

Running Head: MORAL IDENTITY

The Self-importance of Moral Identity

Karl Aquino

University of Delaware

Americus Reed II

University of Pennsylvania

Under review at the Journal of Personality and Social Psychology. Please do not cite without the author's permission.

Author Note

Karl Aquino, Management Department, College of Business at the University of Delaware; Americus Reed II, Marketing Department, the Wharton School of the University of Pennsylvania. Both authors contributed equally to this paper. Order of authorship is alphabetical.

The authors would like to thank Daniel Berger, Sally Blount-White, Kris Byron, Shelly Farnham, Mark Forehand, Jennifer Gregan-Paxton, Steve Hoch, Rebecca Hochstein, Wes Hutchinson, Steve Grover, Stephanie Jen, Velitchka Kaltcheva, Nancy Kim, Karen Reed, Stewart Shapiro, Nicole Walkinshaw, Cassandra Wells and Patti Williams for either administrative and data collection assistance or comments on an earlier draft.

Correspondence concerning this article should be addressed to Americus Reed II, 3620 Locust Walk, 1400 Steinberg Hall-Dietrich Hall, Philadelphia, PA 19104-6371. Electronic correspondence may be sent to amreed@wharton.upenn.edu

Abstract

Recent theorizing in moral psychology extends rationalist models by calling attention to social and cultural influences (Haidt, 2001). Six studies using adolescents, university students, and adults measure the association between the self-importance of moral identity, moral cognitions and behavior. Items were developed to measure the self-importance of moral traits generated in two pilot studies. The psychometric properties of this explicit measure of moral identity were assessed through an examination of the underlying factor structure (study one), and convergent and discriminant validity analyses (studies two and three). Lastly, the relationship between the self-importance of moral identity, various psychological outcomes and behaviors was examined (studies four, five and six). The results are discussed in terms of models of moral behavior, social identity measurement, and the need to consider moral self-conceptions in explaining moral conduct.

"The only thing necessary for the triumph of evil is for good men to do nothing."

Edmund Burke (1729-1797)

An ongoing question in the study of moral behavior is when and why people act in the service of human welfare. One of the most influential theoretical approaches for answering this question is the cognitive developmental model initially proposed by Piaget (1932) and later extended by Kohlberg (1971) and others (Rest, 1979). The central tenet of this model is that the sophistication of a person's moral reasoning predicts moral behavior (cf. Kohlberg, 1969; 1984; Kohlberg & Hersh, 1977; Haan, Smith & Block, 1968; Kohlberg & Kramer, 1969) and, indeed, there is evidence supporting this hypothesis (Gibbs, Basinger & Fuller, 1992; Rest & Navarez, 1994). Kohlberg never claimed or implied that competent moral reasoning was sufficient to explain moral behavior, only that it helped to inform moral behavior. However, it is difficult to argue with the fact that moral reasoning is central to his framework. More recently, moral psychology has begun to focus on other influences besides moral reasoning (cf. Haidt, 2001). For example, the socio-cognitive model (Bandura, 1996, 1999) argues that moral standards and self-sanctions are important predictors of moral behavior. Although Kohlberg identified a variety of important mechanisms beyond moral reasoning, such as ego controls (Kohlberg & Candee, 1984), one key difference between the cognitive developmental and the socio-cognitive model is that the former emphasizes moral reasoning, while the latter emphasizes self-regulatory mechanisms. Both aspects are important because in the absence of self-regulatory mechanisms, the ability to engage in complex moral thinking may have less of an effect on behavior. This article attempts to build upon both the cognitive-developmental model and the socio-cognitive approach by measuring and examining a psychological construct referred to as moral identity.

Moral identity has been described as one kind of self-regulatory mechanism that motivates moral action (e.g., Erikson, 1964; Blasi, 1984; Hart, Atkins & Ford, 1998; Damon & Hart, 1992). Although the term moral identity has been used before, earlier discussions have not fully explored the possibility that people's moral identity may consist of collectively shared, moral characteristics (for exceptions see Walker & Pitts, 1998; Lapsley and Lasky 2001). Like other social identities people embrace, it is

proposed here that moral identity can be a basis for social identification that people use to construct their self-definitions. And like other identities, a person's moral identity may be associated with certain beliefs, attitudes, and behaviors (Shih, Pittinsky & Ambady, 1999; Cheryan & Bodenhausen, 2000; Forehand, Deshpandé & Reed II, in press) particularly when that identity is highly self-important. This paper incorporates these premises into the definition of moral identity by grounding the construct in both self-concept and social identity theories (Tajfel, 1959; Tajfel & Turner, 1979; Turner & Oakes, 1986). First, empirical evidence supporting a definition of moral identity is presented. Second, an explicit measure of the self-importance of moral identity is developed and evidence for its construct validity is offered. Third, relations among moral identity, moral cognition, and moral behavior are tested.

Theoretical Background

The self and identity. Erikson (1964) proposed that an identity is rooted in the very core of one's being, involves being true to oneself in action, and is associated with respect for one's understanding of reality. Erikson's (1964) view of an identity as being true to one's self in action is echoed in Hart, Atkins, & Ford's (1998, p. 515) definition of moral identity as "a commitment to one's sense of self to lines of action that promote or protect the welfare of others." Work in the area of developmental models of self-identity suggested that identity includes some elements of the ideal self and functions as the ideal principle of action (Blasi, 1984; 1993). Blasi (1984) goes on to make several assertions about moral identity that are also assumed in this paper. First, he argues that peoples' moral identities can vary in content. This means that whereas one person may see being compassionate as central to his or her moral identity, another may emphasize being fair and just. Blasi's (1984) analysis suggests that even though there may be several non-overlapping moral traits that comprise each unique person's moral identity, there exists a set of common moral traits likely to be central to most peoples' moral self-definitions.

Blasi's (1984) second assertion is that being a moral person may be, but need not be a part of a person's overall self-definition. This means that the ideal of being a good or moral person may occupy different levels of centrality in peoples' self-concepts. This assertion does not necessarily contradict Erikson's (1964) view that identity is rooted at the very core of one's being; rather it suggests that having

a particular identity is not an either-or proposition. Instead, the self-importance of a given identity may change over time (Hart, et al., 1998) and, consequently, so too might its motivational strength. Although the self-importance of one's moral identity may change, what remains central to Blasi's (1984) view is that in the absence of a strong moral identity, the ability to execute complex moral judgments and present moral arguments is not necessarily a required antecedent of moral behavior. The primacy of moral identity in motivating moral conduct is more strongly asserted by Damon & Hart (1992) who state that "there are both theoretical and empirical reasons to believe that the centrality of morality to self may be the *single most powerful* [italics ours] determiner of concordance between moral judgment and conduct....people whose self-concept is organized around their moral beliefs are highly likely to translate those beliefs into action consistently throughout their lives" (Damon & Hart, 1992 , p. 455).

