A New Moral Identity Measure Integrating:
Thomistic Virtue Ethics with an Eriksonian Identity

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Development Perspective

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Abstract

Psychologists have broadly conceptualized moral identity as the degree to which one prioritizes and defines oneself in terms of moral goals, values, and commitments. Though several moral identity measures have clear psychological theoretical foundations, no existing measures have explicit *philosophical* foundations or psychological *developmental* underpinnings. We attempt to rectify this deficiency by creating a new moral identity measure, integrating Thomistic virtue ethics with an Eriksonian identity development perspective. Two hundred twenty-five participants completed our new measure along with measures of integrity, moral identity, community involvement frequency, and civic engagement motivation. Participants formed unique clusters based on (a) choosing Thomistic virtues versus choosing non-virtues for whom they strive to be, and (b) the degree to which they reflected upon and committed to their chosen qualities. We also found expected group differences among the clusters in integrity and civic engagement motivation, providing evidence of concurrent validity.

In past decades psychologists have increasingly discussed the construct of moral identity (e.g., Blasi, 1983; Colby & Damon, 1992; Hardy & Carlo, 2005, 2011). The construct, broadly conceptualized, is the degree to which one prioritizes—and defines oneself in terms of—moral goals, values, and commitments. In order to study and measure moral identity empirically, psychologists have had to define the construct more specifically. Though several moral identity measures have clear psychological theoretical foundations, few (if any) have either explicit *philosophical* foundations or psychological *developmental* underpinnings. We attempt to rectify this deficiency by creating a new moral identity measure: one that integrates Thomistic virtue ethics with an Eriksonian identity development perspective.

Before describing the theoretical foundations of our new measure, we briefly outline the limitations of existing moral identity measures, with the first one being social desirability. In measuring moral identity, researchers must assess the moral content of an individual's self. Many measures attempt to assess moral content by offering only (e.g., Aquino & Reed, 2002) or mostly (e.g., Hardy, Walker, Olsen, Woodbury, & Hickman, 2014) moral traits or virtues as possible self-descriptions. Given that moral traits are inherently socially desirable, most people are going to over-report being honest, kind, generous, just, etc. Thus, when only or mostly moral traits are presented, it creates a situation fraught with social desirability bias.

Another limitation of existing moral identity measures is having a weak theoretical and psychometric mechanism to describe and assess moral identity's developmental progression. Most moral identity measures produce scores that can range from "low" to "high" (e.g., Aquino & Reed, 2002; Barriga, Morrison, Liau, & Gibbs, 2001). A high score represents a greater centrality of moral traits to the self, while a low score is interpreted as a lesser centrality of moral traits. Yet missing in most of these conceptualizations and measures of moral identity is *how* it is

formed or developed. The developmental progression of moral identity is an important question, considering that adolescence is considered to be a developmentally sensitive period for identity development in general (Blasi & Glodis, 1995; Moshman, 2011) and that much of moral identity research has focused on an adolescent population.

The third and final limitation that we want to highlight is the lack of explicit philosophical underpinnings in moral identity measures. This limitation seems to be present in existing moral identity measures to date: even the one measure that best avoids social desirability bias and has a strong developmental component (Frimer & Walker, 2009). Philosophers—ethicists in particular—have studied for hundreds (and hundreds) of years what it means to be moral, carefully constructing logically cohesive theories of moral goodness. Unfortunately, psychologists have not consistently drawn upon these ethical theories in their own work; we argue that they should. Psychology is a descriptive science, studying how matters *are*. This becomes tricky in studying morality, which prescribes how matters *ought to be* (Walker & Frimer, 2011). There are several ways that psychologists can handle this delicate matter; one of the more logical resolutions is to integrate philosophers' work in ethical theories with psychologists' skills in studying humans empirically.

Not surprisingly, then, we believe philosophical foundations are necessary to adequately articulate the "moral" in "moral identity": we need to give good reasons showing why some qualities or characteristics count as morally good—and thus why their development represents development of *moral* identity—and why some do not. To that end, we have focused on philosophical virtue ethics: it, among the major families of ethical theory, most directly addresses the personal qualities relevant to identity. While we began by looking to Aristotle as the main source of classical Western virtue ethics, we found that—despite his impressive

conceptual analysis of what moral virtues are and how they develop—he does not attempt to form a systematic or exhaustive account of virtues. For such an account, we turned to Aristotle's most systematic and well-known medieval follower: Thomas Aquinas. Thomistic virtue ethics integrates an Aristotelian theory of virtue with other classical accounts such as Stoicism and adds Augustinian (Christian) theological virtues. These latter virtues, particularly charity (love), also form a helpful connection with non-Western systems of virtue ethics—especially Confucianism, whose chief virtue is benevolence (*ren*). So for purposes of our measure, while we emphasize moral virtues, we don't omit "theological" ones: we acknowledge (with Peterson & Seligman, 2004) that spiritual or transcendental qualities can be integral both to a moral life and to a mature identity.

