possible responses, each group could also contain multiple coding categories, therefore
the sum score was open-ended and there was no theoretically defined maximum. For external motivation, scores ranged between 0 and 1 for the context of family, $M = 0.31$, $SD = 0.46$; 0 and 2 for the context of school or work, $M = 0.68$, $SD = 0.49$; and 0 and 2 for the context of community/society, $M = 0.40$, $SD = 0.53$. For relationship-oriented motivation, scores ranged between 0 and 1 for the context of family, $M = 0.39$, $SD = 0.48$; 0 and 1 for the context of school or work, $M = 0.15$, $SD = 0.34$; and 0 and 2 for the context of community/society, $M = 0.37$, $SD = 0.48$. For internal motivation, scores ranged between 0 and 2 for the context of family, $M = 0.36$, $SD = 0.52$; 0 and 2 for the context of work/school, $M = 0.24$, $SD = 0.43$; 0 and 2 for the context of community/society $M = 0.36$, $SD = 0.50$.

Results

A multivariate analysis of variance (MANOVA) was conducted, with context (family, school/work, and community) and type of motivation (external, relationship, internal) as within subject factors and age group (adolescence, emerging adulthood, young adulthood, and middle age) as between subject factor. The dependent variable was the count of responses in each group of categories. Findings of the 3 by 3 by 4 MANOVA are summarized in Table 3.

There were no statistically significant main effects of context and age group. There was a significant main effect of motive. This significant main effect, however, should be considered in the context of two significant two-way interactions: motive by context and motive by age-group. There was no significant three-way interaction between context, motive and age group. The mean levels and standard errors for the motive by age and the motive by context, interactions are displayed in Tables 4 and 5 as well as Figures 2 and 3 respectively. External moral motives occurred more frequently in the context of school/work, whereas relationship and internal motives occurred least frequently in the context of school/work. Internal motives occurred most
frequently in the context of family. In regards to differences between age groups, it was found that external motivation occurred most often in the adolescent age group and decreased with age. By contrast, internal motivation was least frequent in adolescence and increased with age.

**Post-Hoc Analysis for Two-Way Interaction of Motive by Age**

For comparing individual age-groups with regard to the three types of moral motivation, post hoc comparisons were conducted (Scheffe, \( p < .05 \)). Findings are summarized in Table 4. External moral motives were significantly higher in the adolescent age group (\( M = .58, SE = .04 \)), than in the young adults age group (\( M = .37, SE = .04 \)) and the middle adulthood age group (\( M = .41, SE = .04 \)). Relationship motives did not significantly differ across the four age groups. Finally, internal motives appeared significantly less frequently in the adolescent age group (\( M = .18, SE = .05 \)) than the young adults age group (\( M = .40, SE = .05 \)) and middle age group (\( M = .40, SE = .05 \)). The mean levels between adolescence and emerging adults did not differ significantly. The mean levels between emerging adults and young adults, emerging adults and middle age, and young adults and middle age did not differ significantly with regards to internal motives.

**Post-Hoc Analysis for Two-Way Interaction of Motive by Context**

**External motives.** Post-hoc paired samples t-tests (Bonferroni corrected, \( p < .006 \)) were carried out for the three category groups across contexts. Findings are summarized in Table 5. There was a significant difference such that external motives appeared less frequently in the family context (\( M = .33, SE = .03 \)) than in the school/work context (\( M = .67, SE = .03 \)); \( t(243) = 9.43, p < .001 \). Also, external motives appeared significantly more frequently in the school/work context (\( M = .67, SE = .03 \)) than in the context of community (\( M = .39, SE = .04 \)); \( t(243) = 7.09, p < .001 \). There was no significant difference in mean levels between family and community.
Thus, consistent with the second hypothesis, external moral motivation was highest in the context of school/work.

**Relationship.** For the relationship motive, there was a significant difference such that relationship motives appeared more frequently in the family context ($M = .38, SE = .03$) than in the school/work context ($M = .17, SE = .02$); $t(243) = 6.86, p < .001$. Also, relationship motives appeared more frequently in the community context ($M = .41, SE = .03$) than in the school/work context ($M = .17, SE = .02$); $t(243) = -7.53, p < .001$; there was no significant difference between family and the context of community $t(243) = -.21, p = .83$.