In sum, prior theory and research on moral identity has clearly linked this construct to moral behavior. Unfortunately, there have been relatively few attempts to measure the self-importance of moral identity and empirically test its relationship to moral cognition and behavior. One reason for this is the dearth of reliable measures of moral identity consistent with the conceptual definitions proposed in the literature. For example, Hart, et al. (1998) operationalized moral identity as the willingness to volunteer for community service. In doing so, they acknowledged that this measure inadequately captures the degree to which the commitment to help others is connected to the sense of self and identity. There have also been few attempts to conceptualize the self-importance of moral identity as being organized around specific moral traits and as having theoretical properties similar to other kinds of social identities a person may adopt.

Moral identity as a parameter of social identity

Every individual has the capacity to identify with others on a multitude of variables including, but not limited to shared traits, common familial bonds, or similar interests. These variables may be abstracted to higher order social identities linked to avocation, political, religious or ethnic groups (Deaux, Reid, Mizrahi, & Ethier, 1995). Together, the many social identities that people possess constitute their social self-schema, defined as an organized and unique knowledge structure in memory

that links social identities to the self (Markus, 1977). The social self-schema organizes one's social identities and directs attention to new self-relevant information. This general tendency to differentially process self-relevant information has been shown to occur for diverse characteristics like gender (Skitka & Maslach, 1996), mathematical aptitude (Lips, 1996), and other kinds of personality traits (Fekken & Holden, 1992). Thus, it seems reasonable to suggest that self-conceptions can also be organized around moral characteristics, and that moral identity is another potential social identity that may be a part of a person's social self-schema.

Moral identity is defined in this paper as a self-conception organized around a set of moral traits. The definition of moral identity presented here is trait specific and based on recent social cognition oriented definitions of the self. Hence, moral identity is viewed in this study as linked to specific moral traits, but may also be amenable to a distinct mental image of what a moral person is likely to think, feel and do (Kihlstrom & Klein, 1994). Therefore, although rooted in a trait based conceptualization, it is presumed that a person's moral identity may have a social referent that could be a real membership group (e.g., fellow peace corp. volunteers), an abstracted ideal (e.g., God), a known individual (e.g., Big Brother in a mentoring program) an unknown individual (e.g., Mother Teresa)—or any social construction. As long as the person attempts to see the world in terms of the proscriptive implications of moral characteristics linked to that social construction, then it is hypothesized that the person has adopted moral identity as part of their social self-schema (cf. Reed II, 2002).

Extending the link between moral identity and moral action.

The definition of moral identity as being organized around specific moral traits has several advantages over other ways of describing a social identity. One advantage hearkens back to Blasi's (1984) thesis that some traits (e.g., being honest, compassionate, or loyal) may be more central to a person's self-concept than others (e.g., being generous or forgiving). A benefit of adopting a trait-based definition of moral identity is that it capitalizes on the psychological phenomena of spreading activation (cf. Anderson, 1983) by assuming that moral traits form part of a network of connected components (cf. Kihlstrom & Cantor, 1984). Consequently, to measure moral identity, it should not be necessary, in principle, to

discover the entire universe of traits that might comprise a person's unique moral identity. Rather, all that is needed to invoke and subsequently measure moral identity is to activate a subset of moral traits that are linked to other moral traits that may be more central to a particular person's self-concept (cf. Kihlstrom & Kleine, 1994).

Another advantage of the trait-based definition is that it provides a way of addressing a methodological limitation of the extant social identity literature; namely, that social identities have typically been operationalized at such a high level of abstraction (e.g., ethnicity, gender, political affiliation) that they often collapse multiple identities. People possess multiple social identities that become more or less salient in different contexts (e.g., Giles & Johnson, 1987; Turner, Hogg, Oakes, Reicher & Wetherell, 1987; Hinkle & Brown, 1990; Hogg, 1992; Abrams, 1994). By evoking abstract social identities (e.g. ethnicity), one may unknowingly invoke others (e.g., political identity) that share common characteristics. In contrast, the definition of moral identity presented here, and the instrument developed to measure its self-importance, are organized around specific traits that were empirically shown to be associated with what it means to be a moral person. For this reason, it is expected that a trait-based approach for measuring moral identity is less likely to invoke overlapping identities because it is content specific.

Finally, it was noted earlier that Erikson (1964) considered being authentic to one's self in how one behaves as another aspect of identity. This argument implies that people with a strong moral identity should strive to maintain consistency between conceptions of their moral self and their actions in the world. Several other writers have made a similar claim (Blasi, 1984; Hart, et al., 1998; Younis & Yates, 1999). The definition of moral identity proposed here implies that if the identity is deeply linked to a person's self-conception it will tend to be relatively stable over time. However, this does not mean that moral identity is a personality characteristic. Like other social identities that make up a person's social self-schema, it can be activated or suppressed by contextual, situational, or even individual difference variables (Forehand, et. al., in press). Moral identity may also assume greater or lesser importance over time as a function of socio-emotional maturity and life experience (Hart, et al., 1998). Nevertheless, it is

presumed the stronger the self-importance of the moral traits that define a person's moral identity, the more likely this identity will be invoked across a wide range of situations and the stronger will be its association with moral cognitions and moral behavior.

Distinguishing Moral Identity From Moral Reasoning

Moral identity does not supplant the cognitive developmental model or the idea of moral reasoning as a predictor of moral action. Rather, it complements this approach by identifying a social psychological motivator of moral conduct. However, moral identity differs from moral reasoning in that one's level of cognitive sophistication is not the key theoretical element of the former. According to Kohlberg, engaging in moral behavior depends to some degree on both cognitive and perspective-taking ability (Kohlberg, 1969, 1976), a presumption that has been supported by studies showing positive relationships between IQ and perspective taking skill and moral maturity (Rest, 1979). In contrast, according to the definition presented here, the motivational driver between moral identity and behavior is the likelihood that a person views certain moral traits as being essential to his or her self-concept. Although some have argued that there is no theoretical reason to presume that having low cognitive or perspective-taking ability impedes this process (cf. Haidt, 2001), there is reason to believe that the ability to conceptualize consistent traits that determine a stable self does require a certain level of cognitive sophistication and an understanding of personality (cf. Selman, 1980). Nevertheless, the conception of moral identity proposed here views cognitive ability, as measured by indices like IQ, as being relatively less important than the cognitive developmental model.