In constructing a measure of moral identity, it is imperative that we explicitly state our normative claims about what is moral and what is ideal developmentally. We have three primary normative claims inherent within our moral identity assessment:

1. In terms of one's identity, striving towards moral qualities, values, and goals is good;

2. Reflecting on different qualities, values, and goals – both moral and non-moral – is good; and

3. Being deeply committed to moral qualities, values, and goals is good.

The first claim has two dimensions that we will more fully explain: the focus on *striving towards* and the emphasis on *moral*. In striving towards something in identity, a person is working to attain a particular quality or be a certain way, which reflects one's ideal self: who the person wants to be—compared to who she currently is (actual self) or who she wants to avoid becoming (feared self) (Oyserman & James, 2011). Blasi and Glodis (1995), in defining identity, emphasize the notion of an ideal self: "[it] consists of managing one's life and shaping oneself in

order to approximate one's ideals" (p. 424). Others who have conceptualized identity and moral identity in similar ways (Hardy et al., 2014; Waterman & Schwartz, 2013) have argued that striving towards something has an important motivational quality – it provides direction and meaning that ultimately guides decision-making and behavior.

The other dimension to explain for claim 1 is the *moral* content of one's ideal self. We assume that one's ideal self may include both moral and non-moral content. Of course, we are most interested in the *moral* content. As explained earlier, we employ Thomistic ethical theory for our approach to moral identity: we chose virtue ethics because it addresses the character traits relevant to identity (rather than, e.g., merely addressing rules for moral action); and we chose Thomistic ethics in particular because it provides a systematic and comprehensive account of the classical Aristotelian tradition of virtue ethics and connects helpfully with other virtue traditions such as Confucianism. Following Aristotle, Aquinas explains that the moral virtues are good to have and to exercise primarily because they are good *for the agent* who has them: they help him or her to live an excellent, fulfilled human life. (In fact, the classical Greek term typically translated "virtue"—*arête*—actually means "excellence.") Moral virtue empowers the agent to use her reason — not just her feelings or whims — to guide her decisions; indeed, the virtuous person's reason guides her emotions and desires as well as her outward actions. So while an agent's virtue is good for those around her (i.e., it is prosocial), it is also, and crucially, good for the agent herself. Conversely, then, a lack of moral virtue won't just make an agent unpleasant to be around, it will also be detrimental to her own well-being.

Our latter two normative claims (that reflecting on different qualities, values, and goals – both moral and non-moral – is good; and that being deeply committed to moral qualities, values, and goals is good) address the psychological processes of identity formation. For decades Erik

Erikson (1965; 1968) has been most influential in elucidating identity development. Using Erikson's and post-Eriksonian theory, Blasi and Glodis (1995) shrewdly evaluate the identity formation literature. In formulating identity development within our measure, we drew upon several of Blasi and Glodis' ideas and interpretations of Erikson.[1]

According to Erikson (1980), individuals working on identity development should (ideally) experience two processes: crisis and commitment. Erikson often described crisis as "the process of taking an autonomous stance with respect to one's cultural (ideological in particular) environment and to the perception and expectations that one's social group has of oneself" (Blasi & Glodis, 1995, p. 412). Post-Eriksonian researchers have shied away from using the term *crisis,* as it implies a formidable and emotionally troubling situation. Identity development researchers often use the term *exploration* in lieu of *crisis*. We prefer to use the term *reflection* – referring to reflection on the self, in particular. From an Eriksonian perspective, reflection (i.e., crisis) is a necessary process in establishing oneself as a rational agent, whereby an individual is "a subject, not an object; … [and is] moved by reasons, by conscious purposes, which are [one's] own" (Berlin, 1969, p. 131). In being a rational agent, one has autonomy and responsibility for who one is (and has been and will be). Thus, we argue that reflecting on who one wants to be – including both moral and non-moral values, goals, and qualities – is good.

The other process that Erikson highlighted is commitment, which Blasi and Glodis (1995) explained is "the conscious investment of one's self in the object of one's choice" (p. 412). If a person is not consciously invested in working toward who she wants to be, the person's

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[1] However, given that we constructed – intentionally – a self-report questionnaire, our measure is unable to capture all dimensions of identity formation that Blasi and Glodis suggest (e.g., an implicit process of identity formation, an experience of unity in one's identity, the emotional processes inherent in identity); thus, we use Eriksonian interpretations for our results (e.g., achievement, moratorium, confusion) rather than Blasi and Glodis' identity modes.

ideal self has little motivational power, resulting in her behavior being directed by forces other than her identity; this makes her identity much less meaningful. Blasi and Glodis (1995) criticize identity development researchers for too often defining *commitment* too superficially, operationally defining it as simply making a decision. Thus, we conceptualized commitment more deeply in our assessment, integrating dedication, purpose, and fidelity to who one wants to be.

Reflection and commitment, then, are the two key variables in describing how identity develops from an Eriksonian perspective. In order to be identity achieved, one must both deeply *reflect* about who she is and wants to be and *commit* deeply to the self-defining qualities that she chooses based on her reflections. Erikson, along with other identity development researchers, discussed variations of the reflection and commitment processes that may occur in developing one's identity. One such variation is a person engaging in reflection but not yet committing to any sense of who she wants to be. Erikson (1968) and other researchers (Kroger & Marcia, 2011) have labeled this as "moratorium," or a holding pattern or exploratory period in terms of identity development. Another variation, called "identity diffusion" by post-Eriksonian researchers, is when a person neither reflects upon nor commits to any aspect of her identity, indicating no serious attempt to think about or decide who she is and wants to be: such a person lacks direction and is easily swayed by external influences (Kroger & Marcia, 2011). So our second and third normative claims emphasize the importance of reflection and commitment processes as necessary for identity development. And given that we are measuring specifically moral identity, we argue in our third claim that being deeply committed to *moral* qualities, values, and goals is good.