**Internal motives.** Finally, internal motives appeared significantly more frequently in the family context ($M = .37, SE = .03$) than in the school/work context ($M = .24, SE = .03$); $t(243) = 3.85, p < .001$, but did not differ significantly between family and the context of community $t(243) = .73, p = .47$, and between school/work and community $t(243) = -2.75, p = .006$.

**Follow-Up Analyses**

Identifying gender differences in moral motives was not a defined hypothesis in the current study. However, a follow up MANOVA was conducted with gender as a between subjects variable to examine whether or not age differences as obtained in the main analyses applied equally to both genders. Findings are summarized in Table 6. There was no significant main effect of gender and no gender by motive interaction. Thus, gender did not differ in the types of motives. However, the 3-way interaction of motive by age group by gender was significant, implying that age-related differences in moral motivation as described in the main analyses differed for males and females. As demonstrated in Figure 4 and Figure 5, there was a difference in motive type by age between female participants and male participants. External motives were higher in adolescent males than adolescent females; external motives also
continued to decrease across the lifespan for both genders. While relationship motives decreased slightly across the four age groups in females, young adults and middle age males reported higher occurrences of relationship motives than adolescents and emerging adults. As for internal motives, counts increased across the lifespan for female, while fluctuating slightly for male participants, remaining fairly the same. The findings not only add to general literature, but are congruent with research on motivation and is in line with the self determination theory.

Discussion

This study investigated moral motivation across age and context. There were two hypotheses. First it was expected that internal moral motivation would increase with age, thus, moral identity would become progressively internally driven between adolescence and middle age. The second hypothesis proposed that moral motivation would be context-specific, being higher in contexts where morality is more central to individuals such as family and community, in comparison to the contexts of school and the workplace.

Moral Motivation by Age

In the first analysis, the interaction of motive by age was examined. The interaction was statistically significant, thus supporting the hypothesis. As demonstrated in Figure 2, external moral motives decreased with age. This decrease was especially marked between adolescence and emerging adulthood. External moral motivation further decreased between emerging adulthood and young adulthood. However, there was a plateau in external moral motivation between young adulthood and middle age. Consistent with the first hypothesis, internal moral motivation increased with age; a positive gradient can be seen between adolescence and emerging adulthood, and again between emerging adulthood and young adulthood. Internal moral motivation plateaued between young adulthood and middle age. Finally, moral motivation
based on relationship concerns remained relatively unchanged across the four age groups. See Table 4 for a breakdown of means and standard errors of moral motives across the four age groups. In short, the findings of this study supported the first hypothesis. Internal moral motivation increased across the lifespan, while external moral motivation decreases. Relationship driven moral motivation remained unchanged across the lifespan.

Deci and Ryan (2013) discussed human autonomy, from a self determination theory perspective. From an organismic perspective, individuals proactively integrate external aspects into their self development. They actively engage their physical and social environments to support their basic psychological needs. Deci and Ryan (2013) proposed that individuals are intrinsically motivated, at different developmental ages, to take part in a variety of activities throughout their lives. One such activity is learning, which can be intrinsically motivated, therefore intrinsic motivation plays an integral role in growth and revitalization across the lifespan (Deci & Ryan, 2013). According to self determination theory, extrinsic motivation can be internalized, and the more it is internalized, the more autonomous behaviour is. As seen in the results of this study, external motivation decreased with age, and internal motivation increased with age. Older participants expressed a desire to live in line with their inherent values, more so than younger participants.

Research on goals and aspirations (Kasser & Ryan, 1996) found that extrinsic aspirations (wealth, fame, and image) were associated negatively with well-being, while intrinsic aspirations (relationships, growth, and community) were associated positively with well-being. Considering notions that personality development follows a trajectory towards maturity, called the maturity principle (Roberts & Wood, 2006). The maturity principle theorizes that people develop personality characteristics that reflects greater maturity with age. These traits were shown with
personality characteristics such as agreeableness and conscientiousness increases with age, whereas neuroticism decreases. Age significantly predicted the mean-level of moral identity, controlling for agreeableness, conscientiousness, and neuroticism (Krettenauer, Murua, & Jia 2016).

While no research has been directly conducted with moral motivation, the concepts can be applied. Thus, as agreeableness increases with age, it is plausible that internal moral motivation becomes more prevalent with age. In contrast, extrinsic moral motivation decreases with age. Therefore, as individuals age, they assign a higher level of importance to characteristics they perceive as essential in describing a highly moral individual. As seen in Figure 2, there was a general upward trend in internal moral motivation between adolescence and young adulthood. As individuals assign a greater importance to these characteristics, they are more likely to internalize them, and assimilate them into their identity.