In sum, while moral reasoning and cognitive moral development are important variables for explaining moral behavior, they are only part of the story. Imagine a person who comes to truly believe that a set of moral ideals is an essential part of who they are; indeed it defines their ideal self. This thought exercise might conjure up exemplars such as Mother Teresa, Martin Luther King, or Jesus Christ. What is curiously absent from previous analyses of moral behavior and moral character is an explicit consideration of the individual's self-concept and social identity. This omission is theoretically relevant because without a direct implication to the self-concept, moral reasoning, moral cognition, or even a

feeling of goodwill need not necessarily lead to moral action. Based on the aforementioned conceptual arguments, the following sections describe a series of studies designed to further develop the construct of the self-importance of moral identity and demonstrate its ability to predict moral cognitions and behavior. An overview of these studies and the samples used for each is presented in Appendix A.

Phase 1: Measuring Moral Identity

Pilot Study 1: Trait Identification

To measure moral identity as defined here, it was first necessary to identify a set of traits that could reliably invoke this identity. This was the purpose of Pilot Study 1. It is important to note that these traits are used only as salience induction stimuli. In other words, based on the earlier argument that moral traits form an associative network for the higher-order construct of moral identity, it is presumed that the complete set of traits that make up a person's unique moral identity need not be identified in order to invoke that identity. All that is required is that some of the trait stimuli used to make one's moral identity salient are linked to other traits that form part of that person's self-conception.

There is empirical evidence supporting the notion that tapping certain trait stimuli can invoke a broader associative network of related traits. Past research has shown that stimulus cues such as words can heighten the salience of a particular social identity (Hong, Morris, Chiu & Martínez, 2000; Chatman & von Hippel, 2001; Forehand, et. al, in press). Recent research in naturalistic moral conceptions and moral character has begun to identify key moral traits and the moral cognitive prototypes they represent (Lapsley & Lasky 2001; Walker & Pitts, 1998). Similarly, through an inductive process, Pilot Study 1 in this article seeks to identify a set of traits that many people may consider to be characteristic of a moral person. These traits were then used as identity invoking stimuli in subsequent studies, recognizing that they do not comprise an exhaustive set of traits that all persons in all places would consider as being central to their unique moral identities.

Sample and procedure. One-hundred and sixteen male and one-hundred and twelve female undergraduate business students at the University of Delaware participated in the trait identification pilot study in partial fulfillment of a research requirement. Average age in years was 20.4 (SD=2.28). Of those

reporting demographic data, 10 were African-American, 4 were Asian/Pacific Islander, 202 were Caucasian, 1 was Hispanic and 11 responded “other.” They were asked to think of personal traits, characteristics or qualities that a moral person possesses. Participants were then asked to list as many as they could in an open-ended response format. This procedure resulted in the identification of 376 non-overlapping moral traits, characteristics or qualities. A content analysis of the traits was conducted in which undisputed synonymous traits were combined. This procedure reduced the list to 19 distinct traits: Caring, Compassionate, Conscientious, Considerate, Dependable, Ethical, Fair, Forgiving, Friendly, Generous, Giving, Hardworking, Helpful, Honest, Kind, Loyal, Religious, Trustworthy, and Understanding.

Prior theory in social cognition (Kihlstrom & Cantor, 1984) suggests that several traits should be included as stimuli to increase the likelihood of activating the network mapping onto a person’s moral identity. At the same time, to ensure that the traits mapped primarily onto moral identity and not some other social identity, it was desirable to select only those traits that a reasonable percentage of respondents identified as being characteristic of a moral person. To balance breadth and precision, only traits that were mentioned by at least 30 percent of the respondents were selected as stimuli. This threshold resulted in the selection of the following nine traits: Caring, Compassionate, Fair, Friendly, Generous, Helpful, Hardworking, Honest and Kind.

At this point, it can be argued that these nine traits are not the only ones that are characteristic of a moral person. Furthermore, one could argue that some of the nine selected traits are not even essential for being a moral person. In response, it is re-emphasized that the goal of Pilot Study 1 was not to generate an exhaustive list of traits that map onto every persons’ moral identity. It is possible that data collected from a different sample might have yielded the selection of a slightly different set of traits. However, the conceptual premise that underlies the current definition of moral identity requires merely that the selected traits invoke a set of associations with other traits that are aligned with a person’s moral self-concept. These traits may be the nine traits listed above, or they might include others that are more relevant to a particular individual. Having said this, it should also be noted that the traits selected were

identified through an inductive process and were recognized by a reasonably large proportion of respondents as being characteristic of a moral person. The traits also appear to have content validity as they correspond to many of the traits that moral educators (e.g., Bennett, 1991; Damon, 1977) and character-building organizations (e.g., Character Counts Coalition) have identified as defining a person of character. Furthermore, the traits identified closely correspond to other research that has investigated moral cognitive prototypes (Lapsley & Lasky 2001; Walker & Pitts, 1998). Nevertheless, it was decided that further evidence should be obtained that these nine traits have sufficient content validity as identity-invoking stimuli. This was the purpose of Pilot Study 2.

Pilot Study 2: Trait Validation

Sample and procedure. The sample consisted of three groups of people who had varying levels of educational, work, and life experience. One group consisted of MBA students at the University of Chicago. The second group consisted of high school students from a South Florida High School. The third group consisted of undergraduates enrolled in a physics course at the University of Delaware. Table 1 shows descriptive statistics for each sample.

 Insert Table 1 here

Participants in each group were presented a list of the nine moral traits identified in Pilot Study 1 and were asked to indicate on a scale of 1 to 5 the extent to which they believed it is necessary (1=absolutely unnecessary 5=absolutely necessary) for someone to possess each of the characteristics in order to be considered a moral person. For comparison purposes, two traits – “selfish” and “ruthless” – believed to possibly be characteristic of an immoral person were also included, as was the trait “distant,” which should be viewed as being fairly neutral in judging moral character.

Results. The mean ratings for each of the nine moral traits as well as the comparison traits are also shown in Table 2.

Insert Table 2 here

On average, this diverse group of respondents judged all of the moral traits to be above the midpoint of the scale, indicating that a fair number of the respondents considered the traits as being necessary for describing a moral person. The traits were judged as being considerably more necessary than those presumed to be either less moral (ruthless, selfish) or fairly neutral (distant). Based on these results, it is justifiable to include all nine traits as salience inducing stimuli. The instrument developed to measure the self-importance of these traits (i.e., moral identity) is described in the next section.

Study 1: Instrument Development

Two pilot studies identified a set of traits that may reliably activate a person's moral identity. This section describes the development of a scale to measure the self-importance of these traits. Item construction was based on the following theoretical properties of identity described by Erikson (1964): 1) identity is rooted in the very core of one's being and 2) identity means being true to oneself in action. These two aspects of moral identity follow a long tradition of social psychological research that posits both private and public dimensions of the self (cf. James, 1890; Fenigstein, Scheier & Buss, 1975; Schlenker, 1980). For example, theorists have argued that general self-awareness may be characterized by distinct processes of introspection to one's inner thoughts and feelings (i.e., an internal aspect of identity) and a general sensitivity to the self as a social object that has an effect on others (i.e., a socially situated self—cf. Fenigstein, et., al., 1975).