Thus, from our perspective having a fully developed moral identity involves thoughtful reflection on various ways of being (values, qualities, and goals), selecting those ways that are morally virtuous, and then being deeply committed to them. We constructed a moral identity assessment that reflected this notion of moral identity development. The purpose of this study was to empirically examine (for the first time) our new assessment. In doing so, we had three objectives: (1) to identify which factors emerge from the reflection and commitment questions in our new measure, (2) to identify moral identity profiles from our new measure, and (3) to determine whether participants with particular moral identity profiles differed with respect to several morally-relevant behaviors and motivations: integrity, community involvement frequency, civic engagement motivation, and moral identity (as measured by Aquino & Reed, 2002).

With the third objective, we hope to produce evidence of construct validity for our new measure: specifically, convergent and concurrent validity. We would like to show evidence of convergent validity by our new assessment's being related to an existing measure of moral identity. To produce evidence of concurrent validity, we want our assessment to be related to theoretically relevant variables. In our case, based on previous research and theoretical scholarship, we would expect a person with strong moral identity, as indicated on our new assessment, to have a steadfast commitment to ethical principles (i.e., integrity: Blasi, 1983; Colby & Damon, 1992; Schlenker, Miller, & Johnson, 2009), volunteer in their community (i.e., community involvement frequency: Hart & Fegley, 1995; Matsuba, Murzyn, & Hart, 2014; Reimer, DeWitt Goudelock, & Walker, 2009), and volunteer for prosocial, ethical reasons (i.e., civic engagement motivation: Hart & Fegley, 1995; Pratt, Hunsberger, Pancer, & Alisat, 2003; Reimer et al., 2009).

Method

Participants

The participants were 225 students attending a midwestern Catholic university in the U.S. The mean age was 19.5, ranging from 18 to 43 years old. Sixty-seven percent of participants were female. The majority of participants (85%) identified themselves as European American.

Materials and Procedure

The measures included in this study were part of a larger self-report questionnaire that was administered either in paper-pencil or an online format. Fifty-five percent of participants completed the paper-pencil version, with the remaining 45% completing the online version. Each of the measures used in the current study is described below.

Our new moral identity measure. Our new measure, called the Thomistic Eriksonian Moral Identity Assessment (TEMIA), was constructed primarily by the first author starting in 2012, with the consultation and assistance of the third author along with several of the first author's colleagues and students. The measure includes several scales to capture the multi-dimensional nature of moral identity.

First, there is the *moral* dimension of moral identity development, which focuses on the moral content of one's identity. We constructed a comprehensive list of moral and non-moral qualities in order to diminish the influence of social desirability. We used Schwartz's universal values (Fischer & Schwartz, 2011) as a starting point for the comprehensive list. We also incorporated our own list of moral and non-moral qualities independently of Schwartz's values, based on our own observations and disciplinary knowledge (moral psychological development for the first author and Aristotelian and Thomistic ethics for the third author). We combined the list, and then analyzed it both independently and jointly at least two different times. The final list

includes 77 different qualities: 23 are Thomistic virtues (see Table 1), which are considered to be

the moral content of one's identity. Because the list is quite comprehensive, we decided to

present it to participants a few different times in order to ease their cognitive processing of all the

possibilities. So we asked participants to rate and choose qualities for both their actual self (how

they would describe themselves *now*) and their ideal self (describing who they *strive* to be). The

first time participants see the list, they are asked to rate, on a scale of 1 (not true of me at all) to 5

(very true of me), how accurately each quality depicts who they *are now*. Participants are then

immediately asked to choose seven of the 77 characteristics that are most central to who they are.

Shortly thereafter, participants are presented the full list of 77 qualities again, this time choosing

only five that reflect who they *strive to be*. After choosing those five, they are asked to rank the

five in terms of importance.

For the moral content dimension of moral identity development scores, we only use

participants' rankings of the five qualities for their ideal selves (i.e., whom they strive to be). We

intentionally do not use information from their actual selves for two reasons. The first is

theoretical: we see moral ideal self as fundamental to moral identity because the ideal self is

motivational in nature—it provides direction and meaning. The second reason for not using

information about participants' actual selves is practical: individuals' standards and modesty are

likely confounding variables for which we cannot control. For example, a moral exemplar of

generosity and a morally average person may perceive their actual selves very differently based

on their moral standards and modesty. A very modest moral exemplar with high standards of

generosity will be less likely to describe herself as "generous" than an average person with lower

standards and less modesty. We would then have a situation in which the average person has

higher ratings and rankings of her actual self on the moral quality of generosity compared to the

moral exemplar's self-ratings. If we consider high ratings and rankings to reflect a stronger moral identity (which we do), we would wrongly conclude that the average person has a stronger moral identity than the moral exemplar. For this reason, we use only participants' ideal-self Thomistic virtue rankings to assess the moral content dimension. We do not expect the degree of modesty or standards to bias participants' ideal-self perceptions.

In producing a score for the moral content dimension, we examine the rankings of Thomistic virtues that participants choose for whom they strive to be. We ask participants to rank their top five qualities. In scoring them, we assign a weight of 5 to their most important quality, 4 to their second most important, 3 to their third most important, 2 to their fourth most important, and 1 to their fifth most important. Thomistic virtues are worth 1 point, and all other qualities are worth 0 points. So Thomistic virtue scores can range from 0 (choosing all non-virtues for their top 5) to 15 (choosing virtues for all five rankings).