**Moral Motivation by Context**

In the second analysis, the interaction of motive by context was examined. As demonstrated in Figure 3, internal moral motivation was highest in the context of family, followed, by a short margin, with the context of community; however, it was lowest in the context of school/work. External moral motivation was highest in the context of school/work, followed by a significant decrease, in the context of community, which was closely followed by the context of family. This was consistent with the second hypothesis. Relationship moral motives were highest in the contexts of family and community. It was at its lowest in the context of school/work. See Table 5 for a breakdown of the means and standard errors of moral motives across the three contexts. Overall, the results supported the second hypothesis; that
internal moral motivation is context-specific, and highest in the context of family and community in comparison to the context of school/work.

A possible explanation for this finding is that school and work, by nature contain external factors that cause people to act within them. A study Deci (1971) conducted with college students showed that those who were given a monetary reward for completing puzzle problems, led to a decrease in intrinsic motivation on subsequent problems, compared to those who were not given monetary rewards. Studies have shown when people have external causes to engage and complete certain activities, that diminishes their intrinsic drive to complete them. Instead they become driven by the external rewards (Deci & Ryan, 2013).

Early research on tangible rewards, and their effects on motivation, included over 100 published experiments and a meta-analysis (Deci et al., 1999). These studies showed that rewards undermine intrinsic motivation (Deci & Ryan, 2013).

Grolnick and Ryan (1987) found that children in school who were given material to learn under external pressures were less likely to retain the information eight days from when the material was administered. While those who were in a nondirected and non-controlling condition could recall at a higher level. They, therefore, proposed that integration of learning required non-directive and less external conditions. They suggested that less external contingencies produced more autonomous motivation (Grolnick & Ryan, 1987).

This is a plausible explanation for the findings of this study, considering that school and work involve external motives such as deadlines, promotions, and monetary rewards. Selfdetermination theory proposes that individuals desire to be competent, autonomous, and related to with others. When these needs are satisfied, that promotes autonomous motivation. Therefore, according to self determination theory, contexts that support satisfaction of the basic
psychological needs promote and enhance intrinsic motivation, and internalization of autonomous motivation (Deci & Ryan, 2013). As the contexts of school and work contain more external rewards that do not support autonomous motivation, and therefore do not encourage the fostering of intrinsic motivation, it is fathomable that this was the context with the most predominant occurrence of extrinsic moral motivation.

This study demonstrated significant differences in moral motivation between adolescence and emerging adulthood, and between emerging adulthood and young adulthood, by applying a personological approach.

Research on moral identity development in adolescence typically involves a list of values presented to participants. Participants, in turn, are asked to rate these values in accordance with their self-importance. A sum score was calculated reflecting self-importance of moral values. The scores obtained repeatedly showed that moral identity was not related to age. These studies included large-scale cross-sectional studies, in addition to two longitudinal studies (Hardy, 2006; Hardy, Walker, Olsen, Woodbury, & Hickman, 2014; Hardy, Walker, Rackham, & Olsen, 2012; Krettenauer, 2011; Pratt, Hunsberger, Pancer, & Alisat, 2003). One of these measures was the well-validated measure developed by Aquino and Reed (2002). None of these studies revealed any relationship between self-rated importance of moral values and age (Krettenauer & Hertz, 2015).

Considering the general literature on development of morality, personality and identity, a lack of change with regards to age seemed very implausible. As has been noted, this study provided evidence of age related differences in terms of moral motivation, across the four age groups examined.
It is commonly assumed in research that traits do not change with context, and self-descriptions are equally applied to all areas of life. However, there is empirical evidence that individuals make decisions that are context-specific, depending on their social role (Diehl & Hay, 2007).

A cross-sectional study by Krettenauer, Murua, and Jia (2016), covered an age range from 14 to 65, and investigated context dependency of self-importance of moral values. The contexts examined were family, school/work and community. Cross-context differentiation was found to increase from adolescence to young adulthood, peaking at the age of 25 years. While the present study examined moral motivation, the concept is closely related to the concept of self-importance of moral values. Thus, we hypothesised that cross-context differentiation would also be evident with regards to moral motivation.

As demonstrated above, the expectation of the contextualization of moral motivation was described. There were statistically significant differences in moral motivation across the contexts investigated, family, school/work, and community.