Seven items were adapted from previous instruments purported to measure the self-importance of ethnic identity (e.g., Hofman, 1985; Larkey & Hecht, 1995). Six additional items were developed to assess a range of actions that might represent socially symbolic demonstrations of one's moral identity (see Table 3). The psychometric properties of these items were assessed in two samples. In the first sample, the underlying factor structure of the items was examined using exploratory factor analysis (EFA). The resulting factor structure was then cross-validated in a second sample using confirmatory factor analysis (CFA).

Exploratory factor analysis (EFA).

Sample and procedure. The sample consisted of 363 undergraduate students from three universities. One-hundred and forty-four respondents were business students at the University of Delaware¹; 193 were business students at the University of Florida; and 26 were business students from Morehouse College enrolled in a marketing research class. The University of Delaware and University of Florida samples completed the questionnaire as partial fulfillment of a research requirement. The Morehouse College students completed the survey as part of a classroom exercise. Of those reporting their gender, two-hundred were male and 161 were female. They averaged 19.7 (SD=3.3) years of age. Of those providing information about their ethnicity, 255 identified themselves as Caucasian, 54 as African-American, 20 as Asian, 23 as Hispanic, and 1 as Native American. In both the University of Delaware and University of Florida samples, participants completed the questionnaire in the Department of Marketing's behavioral lab. Participants in the Morehouse College sample completed the survey in class. The course instructor, who was blind to the goals of the study, administered the survey.

Measures. The nine stimulus traits and the 13 items assessing their self-importance were used to measure moral identity (see Table 3). The stem question for the survey was as follows:

“Listed below are some characteristics that may describe a person (list of nine traits). The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions.”

Participants answered the 13 items shown in Table 3 using a 5-point (1=strongly disagree, 5=strongly agree) Likert scale.

Results and discussion. A principal components analysis with varimax rotation was conducted on the items comprising the moral identity instrument. The results are also shown in Table 3.

Insert Table 3 here

Inspection of the eigenvalues, scree plot, and factor loadings showed that two factors underlie these items. The following criteria were used to determine whether an item loaded on its underlying factor: 1) the item had to have a factor loading of .50 or better on one factor, 2) a loading of less than .40 on the second factor, and 3) the cross-loading differential across the two factors must have been less than .20. Eleven items met these criteria. The first factor consists of six items tapping the degree to which the traits are reflected in the respondent's actions in the world, referred to hereafter as symbolization. The second factor consists of five items tapping the degree to which the moral traits are central to the self-concept, referred to hereafter as internalization. These items were averaged into scales that showed acceptable internal consistency reliabilities of .77 and .71 for symbolization and internalization, respectively. This two-factor model was cross-validated using a new sample.

Confirmatory factor analysis (CFA)

Sample and procedure. The sample for this CFA consisted of adult community residents located throughout the United States. The community residents were all alumni of the University of Delaware's College of Business and Economics. A list of names and contact information for nine-hundred-and-twenty-seven alumni were provided by the College's Alumni office. Mail surveys were sent to persons on the list who reported a United States address. The moral identity measure was part of a more comprehensive survey assessment that included several other measures that were not of direct interest in the present research. The survey included a cover letter explaining that the purpose of the study was to assess peoples' beliefs about engaging in certain activities. The letter informed respondents that all answers to the survey would remain confidential. Of those who received the survey, 347 provided usable data on the moral identity items (37 percent response rate).

Seventy-percent of the respondents were female. The average age was 42.1 years ($SD=10.7$) and their average years of work experience was 19.9 years ($SD=11.1$). Twenty nine percent of respondents reported working in executive level positions, 17 percent were upper level managers, 30 percent were mid level managers, 4 percent were first level supervisors, and 22 percent were non-managerial employees. Ninety-six percent of the respondents were White.

Results and discussion. A CFA was performed on the alumni sample to cross-validate the two-factor solution resulting from the EFA. LISREL 8.3 (Joreskog & Sorbom, 1993) was used to evaluate the fit of the proposed model. The covariance matrix was used as input for the CFA. Bollen's (1989) recommendation to interpret multiple indexes of fit was followed. Thus, LISREL fit statistics were examined including the chi-square test, root-mean-square residual (RMSR), normed fit index (NFI; Bentler & Bonnet, 1980), goodness of fit index (GFI; Bentler, 1990), and the comparative fit index (CFI; Bentler, 1990).

The CFA showed that the two-factor model indicated by the EFA fit the data reasonably well, P^2 (43, N=347)=205.96, $p<.001$, RMSR=.04, GFI=.90, CFI=.87, NFI=.84. However, some of the fit statistics failed to reach the recommended levels (Bollen, 1989). When a model fails to achieve a good fit, deleting problematic indicators is the preferred solution (Anderson & Gerbing, 1988). An inspection of modification indices and standardized residuals indicated that fit could be improved by deleting the item "I often buy products that communicate the fact that I have these characteristics." After deleting this item, all of the fit statistics were well within acceptable ranges, P^2 (34, N=347)=85.46, $p<.001$, RMSR=.03, GFI=.95, CFI=.95, NFI=.92. Furthermore, the parameter estimates for all the indicators were significant.

The revised two-factor model was compared to a one-factor model to see whether the moral identity items are better represented as tapping a single underlying construct. A chi-square difference test indicated that the two-factor model fit the data significantly better than a one-factor model P^2 (10, N=347)=302.77, $p<.001$. The items loading on their respective factors were combined to form scales. The scales were modestly correlated ($r = .44$, $p<.001$) and both showed acceptable internal consistency reliabilities. Cronbach's alphas were .73 and .82 for the internalization (\underline{M} =4.6, \underline{SD} =.42) and revised symbolization (\underline{M} = 3.1, \underline{SD} =.76) scales, respectively.

The results of the CFA largely upheld the findings of the EFA, with the exception of a single item measuring symbolization. Since the symbolization scale was modified to a revised 10-item scale based on statistical considerations of model fit, it was desirable to cross-validate the results in yet another sample.

Furthermore, examination of the convergent and discriminant validity of the revised explicit measure (shown in Appendix B) was also warranted to provide additional evidence of construct validity. These were the main purposes of Phase 2.

Phase 2: Establishing Construct Validity

A scale demonstrates convergent validity if it is related to conceptually similar measures (Campbell & Fiske, 1959). Discriminant validity is shown when a scale is unrelated to measures of conceptually dissimilar constructs. Although what follows is not an exhaustive compilation of measures, each was chosen because it either represented a construct that appears to be conceptually similar, but not identical to moral identity as defined in this paper, or is a construct presumed to differ conceptually. Data from five independent samples were used to assess convergent and discriminant validity. Data from three of these samples were used to conduct a second CFA. The samples are briefly described below. Table 4 summarizes the demographic characteristics of each sample..