The other dimension of TEMIA is *identity development*. We used the identity concepts of reflection and commitment to assess this dimension (Blasi & Glodis, 1995; Erikson, 1965; 1968). In constructing our reflection and commitment items, we looked to both our conceptual definitions of these two constructs as well as to Luyckx and colleagues' recent work on general identity development (Luyckx, Goossens, Soenens, & Beyers, 2006). Luyckx and colleagues have specified two different aspects of exploration (similar to reflection): breadth of exploration (i.e., how extensively one has explored different ways of being) and depth of exploration (i.e., how intensively one has examined one or a few ways of being). They also specified two aspects of commitment: commitment making and identification with commitment. The researchers constructed scales for each of these aspects and produced evidence of reliability and validity for them (Luyckx et al., 2006; Luycks, Schwartz, Berzonsky, Soenens, Vansteenkiste, Smits, &

Goossens, 2008). The first author of this paper used the questions from these scales as an initial guide in writing the reflection and commitment questions for our moral identity development measure. Her questions went through several rounds of revisions based on the suggestions and advice from the third author and additional colleagues and students. The final set of questions included ten assessing reflection and nine assessing commitment. An example of a reflection question is, "I have thought a lot about how different qualities, values, and goals would play out in my life." An example of a commitment item is, "My commitments to what I do in life are derived from the five statements above [regarding the five qualities chosen as most central to the ideal self]." Participants used a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) to respond to each of the reflection and commitment questions. As part of our results, we factor analyzed the reflection and exploration questions. Thus, the subscales for these questions, along with their coefficient alphas and range of scores, will be reported in the Results section.

An existing moral identity measure. Aquino and Reed's (2002) moral identity measure asked participants to briefly think about nine characteristics (e.g., honest, fair, nice) of a person and visualize what types of people might possess these qualities and how these people would act. Using a 7-point Likert scale (strongly agree to strongly disagree), participants were then asked to respond to (a) five statements assessing the extent to which the group of traits is central to their (actual) self-concept and (b) five statements evaluating the extent to which one's moral self-schema is projected outwardly through one's actions in the world. We used mean scores that could range from 1 to 7. The coefficient alpha for this scale was very good (0.79).

Integrity. We used Schlenker's (2008) Integrity Scale, which asked participants to rate, using a 5-point Likert scale, the extent to which they agree with 18 statements about valuing principled conduct, being committed to principles despite temptations, and avoiding

rationalizations of unprincipled conduct. We computed mean scores, which could range from 1 to 5. The coefficient alpha was very good (0.81).

Community involvement frequency and civic engagement motivation. Reimer et al.'s (2009) Volunteerism Scales were used to assess community involvement frequency and civic engagement motivation. Their community involvement frequency scale included 11 volunteer activities generally available to most youth (e.g., tutoring younger students). Participants were asked how often they engaged in these unpaid, non-school-required volunteer behaviors in the past year, using a 5-point Likert scale ranging from never to more than once per month. Reimer et al. (2009) also had community involvement motivation scales. We specifically used the civic engagement motivation scale, which consisted of three items. Using a 5-point Likert scale (ranging from "not important at all" to "extremely important"), participants rated the following prosocial, ethical reasons for why they volunteered: (1) improving the their community; (2) improving society as a whole; and (3) helping other people. We used mean scores for each of the two scales (community involvement frequency and civic engagement motivation), which could range from 1 to 5. The coefficient alphas for both scales were very good (0.77 and .70, respectively).

<div style="text-align:center">Results</div>

We report our results organized by the three objectives of our study. We first describe our factor analysis, whereby we identify which factors emerged from TEMIA's reflection and commitment questions. Second, we detail our cluster analysis, which generated moral identity profiles from TEMIA. Lastly, in providing evidence of construct validity, we report which moral identity profiles differed in the morally-relevant variables of integrity, community involvement frequency, civic engagement motivation, and moral identity.

Factor Analysis

We performed a factor analysis to investigate the presence of latent factors among the breadth of ideal self reflection, depth of ideal self reflection, and depth of commitment questions. Using principle axis factoring and promax rotation with Kaiser Normalization we found four factors with eigenvalues greater than one. However, a scree plot analysis revealed a sharp drop in eigenvalue loadings after three factors, resulting in our final number of factor loadings to be three. Factor 1, which we named *ideal self reflection*, was comprised of eight questions of the breadth and depth of reflection measures, measuring participant's attitudes toward their own levels of ideal self reflection, with higher scores indicating more reflection (see Table 2). Factors 2 and 3 we identified as *guiding commitment* and *challenged commitment* respectively. Guiding commitment and challenged commitment were comprised of five and four questions, respectively, from the depth of commitment scales. The five questions of guiding commitment reflect participants' being strongly committed to their five self-chosen qualities and using them as a guide for what they want to do; higher scores reflect stronger commitments. Challenged commitment's four questions signify ambivalence toward their chosen qualities and incongruence between their qualities and behavior. Thus, higher challenged commitment scores reflect *more* ambivalence and incongruence. Coefficient alphas of each of the three factors were as follows: ideal self-reflection ($\alpha = .83$), guiding commitment ($\alpha = .81$), and challenged commitment ($\alpha = .64$). Mean scores for each factor were computed and used in the cluster analysis described next.