Coding Scheme

An important outcome of the present study was developing a coding scheme assessing external and internal moral motivation. Overall, nine different categories were identified from the interview responses. External moral motives were coded using two different codes, self-interest and reputation. For the full sample, 28.32% of the total codes were self-interest, while 8.34% of total codes were concerned with one’s reputation. Relationship codes were labeled as consequences for relationships/others, and they comprised 29.49% of the total codes. Internal moral motivation codes were coded using three different codes, role-model, self-ideals,
and relationship-ideals. Role-model made up 7.64% of the total codes, self-ideals were 14.22% of the total codes and relationship-ideals were 2.59% of the total codes.

An interesting finding was that there were no relationship-ideals codes in the context of school/work. However, while relationship-ideals do not exist in the context of school/work, consequences for relationships/others was present in school/work context.

There were three codes that were used to identify motives that were not included in the analyses, as they did not subscribe to any of the codes based on self-determination theory (external, relationship, internal). These codes were unanswered, which was used when participants did not address the question, and gave answers that were not relevant to the topic. The second was unclassified, which was used when participants indicated that what motivates them is due to a reason that cannot be classified by one specific code, and not in line with the reasons devised in this coding scheme; these responses were idiosyncratic. Finally, unscorable, was used when participants did not indicate what specifically motivates them, and/or the interview was missing information. This was due to lack of material to code, caused by interviewer mistakes, such as lack of probing, as well as technical difficulties.

**Gender Differences**

Examining gender differences was not a hypothesis investigated in this study. However, follow-up analyses were conducted to examine how moral motivation differs with regards to gender. There were no significant gender differences in the types of motives reflected in female vs. male participants. Interactions involving gender, were added to the main analyses.

There was only one significant interaction; the 3-way interaction between motive, age, and gender. Male participants reported a higher count of external motives than female participants; however, in the other age groups, emerging adulthood, young adulthood, and
middle age, external motives were reported at approximately the same frequency in both female and male participants. Relationship motives showed no significant change in frequency across the age groups in females; however, in male participants, there was a significant increase in relationship-oriented motives between adolescence and emerging adulthood, which then plateaued into young adulthood and middle age. Internal moral motives increased between adolescence and emerging adulthood; however, in female participants, the progression was stronger between emerging adulthood and young adulthood, and plateaued between young adulthood and middle age. As for male participants, counts decreased slightly between emerging adulthood and young adulthood, and increased again slightly between young adulthood and middle age. Suggestions for future studies would include one explicitly investigating gender differences with regards to moral motivation. A meaningful addition to this study would be to include questions regarding marital status, family status, and gender roles to the interview.

Limitations and Future Directions

A major limitation of this study is that it followed a cross-sectional design. This makes it impossible to monitor the progression of individuals’ moral motivation across the lifespan. Agerelated differences examined in this study may be due to generational differences, instead of developmental differences. Therefore, empirical evidence for developmental patterns regarding moral identity and age differences as presented in this study are only indirect. A future study, using a longitudinal design is needed to address this limitation and eliminate cohort effects as a potential confound of age-related differences.

Another limitation of the study is that the developed coding scheme was both developed through and applied to the same participant sample and data. This hinders the testing of the validity of the coding scheme and its applicability to other samples. A different sample, from the
one used to formulate the coding scheme should be used to cross validate the coding scheme, which would have eliminated this limitation. Also, we cannot conclude that the coding scheme is applicable to other cultural contexts, such as collectivistic cultures.

In addition, there were three codes that were not included in the analyses (unanswered, unclassified, and unscorable). The presence of these codes is a limitation in this study. Most of these come from the code unscorable. Future studies employing this code scheme would need to better train interviewers.

The third limitation of the study is that the results of this study may not be representative of an international population, but may be restricted to Western individualistic societies. Therefore, it undermines the extent these findings can be applied to other cultures. A future study examining a more internationally representative sample would address this limitation. This study would be carried out in different countries and across different cultures.

Future directions may also examine specific factors that affect the growth of internal moral identity motivation, particularly in adolescence and emerging adulthood, and to investigate how their growth and progression is connected to the general process of identity development. Internal moral motivation is linked to being a reliable predictor of actual moral behaviour, more so than external moral motivation. Internal moral motivation protects individuals from circumstances faced in life which can bring about moral misconduct (Krettenauer & Casey, 2015). Internal moral identity motivation should be fostered and encouraged as a vital goal of moral development.