Insert Table 4 here

Sample A: Fifty-three University of Pennsylvania undergraduates enrolled in an introductory marketing class completed the moral identity measure at the beginning of the semester. Approximately six weeks later, they completed the same questionnaire along with several others that were used to provide evidence of convergent and discriminant validity. Students received course credit for their participation. Of the fifty-three students who completed the initial moral identity measure, 44 completed the measure six weeks later along with the questionnaires for assessing convergent and discriminant validity.

Sample B: One-hundred undergraduates from the University of Washington completed the moral identity measure on two occasions (with a 6 week interval) to fulfill a research requirement. On the second occasion, students also completed several other questionnaires. Of the students who completed the

initial moral identity measure, 53 completed the measure six weeks later along with the questionnaires for assessing convergent and discriminant validity.

Sample C: Fifty-seven undergraduates from Georgia State University completed the moral identity measure on two occasions (with a four week interval). On the second occasion, they also completed several other questionnaires. Participants received course credit for their participation. Of the students who completed the initial moral identity measure, 51 completed the moral identity measure along with other questionnaires.

Sample D. One-hundred-thirty-eight University of Pennsylvania undergraduates enrolled in an introductory marketing class completed the moral identity measure at the beginning of the semester. Four weeks later, 124 of the original 138 participants completed an implicit measure used to establish convergent validity (described below). Students received course credit for their participation.

Sample E. Fifty-five students enrolled in two Master's level organizational behavior classes at the University of Delaware completed the moral identity measure prior to a class lecture on the role of personality in organizations. Six weeks later, prior to conducting a case analysis involving ethical decision-making, they completed Rest's (1979) Defining Issues Test (DIT) to assess moral reasoning. The confidentiality of students' responses was maintained by assigning code numbers to each survey. The scores on the DIT were used by the instructor to assign students to groups for a non-graded, in-class exercise that was unrelated to this study. After completing both questionnaires, the results were reported to students and used as the basis for a class discussion on business ethics. Fifty-two students completed both questionnaires.

Study 2: Convergent Validity via Strength of Moral Self-Associations

The authors are not aware of pre-existing instruments that measure the self-importance of moral identity. Therefore, as an initial assessment of convergent validity, a measure that taps automaticity of moral associations to the self-concept was developed. It is expected that this measure will be positively correlated to both dimensions of the revised 10-item explicit measure of moral identity because past research suggests that implicit measures of explicit constructs tend to represent theoretically different, but

related constructs (cf. Greenwald & Farnham, 2000; exp 1, page 1027). Hence, a positive correlation is expected because the explicit measure of moral identity measures the self-importance of the moral traits to a person's self-concept and the implicit measure assesses the non-conscious, automatic strength of association between a person's self-concept and the moral traits identified in phase 1 (cf. Greenwald, McGhee & Schwartz, 1998).

Implicit measure. The implicit association test (IAT) is a general-purpose procedure for testing the strength of automatic association between target concepts (Greenwald, et al., 1998). An implicit measure was developed because it seems reasonable to assume that many individuals will be motivated to express that they possess the traits in question, either to please the experimenter (Schlenker, 1980) or as a reflection of a more general self-positivity bias (Taylor & Brown, 1988). Aside from providing convergent validity evidence, an implicit measure that assesses the strength of association between moral traits and the self-concept would be less affected by self-presentational concerns because such measures tend to be less amenable to conscious control (Greenwald, et al., 1998; Greenwald & Farnham, 2000). Detailed descriptions of the implicit association test and analyses of its internal and external validity exist elsewhere (Greenwald & Farnham, 2000; Dasgupta, McGhee, Greenwald & Banaji, 2000; Rudman, Greenwald, Mellott & Schwartz, 1999). For the sake of brevity, these will not be duplicated here except to describe the experimental procedure used for the implicit measure. A more detailed description of the procedure is presented in Appendix C.

Participants, Method and Procedure. Sample D completed the 10-item explicit moral identity measure. One month later, they completed the implicit measure. The implicit measure was administered on computer by having participants respond to two sets of items that represent a possibly associated concept and an attribute pair (e.g., the 19 non-overlapping traits from Pilot Study 1, their antonyms and the target concept of "me" vs. "not me"). Association between the concept and attribute that share a response is inferred to be stronger the faster that the participant can respond to randomized, alternative pairings of counterbalanced attribute pairs and target concepts (Greenwald & Farnham, 2000). Therefore, the strength of association between the original 19 moral traits identified in Pilot Study 1 was measured

by observing the difference in speed between a condition in which the moral traits (and their antonyms) and the “me” (“not me”) target concept was presented together—typically fast—and a condition in which the moral traits (and their antonyms) and the “not me” (“me”) target concept was presented—typically slow. If the 10-item revised explicit measure of moral identity were actually tapping the self-importance (of the moral traits) linked to a person’s moral identity, then the explicit measure should be positively correlated with a measure of the strength of association of the moral traits to a person’s self-concept (i.e., the implicit measure described above).

Data Reduction. Data were retained only for the critical trial blocks. Consistent with Greenwald et al., (1998) procedures, data reduction consisted of three steps: 1) the first two practice trials of each data collection block were dropped due to their typically lengthy latencies, 2) latencies greater than 3,000 ms were recoded to 3,000 ms and latencies less than 300 ms were recoded to 300 ms and 3) logarithm transformation was used to normalize the distribution of the raw response latencies in each trial.

Results, discussion and limitations: An initial analysis examined the effect of the order (see Appendix C) of the condition in which the moral traits (and their antonyms) and the “me” (“not me”) target concept was presented together and the condition in which the moral traits (and their antonyms) and the “not me” (“me”) target concept was presented together. This variable had no significant effect on the average response latency of the critical trials. Overall, and consistent with prior research using the (IAT), participants responded much more quickly when associating “me” (not me) with the positive concepts—moral traits (negative concepts--antonyms). The implicit association effect (mean latency for the self + negative [i.e., antonyms of the moral traits block] minus mean latency for the self + positive [i.e., the moral traits block]) was strong, Cohen’s $d = 1.31$, $F(1, 124) = 188$, $p < .001$. Supplementary analyses showed that sex of the participant did not moderate the magnitude of the implicit association effect, ($F < 1$).