Cluster Analysis

We conducted a two-step cluster analysis. Of the many different types of cluster analyses available, we chose the two-step method because it is the ideal clustering equation when scale

types and levels differ between variables used in the analysis (Mooi & Sarstedt, 2011). In our

case, we used four variables: Thomistic virtue total, challenged commitment, guiding

commitment, and ideal self reflection. Our Thomistic virtue total was based on an ordinal scale

(i.e., ranking data) while the other three variables employed interval scales (i.e., rating data with

a Likert scale). Furthermore, two-step cluster analysis provides ample information to help

researchers choose the number of clusters, including statistical generations of ideal cluster

amounts according to Akaike Information Criterion (AIC) and Bayes Information Criterion

(BIC). AIC algorithms tend to overestimate the optimal number of clusters, while BIC tends to

underestimate the optimal number of clusters (Mooi & Sarstedt, 2011).

As previously mentioned, we used four variables in our two-step cluster analysis:

Thomistic virtue total, challenged commitment, guiding commitment, and ideal self-reflection.

Beginning with the AIC clustering algorithm, seven distinct clusters were produced. Next, the

process was repeated using the BIC algorithm, with three clusters being produced. Due to the

difference of cluster solutions produced, we conducted three additional cluster analyses

specifying four, five, and six cluster solutions. All five possible cluster solutions had comparable

levels of fit, with "fair" cohesion and separation. We then examined all five cluster solutions for

theoretical fit and parsimony, deciding that a four cluster solution was the most theoretically

sound while being most parsimonious. Table 3 shows the four clusters by mean score and

standard deviation for each of the four defining variables.[2] Cluster one, labeled as *moral identity*

achieved, was comprised of 61 (28%) participants who had the highest scores of Thomistic

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[2] SPSS produced scores of 'variable to cluster importance' of the four clustering variables. These
scores ranged from no ability (0.0) to perfect ability (1.0) of the variables to differentiate
participants into clusters, compared to the other clustering variables. The most important variable
was Thomastic virtue total (1.0), followed by ideal self reflection (.92), challenged commitment
(.76), and lastly guiding commitment (.57).

virtue total, ideal self reflection, and guiding commitment, and the lowest scores of challenged commitment. Cluster two, labeled *moral identity moratorium*, was comprised of 57 (27%) participants with high scores on Thomistic virtue total, high scores on ideal self reflection, and moderate levels of guiding commitment and challenged commitment. Cluster three was comprised of 19 (9%) participants, whom we called *identity diffused* and was characterized by the lowest levels of ideal self reflection, guiding commitment, and the highest scores of challenged commitment. The final cluster consisted of 78 (36%) participants and labeled *non-moral identity moratorium* due to the lowest levels of Thomistic virtue total, high levels of ideal self reflection, and moderate levels of both guiding commitment and challenged commitment.

We next used univariate analyses of variance (ANOVAs) to test for validation of the four-cluster solution, examining differences among the four clusters on each of the four defining variables (Thomistic virtue total, ideal self reflection, guiding commitment, and challenged commitment). Two of the four variables, Thomistic virtue total and guiding commitment, lacked equality of variances, an important assumption of ANOVAs. In order to rectify the inequality we first randomly reduced all clusters to 19 participants per group. Equality of variance was still found to be unequal after cluster size reduction, so we used Dunnet's C test as it was the most conservative statistic available, specifically for unequal variances with equal sample sizes (Cardinal, n.d.). We found statistically significant differences for Thomistic virtue total among the four clusters ($F(3, 72) = 23.43$, $p < .001$, partial eta-squared = .49), with the moral identity achieved cluster scoring higher than the diffusion and non-moral moratorium clusters, and the non-moral moratorium cluster being significantly lower than all others. Guiding commitment resulted in statistically significant differences ($F(3, 72) = 25.14$, $p < .001$, partial eta-squared =

.51), with the moral identity achieved cluster scoring higher than all other clusters and the diffusion cluster scoring lower than all other clusters.

Ideal self reflection and challenged commitment both showed equal variances and did not require cluster size reduction; thus, we used ANOVAs with the original sample sizes. Ideal self reflection resulted in statistically significant differences ($F(3, 72) = 23.43$, $p < .001$, partial eta-squared = .49), with the moral identity achieved and non-moral moratorium clusters not significantly different from each other, but scoring significantly higher than the other two clusters.[3] Challenged commitment resulted in statistically significant differences ($F(3, 211) = 55.35$, $p < .001$, partial eta-squared = .44), with the moral identity achieved cluster scoring higher than all others and the diffusion cluster scoring lower than all others.

Evidence of TEMIA's construct validity

To provide evidence of construct validity, we now report which moral identity profiles differed in the morally-relevant variables of integrity, community involvement frequency, civic engagement motivation, and moral identity. We used a multiple analysis of variance (MANOVA) to determine whether differences existed among our four clusters (our independent variable) on the following dependent variables: integrity, community involvement frequency, and moral identity. The overall MANOVA, which is a linear combination of all dependent variables, was significant ($F(9, 467) = 6.35$, $p < .001$, partial eta-squared = .09). Follow-up univariate ANOVAs showed statistically significant differences specifically for integrity ($F(3, 194) = 13.76$, $p < .001$, partial eta-squared = .18) and moral identity ($F(3, 194) = 8.49$, $p < .001$,

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[3] One might question whether the cluster we label *moral identity moratorium* should be called "moratorium" given it had significantly lower ideal self reflection scores than the non-moral identity moratorium cluster. However, looking at the mean scores and standard deviations of these two clusters (moral moratorium = 5.34 (.54) and non-moral moratorium = 5.78 (.52), with possible scores ranging from 1 to 7), we argue that the two clusters are relatively comparable in ideal self reflection from the perspective of highest and lowest possible scores.

partial eta-squared = .12). In post hoc analyses, the moral identity achieved cluster had significantly higher integrity scores than all other three clusters. For moral identity, the diffused cluster was significantly lower compared to all others. No significant differences were found among the four clusters for community involvement frequency. Table 4 shows the mean and standard deviation of each morally-relevant variable for all four clusters.