In conclusion, this study provided evidence that internal moral motivation increases across development, particularly in adolescence and emerging adulthood. It also showed that
moral motivation is context dependent. Finally, this study provides an example for the usefulness of employing the personological approach in investing moral identity development.

References


Table 1.
List of Attributes Presented to Participants

<table>
<thead>
<tr>
<th>accepting</th>
<th>faithful</th>
<th>just</th>
<th>reliable</th>
</tr>
</thead>
<tbody>
<tr>
<td>altruistic</td>
<td>follows the rules</td>
<td>kind</td>
<td>religious</td>
</tr>
<tr>
<td>benevolent</td>
<td>forgiving</td>
<td>knowledgeable</td>
<td>respectful</td>
</tr>
<tr>
<td>caring</td>
<td>friendly</td>
<td>knows what is right/wrong</td>
<td>responsible</td>
</tr>
<tr>
<td>cheerful</td>
<td>fun</td>
<td>law-abiding</td>
<td>righteous</td>
</tr>
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<td>listens</td>
<td>self-assured</td>
</tr>
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<td>genuine</td>
<td>loving</td>
<td>self-disciplined</td>
</tr>
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<td>good</td>
<td>loyal</td>
<td>selfless</td>
</tr>
<tr>
<td>conscientious</td>
<td>grateful</td>
<td>makes the right choices</td>
<td>sharing</td>
</tr>
<tr>
<td>considerate</td>
<td>happy</td>
<td>modest</td>
<td>sincere</td>
</tr>
<tr>
<td>consistent</td>
<td>hard-working</td>
<td>nice</td>
<td>sociable</td>
</tr>
<tr>
<td>cooperative</td>
<td>has high standards</td>
<td>non-judgmental</td>
<td>strong</td>
</tr>
<tr>
<td>courageous</td>
<td>has integrity</td>
<td>obedient</td>
<td>thrifty</td>
</tr>
<tr>
<td>courteous</td>
<td>healthy</td>
<td>open-minded</td>
<td>tolerant</td>
</tr>
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<td>helpful</td>
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<td>trustworthy</td>
</tr>
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<tr>
<td>empathic</td>
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<td>understanding</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
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<td>proper</td>
<td>upstanding</td>
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<tr>
<td>exemplary</td>
<td>independent</td>
<td>proud</td>
<td>virtuous</td>
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<tr>
<td>fair</td>
<td>intelligent</td>
<td>rational</td>
<td>wise</td>
</tr>
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</table>
Table 2

Number of coded responses and their percentages for each context

<table>
<thead>
<tr>
<th>Code</th>
<th>Family</th>
<th>School/Work</th>
<th>Community</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External</td>
<td>53</td>
<td>129</td>
<td>59</td>
<td>241 (28.32%)</td>
</tr>
<tr>
<td>Self-interest</td>
<td>(18.73%)</td>
<td>(45.91%)</td>
<td>(20.56%)</td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>14</td>
<td>25</td>
<td>32</td>
<td>71 (8.34%)</td>
</tr>
<tr>
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<td>(4.95%)</td>
<td>(8.90%)</td>
<td>(11.15%)</td>
<td></td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequences</td>
<td>89</td>
<td>31</td>
<td>95</td>
<td>215 (29.49%)</td>
</tr>
<tr>
<td>for others/</td>
<td>(31.45%)</td>
<td>(11.03%)</td>
<td>(33.10%)</td>
<td></td>
</tr>
<tr>
<td>relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Role model</td>
<td>36</td>
<td>12</td>
<td>17</td>
<td>65 (7.64%)</td>
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<td>(12.72%)</td>
<td>(4.27%)</td>
<td>(5.92%)</td>
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<tr>
<td>Self ideals</td>
<td>33</td>
<td>38</td>
<td>50</td>
<td>121 (14.22%)</td>
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<tr>
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<td>(11.66%)</td>
<td>(13.52%)</td>
<td>(17.42%)</td>
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<tr>
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<td>0</td>
<td>8</td>
<td>22 (2.59%)</td>
</tr>
<tr>
<td>Relationship</td>
<td>(4.95%)</td>
<td>(0.00%)</td>
<td>(2.79%)</td>
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<tr>
<td><strong>Other</strong></td>
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<td></td>
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<tr>
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<td>2</td>
<td>1</td>
<td>3</td>
<td>6 (0.71%)</td>
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<tr>
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<td>(0.71%)</td>
<td>(0.36%)</td>
<td>(1.05%)</td>
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<tr>
<td>Unclassified</td>
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<td>12</td>
<td>1</td>
<td>25 (2.94%)</td>
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<tr>
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<td>(4.24%)</td>
<td>(4.27%)</td>
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<td>33</td>
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<td>85 (9.99%)</td>
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<tr>
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<td>(10.60%)</td>
<td>(11.74%)</td>
<td>(7.67%)</td>
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</table>
MORAL MOTIVATION ACROSS CONTEXT AND AGE