Insert Table 5 here

Means for internalization and symbolization dimensions of the 10-item revised explicit measure of moral identity are reported in Table 5, classified by sex. Analysis of Variance (ANOVA) of the explicit measure of moral identity revealed that there was no effect of gender on internalization, but a modest effect of gender on symbolization. Table 5 also provides correlations among the implicit association measure and the internalization and symbolization dimensions of the 10-item explicit measure of moral identity taken one month prior. Consistent with Study 1, the two measures of internalization (Cronbach's $\alpha = .83$) and symbolization (Cronbach's $\alpha = .82$) were modestly correlated, ($r = .41$, $p < .001$).

Internalization was correlated with the implicit measure ($r = .33$, $p < .001$; $N = 124$) but the implicit measure was not correlated to symbolization ($r = .11$, $p > .20$; $N = 124$). At first glance, the correlation between the implicit measure and the internalization dimension does not appear large in magnitude. It is important to note, though, that the magnitude of both these correlations is comparable to those found in other research investigating the relationship between implicit and explicit measures of racial attitudes (McConnell & Leibold, 2001) and implicit and explicit measures of self-esteem (Greenwald & Farnham, 2000). For example, Greenwald & Farnham (2000, page 1027) reported an average correlation of .17 (ranging between .11 to .27; $N = 145$) between four separate measures of self-esteem and two separate implicit measures of self-esteem. Additionally, the explicit measure in this study was taken one month prior to the implicit measure whereas in most research that tests implicit and explicit measures, the measures are typically administered within cross-sectional designs (Greenwald & Farnham, 2000).

Taken together, these results provide some evidence for convergent validity in that an alternative method of assessing the underlying strength of associations of the moral traits to a person's self-concept was positively correlated with the internalization dimension of the explicit measure of moral identity. Additionally, since the explicit measure of moral identity used only a subset (9) of the moral traits used in the implicit measure (the original 19 from Pilot Study 1), the positive correlation in this study provides preliminary and indirect evidence for the theoretical assertion that one need only include subset of trait stimuli to activate a person's moral identity.

Study 3: Further Tests of Convergent Validity and Tests of Discriminant Validity

The associations between the explicit measure and scores on the following instruments presumed to measure theoretically related constructs were assessed to further establish convergent validity. All of the measures described below, with the exception of the Defining Issues Test (DIT) (Rest, 1979), were collected from Samples A, B, and C. The DIT was collected from Sample E.

Normlessness. A four-item ($\alpha=.76$) Normlessness scale (Kohn & Schooler, 1983) was used to measure people's propensity to approve of situations where there is a high expectancy that socially unapproved behaviors are required to achieve given goals. It is expected that this construct should be negatively related to moral identity because the core idea of normlessness is an individual-centered viewpoint that certain people at certain times may not respect norms, may not trust others to respect them, may not perceive that there is a consensus with respect to appropriate behavior, and may be prepared to act in deviant ways.

Religiosity. The relationship between religiosity and morality is complicated and controversial. For example, although Walker & Pitts (1998) found evidence that the moral person-concept is somewhat independent of the religious moral concept; their data suggest that for an individual to embody the moral traits identified in their study is central to what it means to be a "highly religious person" (page 408). Since moral identity is presumed to reflect widely endorsed moral ideals and principles that may partially overlap with certain religious values, one might expect a slight positive but somewhat weak, relationship. The five-item "other orthodox Christian beliefs" subscale of Brown's (1962) religiosity measure ($\alpha = .74$) was used to measure the extent to which a person held various religious beliefs.

Sympathy. A defining characteristic of morality is that a person shows concern for the needs and welfare of others (Eisenberg, 2000). Thus, it was expected that compared to those for whom the self-importance of moral traits are not high, people who have a strong sense of the self-importance of moral traits should report being more sympathetic towards helping others who may be in need. The eight-item "nurturance" dimension ($\alpha=.73$) of the Acceptance of Welfare scale (Ahmed & Jackson, 1979) was used to measure this orientation.

Negative reciprocity norm. The norm of negative reciprocity refers to the principle that it is appropriate to retaliate against physical or symbolic mistreatment (Gouldner, 1960). The norm endorses taking revenge against those who cause injury. If moral acts further human welfare, it seems reasonable to expect people with a strong moral identity to hold a less favorable view of the norm of negative reciprocity because it has the potential to cause harm or injury to another. This norm was measured with 9 items ($\alpha=.93$) developed by Eisenberger, Lynch, & Rohdieck (2002).

Moral reasoning. Although moral reasoning is viewed as distinct from moral identity in this paper, the two constructs might be correlated if people who have a strong moral identity are also more motivated to expend cognitive resources when contemplating an ethical dilemma. If this argument is correct, the people for whom moral identity has greater self-importance may devote more cognitive effort to understanding and trying to resolve an ethical problem, whereas people for whom a moral identity has low self-importance might rely on simple decision heuristics (e.g., What should I do to avoid punishment?). If this argument is correct, then people with a strong moral identity may be more likely to engage in a sophisticated decision making processes when faced with an ethical problem whereas people with a weak moral identity might be satisfied using simple decision heuristics (e.g., What should I do to avoid punishment?). This possibility was examined by using a short (three dilemma) version of Rest's (1979) Defining Issues Test (DIT) to assess moral reasoning. The DIT is the most widely used measure of cognitive moral development and hundreds of studies have validated its reliability and usefulness (see summary of research by Rest & Navarez, 1994). The P-score was used to indicate the degree to which a person's level of moral reasoning approaches the principled level that Kohlberg (1971) considered to be the highest level of moral reasoning (Rest, 1979). If people with a strong moral identity expend more cognitive effort to understanding and trying to resolve ethical dilemmas, then scores on the DIT may be positively correlated with moral identity. Five of the 52 MBA student respondents whose M-score on the DIT, a measure of whether respondents followed directions, exceeded the recommended cutoff (Center for the Study of Ethical Development, 1993) were deleted for the correlational analysis.

Discriminant validity measures

Discriminant validity was assessed by examining relations between the explicit moral identity measure and constructs presumed to be theoretically unrelated. It is expected that the 10-item explicit measure of moral identity would produce low or negligible correlations with the constructs listed below. Samples A, B, and C completed these instruments.

Self Esteem. Rosenberg's (1965) 10-item self-esteem scale ($\alpha=.85$) was designed to measure global feelings of self-worth or self-acceptance. It was not hypothesized that moral identity is in any way dependent upon self-esteem, thus it is expected that moral identity should not be related to overall global self-esteem.

Locus of Control. A twenty-four item measure of locus of control (Levenson, 1981) was administered. This measure ($\alpha=.68$) assesses three aspects: the extent to which people believe that they have control over their own lives, the extent to which people believe that other persons control the events in their life and the extent to which people believe that chance affects their experiences and outcomes. It was expected that moral identity would not be related to locus of control.