For civic engagement motivation, a technical error with the online measurement reduced our overall sample size to 141 participants (moral identity achieved = 41; moral moratorium = 43; identity diffused = 9; non-moral moratorium = 47). Thus, we conducted a separate ANOVA for this variable (rather than including it in the MANOVA). We found statistically significant differences in civic engagement motivation ($F(3, 137) = 4.32$, $p < .01$, partial eta-squared = .09), with the moral identity achieved cluster having significantly higher scores than the non-moral moratorium cluster.

Discussion

The purpose of this study was to empirically examine TEMIA, our new assessment of moral identity that integrates Thomistic virtue ethics with an Eriksonian identity development perspective. In examining our measure, we had three objectives: (1) to identify which factors were generated from TEMIA's reflection and commitment questions, (2) to identify moral identity profiles that emerged from TEMIA, and (3) to determine whether participants with particular moral identity profiles differed in several morally-relevant behavior and motivations, including integrity, community involvement frequency, civic engagement motivation, and moral identity.

For our first objective, our factor analysis revealed three underlying variables of the reflection and commitment questions: ideal self reflection, guiding commitment, and challenged

commitment. We used these three factors, along with Thomistic virtue scores, in a cluster

analysis to differentiate our participants into distinct moral identity profiles. We found four

different profiles among participants: (1) moral identity achieved, who showed the greatest

maturity in moral identity by choosing the most Thomistic virtues in describing who they want to

be and having the highest degree of reflection and commitment to these virtues; (2) moral

identity moratorium, who had the second highest Thomistic virtue score (behind moral identity

achieved) and showed fairly high levels of ideal self reflection and a moderate degree of

commitment; (3) non-moral identity moratorium, who looked very similar to the moral identity

moratorium participants except that they had very low Thomistic virtue scores (the lowest of all

four profiles, in fact); and (4) identity diffused, who showed the lowest levels of reflection and

commitment with moderate Thomistic virtue scores. Lastly, we found expected differences

among the profiles for three different morally-relevant variables. Participants in the morally

identity achieved profile had higher integrity scores compared to those in all other profiles, and

had higher civic engagement motivation scores compared to those in the non-moral moratorium

profile. Participants who were identity diffused had the lowest moral identity scores (on Aquino

and Reed's moral identity measure) compared to participants in all other profiles.

We find the emergence of four different profiles from TEMIA to be interesting and

enlightening when thinking about development of, and individual differences in, moral identity

development. Many existing measures of moral identity (e.g., Aquino & Reed, 2002; Barriga et

al., 2001; Hardy et al., 2014) produce a single score, simply reflecting the degree to which an

individual perceives very general moral concerns as central to the self. Our new measure, on the

other hand, bears a philosophically informed notion of what "moral" is and provides a more

nuanced developmental picture of a person's moral identity. The fact that four unique profiles

emerged -- with each profile being slightly different based on our philosophically informed conceptualization of "moral" (i.e., our Thomistic virtue score) and our developmentally-based variables of reflection and commitment -- suggest that individuals do indeed vary in different ways along these dimensions.

We also wanted to show that not only do individuals vary along these philosophical and developmental dimensions, but that they vary in *meaningful* ways. Thus, the profiles (generated from the dimensions) should differ from each other in theoretically relevant ways; in other words, that the profiles exhibit evidence of concurrent validity. We do, in fact, show initial evidence of concurrent validity. Individuals in the most mature moral identity profile (moral identity achieved) had the highest integrity and civic engagement motivation compared to the other profiles. Just as Colby and Damon (1992) found in their study on moral exemplars, those identified as most mature in moral identity from our assessment had the most steadfast commitment to ethical principles (i.e., integrity). This is also in line with Schlenker's (2009) notion of how integrity is related to moral identity.

Additional evidence of concurrent validity comes from civic engagement motivation, but before we address this in more depth, we will turn briefly to community involvement frequency. Interestingly, our four profiles did not differ in community involvement frequency, suggesting that individuals -- regardless of what profile they had -- were just as likely to volunteer (or not) in their community. This is interesting because community involvement is often regarded in the moral development literature as the best representation of moral behavior. However, we might want to call this into question for the current generation, given that 22% of millenials in 2010 volunteered in their community (Corporation for National and Community Service, 2011). We also know that community volunteerism is strongly encouraged – if not sometimes required – for

college and medical school applications. Thus, it is not surprising that community involvement is fairly high among today's youth and that our four profiles were not different from one another in their frequency of community involvement. What is now necessary is to understand *why* young people are volunteering in their community: to enhance their resume or application? to learn a new skill? to help others and improve their community? The latter motivation is what we were most interested in, especially given that, according to previous research, youth with strong moral identity volunteer for prosocial, ethical reasons (Hart & Fegley, 1995; Pratt, Hunsberger, Pancer, & Alisat, 2003; Reimer et al., 2009). And indeed, we found that those identified as most mature in moral identity from our assessment had the strongest civic engagement motivation.