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>283</th>
<th>281</th>
<th>287</th>
<th>851</th>
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% represent column percent.

Table 3
*Moral Motivation Categories by Context and Age Group: Summary of MANOVA*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Wilk’s λ</th>
<th>F</th>
<th>df</th>
<th>p</th>
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<tr>
<td>Context</td>
<td>0.98</td>
<td>1.99</td>
<td>2,232</td>
<td>0.14</td>
</tr>
<tr>
<td>Motive</td>
<td>0.92</td>
<td>10.00</td>
<td>2,232</td>
<td>0.00</td>
</tr>
<tr>
<td>Age</td>
<td>0.90</td>
<td>0.77</td>
<td>3,233</td>
<td>0.51</td>
</tr>
<tr>
<td>Context * Motive</td>
<td>0.67</td>
<td>28.44</td>
<td>4,230</td>
<td>0.00</td>
</tr>
<tr>
<td>Context * Age</td>
<td>0.99</td>
<td>0.48</td>
<td>6,464</td>
<td>0.83</td>
</tr>
<tr>
<td>Motive * Age</td>
<td>0.92</td>
<td>3.31</td>
<td>6,464</td>
<td>0.00</td>
</tr>
<tr>
<td>Context * Age * Motive</td>
<td>0.94</td>
<td>1.11</td>
<td>12,608</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Table 4.
*Means and (SEs) for age group by motive interaction*

<table>
<thead>
<tr>
<th></th>
<th>Adolescence</th>
<th>Emerging</th>
<th>Young</th>
<th>Middle Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adulthood</td>
<td>Adulthood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External</td>
<td>0.58 (0.04)</td>
<td>0.50 (0.05)</td>
<td>0.37 (0.04)</td>
<td>0.41 (0.04)</td>
</tr>
<tr>
<td>Relationship</td>
<td>0.30 (0.04)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.35 (0.04)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.33 (0.04)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.30 (0.04)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Internal</td>
<td>0.18 (0.05)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.28 (0.05)&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>0.40 (0.05)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.40 (0.05)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Means in each row with different superscripts significantly differ from each other in posthoc comparisons (Scheffé, $p < .05$).
Table 5.  
*Means and (SEs) for context by motive interaction*

<table>
<thead>
<tr>
<th></th>
<th>Family</th>
<th>School/Work</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>0.33 (0.03)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.67 (0.03)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.39 (0.04)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Relationship</td>
<td>0.38 (0.03)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.17 (0.02)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.41 (0.03)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Internal</td>
<td>0.37 (0.03)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.24 (0.03)&lt;sup&gt;b,c&lt;/sup&gt;</td>
<td>0.33 (0.03)&lt;sup&gt;a,c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Means in each row with different superscripts significantly differ from each other in posthoc comparisons (paired t-test, Bonferroni corrected, $p < .006$)
Table 6.
Analysis of variance. Consecutive analyses with gender as an additional variable