Social Anxiety. The six-item social anxiety subscale ($\alpha=.83$) of the public and private self-consciousness scale was also administered (Fenigstein, et al., 1975). Intuitively, one does not expect moral identity to be related to social anxiety because social anxiety is defined as a general discomfort in the presence of others (i.e., salient real or imagined audiences). Conceptually, this theoretical notion does not seem related to the relative self-importance of moral traits as defined by the internalization and symbolization measures of the explicit scale.

Results discussion and limitations. Prior to assessing convergent and discriminant validity, a second CFA was performed to cross-validate the results of the CFA reported in Study 1. Samples A, B, and C were combined for this analysis. In these three samples, the responses of 210 participants who completed the moral identity measure at Time 1 of the test-retest design were analyzed. Following the same analytical procedures described in Study 1, the sample covariance matrix was used as data input. The CFA showed that the revised factor model fit the data from the new sample very well, P^2 (34, $N=210$)=77.88, $p<.001$, $RMSR=.04$, $GFI=.93$, $CFI=.93$, $NFI=.88$. The scales also showed acceptable

internal consistency with Cronbach's alphas of .77 and .76 for the internalization ($\underline{M} = 4.5$, $\underline{SD} = .46$) and symbolization ($\underline{M} = 3.0$, $\underline{SD} = .64$) measures, respectively.

Convergent and discriminant validity assessments were subsequently performed on these measures based on the strong results obtained in the second CFA. The correlations among the two dimensions of the explicit measure of moral identity and the similar and dissimilar measures are shown in Table 6.

 Insert Table 6 here

The pattern of results generally conforms to the above predictions. As expected, both dimensions of moral identity are more modestly correlated with Sympathy and Negative Reciprocity. However, the two dimensions show a different pattern of correlations to Normlessness, Religiosity, and Moral Reasoning. Whereas internalization is more strongly correlated with Normlessness and Moral Reasoning than symbolization, the opposite is true with regard to Religiosity. The theoretical predictions made earlier are also largely supported with regard to discriminant validity. Both dimensions of moral identity show weak or non-significant relationships to presumably unrelated constructs. The one exception is that the symbolization dimension was modestly correlated to Self-Esteem.

In addition to assessing convergent and discriminant validity, the test-retest reliability of the moral identity instrument was also examined. The test-retest reliabilities for the internalization and symbolization scales were .49 and .71 ($N=148$), respectively, over a time interval that varied from four to six weeks depending on the sample. That these relationships are of modest magnitude supports the general argument that moral identity is not a stable trait and should not be treated as such. Rather, it may become more or less salient in different contexts. What might determine the extent to which this identity will be stable across situations is the presence of comparable or equivalent situational stimuli that make the identity salient. It is also possible that certain personality traits may influence its stability.

Lastly, the scales measuring the two dimensions of moral identity were evaluated for their sensitivity to social desirability response bias. Sixteen items ($\alpha=.74$) from Paulhus's (1989) scale were used to measure impression management. The scores on this instrument were correlated to scores on the two moral identity scales. The results showed that both internalization ($r = .18$, $p < .05$) and symbolization ($r = .26$, $p < .05$) were weakly related to impression management. This relationship, while not extremely strong, suggests that the items on this scale may be somewhat sensitive to self-presentation and impression management concerns.

Taken together, the pattern of correlations reported above supports the convergent and discriminant validity of the 10-item explicit measure of moral identity. It should be noted that these relationships result from data collected at different points in time over a period varying from four to six weeks. This time lag may account for why the associations among theoretically related measures and moral identity are not stronger. Nevertheless, the fact that they are not extremely strong supports the argument that moral identity is distinct from these constructs.

Phase 3: Predicting Psychological and Behavioral Outcomes

Phase 2 of this research provided evidence for the construct validity of the explicit measure of moral identity. In Phase 3, the predictive validity of the measure is examined by testing its relation to several psychological and behavioral outcomes. These outcomes include: 1) the extent to which a spontaneous self-concept description involves moral themes, 2) self-reported volunteerism, 3) the actual donation of food to help the needy.

Study 4: Moral Identity And The Emergence Of A Moral Spontaneous Self-Concept

McGuire, McGuire, Child & Fujioka (1978) proposed that particular group memberships are salient to a person if his or her membership in that group is "distinctive" in the social environment. For example, McGuire, McGuire & Winton (1979) asked grade school children to talk for a few minutes about themselves. Results showed that girls from households where their gender was in the minority were more likely to mention gender than were girls from households where their gender made up the majority. This effect was evidence of a construct termed the spontaneous self-concept (McGuire et al.,

1978; 1979). Similar effects were demonstrated in another study where the salience of ethnic identity was found to affect informal self-descriptions (McGuire et al., 1978; see also Forehand & Deshpande, 2001; Grier & Deshpande 2001; Forehand, et al., in press). If the explicit measure of moral identity actually taps an aspect of the social self-schema that is organized around moral traits, then one would expect that an open ended response to the question “describe yourself” is likely to elicit a spontaneous self-description that reflects moral self-definitions particularly for those who possess a strong internalized or symbolized moral identity.

Participants: A sample of 160 south Florida high school students participated in the study. Their average age was 16.7 years (SD=1.28). Among those providing demographic information, eighty-two identified themselves as female and seventy-three as male. Sixty-nine reported their ethnicity as Caucasian, 41 as African-American, 5 as Asian/Pacific Islander, 24 as Hispanic, 3 as Native American, 1 as Middle-Eastern, and 6 as Other.

Method and Procedure. A high school teacher who was blind to the study hypotheses collected data at three time periods. Students were informed that participation was voluntary and that they would not be penalized in any way for refusing to participate.

Measures. At time one, students filled out the explicit moral identity measure. Two months later, they completed seven weekly “writing assignments.” For one of the writing assignments they were asked to respond to the following statement: “How would you describe yourself – discuss who you are as a person, what is important to you and what qualities or characteristics do you like / dislike about yourself. Write your response on the attached paper.”

Moral self-concept. Three undergraduate research assistants independently judged the spontaneous self-concept descriptions. Judges were asked to rate each description on a 7-point Likert scale (1=not moral, 7=highly moral) to assess the salience of moral self-definitions. Each judge was given the list of 9 traits and asked to examine them. Judges were then asked to read each participant’s self-description and then to give a rating of the self-description’s moral intensity; that is, the extent to which the self-description holistically reflected self-expression of the nine traits. The inter-rater reliability was

sufficient (Cronbach's $\alpha = .81$). Judges ratings were averaged to represent the extent to which the person's self-description was indicative of a highly moral person via trait expression.