We also wanted to show evidence of converging validity for TEMIA, in that it should be related to an existing measure of moral identity. The evidence that we produced is in the right direction, though not ideal. However, given the concerns we have about the existing measure of moral identity that we used (Aquino and Reed, 2002), we were not surprised that we produced the meager results. We found that the identity diffused profile had significantly lower moral identity scores than all other profiles, with no statistically significant differences among the other three profiles. One might wonder why our moral identity achieved cluster did not produce higher scores on Aquino and Reed's measure than the moral identity moratorium and non-moral identity moratorium profiles. We argue that the lack of differences between these three profiles is a function of Aquino and Reed's measure, not ours. Their assessment of moral identity has individuals think about a group of nine moral traits and the degree to which those moral traits are important to themselves. This exclusive focus on moral virtues, we believe, produces in their measure a strong inherent social desirability bias. And in fact, the vast majority of studies that use this measure produce very high mean scores and very small standard deviations, supporting

our notion that the measure has some degree of social desirability bias and is ultimately weak in distinguishing large individual differences in moral identity. Thus, we are not surprised that only our diffused profile was different from the other three profiles in how Aquino and Reed assess moral identity, and we argue that this may well be the best evidence for convergent validity that can be produced from their limited assessment.

It is important that we acknowledge some conceptual limitations of our new measure. First, our measure and its theoretical foundation have a fairly strong Western, individualistic orientation. Though our Thomistic philosophical underpinning likely has significant overlap with non-Western ethical theories, it is still decidedly Western. For example, we include some "non-moral" qualities in our measure that may be considered ethical from a Confucian perspective but are not Thomistic virtues (e.g., politeness and loyalty). For the most part, our assessment of identity formation also assumes a strong notion of an independent, rather than interdependent, self – requiring that individuals undergo a fairly autonomous process of reflection and commitment about who they are and want to be. This developmental process may not apply well to people in collectivistic cultures that encourage a much more interdependent self that relies less heavily on autonomous reflection.

Second, our measure detects only *conscious* reflection and commitment about one's identity. We do not preclude that identity formation can be an implicit process. Even Erikson, who often emphasized the conscious formation processes, acknowledged that identity development is both conscious and unconscious. Unfortunately, psychologists to date have limited methodologies for tapping unconscious, implicit processes. And we did not attempt to take on this dimension in our own measure.

Third, our measure is a self-report, which limits its ability to provide a holistic picture of

one's identity. We attempted to capture identity as best we could, particularly in offering 77

different cross-cultural qualities that participants could choose to describe who they are and who

they want to be. Yet, there are likely hundreds of ways to describe oneself beyond our 77

qualities. Our self-report measure is also unable to capture the more complex nuances of oneself

that more open-ended methodologies (like narratives) can. For example, our measure is limited

in describing how participants' chosen qualities work together in unison (or not) and the degree

to which individuals have a larger (i.e., more than five), more complex web of qualities that

provide a sense of sameness and continuity over time. That being said, however, our self-report

measure is valuable in providing a time-efficient means to produce a meaningful (though

admittedly somewhat limited) picture of one's moral identity.

The last limitation that we would like to acknowledge is our rather narrow sample. The

vast majority of participants were white, and all were attending a private, Catholic university,

which implies a more affluent socioeconomic background. We need to replicate our findings

with a more diverse sample: more ethnically diverse, more gender balanced, and attending a

more diverse range of higher educational institutions as well as those choosing not to pursue

higher education. We would like to first replicate our findings primarily with emerging adults,

and eventually extend to studying participants' moral identity in adolescence and throughout

adulthood.

In sum, our new measure shows exciting potential. Unlike existing measures of moral

identity, it has an explicit philosophical underpinning as well as a psychological developmental

basis. Moreover, our first empirical investigation revealed that the new measure is able to

distinguish meaningful individual differences in moral identity, providing initial evidence of

construct validity.

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Table 1

Qualities listed in TEMIA

Thomistic virtues	**All other qualities**	
be brave (courageous)	be ambitious (driven, aspiring)	be sophisticated (worldly, cultured)
be compassionate (sympathetic, understanding)	be assertive (forthright, determined)	be studious (scholarly, academic)
be even-tempered (calm, stable)	be athletic (fit, able-bodied)	be successful (achieving goals)
be forgiving (willing to pardon others)	be attractive (good-looking or appealing personality)	be talented (skilled, adept)
be friendly (amiable, genial)	be broadminded (open to different ideas and beliefs)	be accepting of my portion in life (submitting to life's circumstances)
be generous (charitable, giving)	be capable (competent, effective, efficient)	choose my own goals (selecting own purposes)
be hardworking (diligent, persevering)	be cautious (careful, judicious)	enjoy life (enjoying food, leisure, etc.)
be helpful (working for the welfare of others)	be clean (neat, tidy)	feel a sense of belonging (feeling that others care about me)
be honest (genuine, sincere)	be creative (uniqueness, imagination)	live a varied life (filled with challenge, novelty, and change)
be humble (modest, knowing your limitations)	be curious (interested in everything, exploring)	live an exciting life (stimulating experiences)
be kind (considerate, thoughtful)	be daring (seeking adventure, risk)	have authority (the right to lead or command)
be kind (considerate, thoughtful)	be dependable (responsible, reliable)	have self-respect (belief in one's own worth)
be moderate (avoiding extremes of feeling and action)	be energetic (lively, vibrant)	have social power (control over others, dominance)
be patient (tolerant, uncomplaining)	be free-spirited (uninhibited, spontaneous)	have social recognition (respect, approval by others)
be unselfish (altruistic, selfless)	be health-conscious (working to achieve physical and mental health)	have true friendship (close, supportive friends)
be unselfish (altruistic, selfless)	be independent (self-reliant, self-sufficient)	have wealth (material possessions, money)
have inner harmony (at peace with myself)	be influential (having an impact on people and events)	help provide family security (safety for loved ones)