<table>
<thead>
<tr>
<th>Factor</th>
<th>Wilk’s $\lambda$</th>
<th>$F$</th>
<th>$df$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context</td>
<td>0.98</td>
<td>1.99</td>
<td>2,232</td>
<td>0.14</td>
</tr>
<tr>
<td>Motive</td>
<td>0.92</td>
<td>10.00</td>
<td>2,232</td>
<td>0.00</td>
</tr>
<tr>
<td>Age</td>
<td>0.90</td>
<td>0.77</td>
<td>3,233</td>
<td>0.51</td>
</tr>
<tr>
<td>Context * Motive</td>
<td>0.67</td>
<td>28.44</td>
<td>4,230</td>
<td>0.00</td>
</tr>
<tr>
<td>Context * Age</td>
<td>0.99</td>
<td>0.48</td>
<td>6,464</td>
<td>0.83</td>
</tr>
<tr>
<td>Motive * Age</td>
<td>0.92</td>
<td>3.31</td>
<td>6,464</td>
<td>0.00</td>
</tr>
<tr>
<td>Context * Age * Motive</td>
<td>0.94</td>
<td>1.11</td>
<td>12,608</td>
<td>0.35</td>
</tr>
<tr>
<td>Context * Gender</td>
<td>1.00</td>
<td>0.108</td>
<td>2,228</td>
<td>0.90</td>
</tr>
<tr>
<td>Context * Age * Gender</td>
<td>0.97</td>
<td>1.35</td>
<td>6,456</td>
<td>0.23</td>
</tr>
<tr>
<td>Motive * Gender</td>
<td>0.99</td>
<td>1.33</td>
<td>2,228</td>
<td>0.27</td>
</tr>
<tr>
<td>Motive * Age * Gender</td>
<td>0.93</td>
<td>2.68</td>
<td>6,456</td>
<td>0.02</td>
</tr>
<tr>
<td>Context * Motive * Gender</td>
<td>1.00</td>
<td>0.22</td>
<td>4,226</td>
<td>0.93</td>
</tr>
<tr>
<td>Context * Motive * Age * Gender</td>
<td>0.97</td>
<td>0.59</td>
<td>12,598</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Table 7
Number of coded responses for each age group in the context of family
## Table 8: Moral Motivation Across Context and Age

<table>
<thead>
<tr>
<th>Code</th>
<th>Adolescence</th>
<th>Emerging Adulthood</th>
<th>Young Adulthood</th>
<th>Middle Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td>22 (30.99%)</td>
<td>11 (18.03%)</td>
<td>7 (9.21%)</td>
<td>13 (17.33%)</td>
<td>53 (18.73%)</td>
</tr>
<tr>
<td>Reputation</td>
<td>4 (5.63%)</td>
<td>2 (3.28%)</td>
<td>4 (5.26%)</td>
<td>4 (5.33%)</td>
<td>14 (4.95%)</td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequences for relationships/others</td>
<td>25 (35.21%)</td>
<td>20 (32.79%)</td>
<td>22 (28.95%)</td>
<td>22 (29.33%)</td>
<td>89 (31.45%)</td>
</tr>
<tr>
<td>Internal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role model</td>
<td>4 (5.63%)</td>
<td>5 (8.20%)</td>
<td>11 (14.47%)</td>
<td>16 (21.33%)</td>
<td>36 (12.72%)</td>
</tr>
<tr>
<td>Self ideals</td>
<td>5 (7.04%)</td>
<td>9 (14.75%)</td>
<td>8 (10.52%)</td>
<td>11 (14.67%)</td>
<td>33 (11.66%)</td>
</tr>
<tr>
<td>Relationship ideals</td>
<td>0 (0.00%)</td>
<td>5 (8.20%)</td>
<td>5 (6.58%)</td>
<td>4 (5.33%)</td>
<td>14 (4.95%)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unanswered</td>
<td>0 (0.00%)</td>
<td>1 (1.64%)</td>
<td>0 (0.00%)</td>
<td>1 (1.33%)</td>
<td>2 (0.71%)</td>
</tr>
<tr>
<td>Unclassified</td>
<td>3 (4.23%)</td>
<td>2 (3.28%)</td>
<td>7 (9.21%)</td>
<td>0 (0.00%)</td>
<td>12 (4.24%)</td>
</tr>
<tr>
<td>Unscorable</td>
<td>8 (11.27%)</td>
<td>6 (9.84%)</td>
<td>12 (15.79%)</td>
<td>4 (5.33%)</td>
<td>30 (10.60%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>71</td>
<td>61</td>
<td>76</td>
<td>75</td>
<td>283</td>
</tr>
</tbody>
</table>

% represent column percent.
### Number of coded responses for each age group in the context of school/work

<table>
<thead>
<tr>
<th>Code</th>
<th>Adolescence</th>
<th>Emerging Adulthood</th>
<th>Young Adulthood</th>
<th>Middle Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td>43 (58.90%)</td>
<td>33 (55.00%)</td>
<td>28 (35.90%)</td>
<td>25 (35.71%)</td>
<td>129 (45.90%)</td>
</tr>
<tr>
<td>Reputation</td>
<td>7 (9.59%)</td>
<td>6 (10.00%)</td>
<td>7 (8.97%)</td>
<td>5 (7.14%)</td>
<td>25 (8.99%)</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequences for relationships/others</td>
<td>7 (9.59%)</td>
<td>9 (15.00%)</td>
<td>9 (11.54%)</td>
<td>6 (8.57%)</td>
<td>31 (11.03%)</td>
</tr>
<tr>
<td><strong>Internal Role model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role model</td>
<td>3 (4.11%)</td>
<td>1 (1.67%)</td>
<td>3 (3.85%)</td>
<td>5 (7.14%)</td>
<td>12 (4.27%)</td>
</tr>
<tr>
<td>Self ideals</td>
<td>4 (5.48%)</td>
<td>6 (10.00%)</td>
<td>14 (6.60%)</td>
<td>14 (20.0%)</td>
<td>38 (13.52%)</td>
</tr>
<tr>
<td>Relationship ideals</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unanswered</td>
<td>0 (0.00%)</td>
<td>1 (1.67%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>1 (0.36%)</td>
</tr>
<tr>
<td>Unclassified</td>
<td>3 (4.11%)</td>
<td>2 (3.33%)</td>
<td>7 (8.97%)</td>
<td>0 (0.00%)</td>
<td>12 (4.27%)</td>
</tr>
<tr>
<td>Unscorable</td>
<td>6 (8.22%)</td>
<td>2 (3.33%)</td>
<td>10 (12.82%)</td>
<td>15 (21.43%)</td>
<td>33 (11.74%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>73</td>
<td>60</td>
<td>78</td>
<td>70</td>
<td>281</td>
</tr>
</tbody>
</table>

% represent column percent.

Table 9
**MORAL MOTIVATION ACROSS CONTEXT AND AGE**

*Number of coded responses for each age group in the context of community*

<table>
<thead>
<tr>
<th></th>
<th>Adolescence</th>
<th>Emerging Adulthood</th>
<th>Young Adulthood</th>
<th>Middle Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-interest</td>
<td>22 (30.14%)</td>
<td>12 (19.05%)</td>
<td>11 (14.29%)</td>
<td>14 (18.92%)</td>
<td>59 (20.56%)</td>
</tr>
<tr>
<td>Reputation</td>
<td>8 (10.96%)</td>
<td>7 (11.11%)</td>
<td>7 (9.09%)</td>
<td>10 (13.51%)</td>
<td>32 (11.15%)</td>
</tr>
<tr>
<td><strong>Relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consequences for</td>
<td>22 (30.14%)</td>
<td>24 (38.10%)</td>
<td>25 (32.47%)</td>
<td>24 (32.43%)</td>
<td>95 (33.10%)</td>
</tr>
<tr>
<td>relationships/others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role model</td>
<td>4 (5.48%)</td>
<td>2 (3.17%)</td>
<td>9 (11.69%)</td>
<td>2 (2.70%)</td>
<td>17 (5.92%)</td>
</tr>
<tr>
<td>Self ideals</td>
<td>9 (12.33%)</td>
<td>10 (15.87%)</td>
<td>15 (19.48%)</td>
<td>16 (21.62%)</td>
<td>50 (17.42%)</td>
</tr>
<tr>
<td>Relationship ideals</td>
<td>2 (2.74%)</td>
<td>3 4.76%</td>
<td>2 (2.60%)</td>
<td>1 (1.35%)</td>
<td>8 (2.79%)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unanswered</td>
<td>1 (1.37%)</td>
<td>1 (1.59%)</td>
<td>1 (1.30%)</td>
<td>0 (0.00%)</td>
<td>3 (1.05%)</td>
</tr>
<tr>
<td>Unclassified</td>
<td>0 (0.00%)</td>
<td>1 (1.59%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>1 (0.35%)</td>
</tr>
<tr>
<td>Unscorable</td>
<td>5 (6.85%)</td>
<td>3 (4.76%)</td>
<td>7 (9.09%)</td>
<td>7 (9.46%)</td>
<td>22 (7.67%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>73</td>
<td>63</td>
<td>77</td>
<td>74</td>
<td>287</td>
</tr>
</tbody>
</table>

% represent column percent.
Figure 1. Diagram presented to study participants for assessing self-importance of moral values in the context of family.
Figure 2. Moral motivation by age group
Figure 3. Moral motivation by context
Figure 4. Moral motivation by age group for females
Figure 5. Moral motivation by age group for males