Thomistic virtues	All other qualities	
have inner harmony (at peace with myself)	be joyful (sunny, cheerful)	preserve my public image (protecting my "face")
have self-discipline (self-restraint, resistance to temptation)	be loyal (faithful to my friends, group)	promote freedom (freedom of action and thought)
honor my parents and elders (showing respect)	be obedient (dutiful, following rules)	promote respect for tradition (preservation of time-honored customs)
promote world peace (free of war and conflict)	be polite (courtesy, good manners)	promote social order (stability of society)
work for equality (equal opportunity for all)	be popular (well-liked, favored by many)	promote a world of beauty (beauty of nature and the arts)
work toward social justice (correcting injustice, care for the weak)	be practical (realistic, sensible)	promote a world of beauty (beauty of nature and the arts)
	be proud (pleased with oneself)	promote a world of beauty (beauty of nature and the arts)
	be resourceful (clever and inventive)	reciprocate favors (avoidance of indebtedness)
	be romantic (tender, affectionate)	seek pleasure (gratification of desires)
	be self-indulgent (doing pleasant things)	promote national security (protection of my nation from enemies)

Table 2

Factor loadings for items in TEMIA's reflection and commitment scales, and eigenvalues of the

three identified factors

Items	Factor loadings		
	Ideal self reflection	Guiding commitment	Challenged commitment
I have thought a lot about how different qualities, values, and goals would play out in my life	**.71**	-.09	-.05
I have critically examined many different qualities, values, and goals I could strive for	**.71**	-.04	.04
I have considered how different qualities, values, and goals would impact my life	**.69**	-.05	.05
I have tried to figure out which of many different qualities, values, and goals would be good for me	**.61**	-.05	.07
I have thought a lot about the values and goals I strive for	**.58**	.13	-.03
I have seriously contemplated whether the qualities, values, and goals I want to embody would be a good fit for me	**.57**	.02	-.10
I have carefully thought about the kind of person I strive to be	**.54**	.16	-.06
I have evaluated which qualities, values, and goals would suit me	**.54**	.03	.00
I have talked with other people about the kind of person I want to be	.30	.16	-.03
I have tried to find out regularly what other people close to me think about the qualities, values, and goals I want to embrace	.25	.14	.08
My commitments to what I do in life are derived from the five statements above	-.05	**.90**	.02
My purpose in life reflects the five statements above	-.07	**.68**	-.12
I am deeply dedicated to striving towards the five qualities, values, and goals I identified above	.12	**.67**	-.03
I regularly use the five statements above to decide what types of activities and events I partake in	.13	**.65**	.12
I often sacrifice my other interests or pleasures in order to work toward the five qualities, values, and goals I identified above	.11	**.46**	.05
If something better came along, my commitment to the five statements above would change	-.01	.03	**.69**
If there are competing interests in a particular situation, my five chosen qualities, values, or goals may not be	.18	.00	**.58**

evident to others			
In some situations, I may not act on my five chosen qualities, values, or goals	-.06	-.10	**.52**
If I cannot achieve the five qualities, values, and goals I identified above, I am willing to settle for less	-.16	.11	**.44**
Eigenvalues	5.20	2.35	1.48
Percent of variance explained	27.34	12.39	7.78

Table 3

Means and standard deviations of the four defining variables for each cluster

	Cluster 1: moral identity achieved (n = 61)	Cluster 2: moral identity moratorium (n = 57)	Cluster 3: identity diffusion (n = 19)	Cluster 4: non-moral identity moratorium (n = 78)
Thomistic virtue total	8.13 (3.62)	7.02 (1.87)	4.84 (3.34)	1.94 (1.54)
Ideal self reflection	5.85 (0.59)	5.34 (0.54)	3.80 (0.77)	5.78 (0.52)
Challenged commitment	3.02 (0.73)	4.25 (0.74)	5.18 (0.96)	4.25 (0.70)
Guiding commitment	5.89 (0.65)	4.61 (0.96)	3.77 (0.59)	4.79 (1.00)

Note. Possible scores for Thomistic virtue total ranged from 0 to 15, while possible ideal self-reflection, challenged commitment, and guiding commitment scores ranged from 1 to 7.

Table 4

Means and standard deviations of each of the morally-relevant variables for each cluster

	Cluster 1: moral identity achieved	Cluster 2: moral identity moratorium	Cluster 3: identity diffusion	Cluster 4: non-moral identity moratorium
Moral identity (existing measure)	5.69 (0.69)	5.49 (0.65)	4.73 (0.75)	5.37 (0.75)
Integrity	3.97 (0.46)	3.59 (0.39)	3.37 (0.48)	3.60 (0.40)
Community involvement frequency	2.27 (0.70)	2.21 (0.68)	1.81 (0.60)	2.26 (0.72)
Civic engagement motivation	3.90 (0.57)	3.80 (0.58)	3.51 (0.47)	3.46 (0.72)

Note. Possible scores for moral identity ranged from 1 to 7, while integrity, community

involvement frequency, and civic engagement motivation scores ranged from 1 to 5.