Results, discussion and limitations. The results showed that both Internalization ($M=4.04$, $S.D.=.67$ $r=.39$ $p<.001$) and Symbolization ($M=3.04$, $s.d.=.67$ $r=.28$, $p<.001$) were significantly correlated with the external judges' ratings of the moral content of the self-concept descriptions. Although the magnitude of these correlations is modest, it is important to keep in mind that the moral content of their self-descriptions emerged even though subjects could have talked about absolutely anything in describing themselves. Thus, of all the possible ways they could have presented themselves to others, it appears that many chose a self-description that was organized around moral characteristics. Further, the propensity to do this was positively related to the explicit moral identity measure that was taken some two months earlier. This finding is consistent with prior research. Hart & Fegley (1995), investigated the link between self-understanding and moral judgment in a small group of 30 minority individuals pre-identified as committed to caring for others in the community. Their finding is consistent with the results from Study 4 in that they found that participants who were predetermined to be high on pro-social dimensions were more likely to describe themselves in terms of moral personality traits and goals as compared to a matched control group. Hence, the evidence presented in this study is conceptually consistent with the idea that moral identity is indeed one of the potential identities that may comprise a person's self-schema (i.e., working self-concept (McGuire, et al., 1978)) and that this identity is being tapped by the explicit measure developed in this article.

Study 5: Moral Identity and Self reported Volunteerism

In the tradition of moral development theorists (e.g., Eisenberg, 2002; Gilligan, 1982), moral action is defined as social responsiveness to the needs of others. Given this definition, it is expected that moral identity will predict the frequency with which people engage in activities that benefit others. Furthermore, it is expected that their psychological responses to having participated in these activities will be influenced by the self-importance of their moral identity such that people who are high in moral identity will report a stronger sense of having freely chosen to engage in these activities. The prediction is

based on the assumption that people who are high in moral identity are more likely to pursue moral actions in the absence of external or social pressures to do so (Hart, et al., 1998). It is also predicted that these persons will derive greater intrinsic satisfaction and a higher level of psychological involvement in these activities because such actions are consistent with their self-conceptions (Hart, et al., 1998; Younis & Yates, 1999).

Participants. Participants were from the University of Delaware Alumni sample described in Study 1 of Phase 1. Three-hundred and thirty participants from the sample described in the confirmatory factor analysis portion of Study 1 provided usable data on all the variables for this study.

Measures.

Moral identity. The revised 10-item instrument was used to measure this construct. Cronbach's alpha reliabilities were (α)= .70 and (α)= .80 for the internalization and symbolization scales, respectively.

Self-reported volunteering. Participants were asked to indicate whether or not they had ever participated in the following activities within the last two years: *volunteering at a local homeless shelter, helping feed the hungry, organizing a food drive, mentoring troubled youth, visiting patients at a nursing home*. These activities were selected because they are clearly acts that promote human welfare. Participants answered "yes" or "no" to this question. If they answered "no" to these particular activities, then they were asked to list any similar activities that they may have participated in within the last two years. If they reported engaging in any of the activities the researchers presented, or in similar activities that they themselves listed, then they were coded as having acted in the service of human welfare within the last 2 years. The coding format for this variable was therefore dichotomous (0=No, 1=Yes).

Psychological responses to volunteering. If participants reported engaging in the specific activities described to them by the researchers, or in other similar activities they identified, then participants were asked several questions about their experiences with those activities. These questions assessed: a) the amount of intrinsic satisfaction they derived from these activities, b) the extent to which their participation in these activities was voluntary, and c) the extent to which they felt deeply involved in

those activities. Unger & Kernan's (1983) measure of perceptions of subjective leisure was used to assess these psychological states. Respondents answered each question on a 5-point Likert scale format (1=Strongly disagree, 5=Strongly agree). The Cronbach's alpha reliabilities were .88, .77, and .74. for the measures of intrinsic satisfaction, voluntary choice, and level of involvement scales, respectively.

Controls. Self-reported volunteerism may be influenced by social desirability concerns. Furthermore, Phase 2 of this study suggested that the symbolization measure may be susceptible to social desirability response bias. Consequently, 16 items from Paulhus's (1989) measure of impression management were included in the survey to control for this effect ($\alpha=.80$). Gender was included as a control variable in the model because it has been suggested that women may be more oriented towards an ethic of care than men (Gilligan, 1982). As a result, they may be more likely to volunteer for activities that contribute directly to human welfare. This variable was dummy coded (0=Male, 1=Female) such that male represented the reference category. Age was also used as a control variable because people at different life stages may vary in the amount of time they devote to volunteer activities. On the one hand, a case can be made that as people get older and assume more responsibilities, the amount of time they can allocate to volunteering decreases. However, it may also be that once they reach a certain age and become financially more secure, they are more willing and able to take time off work to volunteer. Since the direction of the age effect is unclear, and the variable is not of direct interest in our study, no predictions are made about its relation to volunteerism other than that it is a likely predictor that should be used as a control prior to testing the effects of moral identity.

Results, discussion and limitations. A binary logit model was used to analyze participants' responses to the first dependent measure: whether or not they reported engaging in activities that benefit human welfare over the last two years. Sixty-two percent of respondents reported having volunteered for some community service activity. The model predicting volunteerism included age, gender, and a measure of impression management as controls along with the independent variables of internalization and symbolization. The means, standard deviations and correlations amongst all variables are shown in Table 7. Table 8 shows the results of the logit and regression analyses. There were significant effects for

age, internalization and symbolization. The Table shows that for every unit increase in internalization, the odds that a person engaged in some volunteer activity increased by 110% ($\chi^2 = 5.77$, $p=.02$) and for every unit increase in symbolization, the odds that a person engaged in some volunteer activity in the past two years increased by 79% ($\chi^2 = 8.47$, $p=.004$).²

 Insert Table 7 and Table 8 about here

For the second set of dependent measures, regression analyses were performed on the three psychological states associated with volunteering. Like the logit analysis, the models included age, gender and impression management as controls along with internalization and symbolization. These results are also presented in Table 8.

The Table shows significant effects for age, ($b = .01$, $p<.05$) symbolization ($b = .34$, $p<.001$) and impression management ($b = .22$, $p<.04$) on the intrinsic satisfaction derived from the volunteer activities. As expected, the direction of the effects shows that people who scored higher on the symbolization measure of moral identity were more likely to report a higher level of perceived intrinsic satisfaction with their self-reported volunteer activities in the past two years. There was a significant effect for internalization ($b = .32$, $p< .001$) and a marginally significant effect of symbolization ($b = .10$, $p=.05$) on the extent to which participants felt that they had freely volunteered for these activities. The direction of the effect indicated that people who scored higher on the internalization and symbolization measures were more likely to report having freely chosen to engage in volunteer activities. Finally, there was a significant effect for age ($b = .01$, $p<.01$) and symbolization ($b = .34$, $p<.001$) on the extent to which participants felt psychologically involved in the activities.

Overall, the results of the model predicting self-reported volunteerism and the psychological reactions to such behavior are both consistent with the theoretical predictions. However, with respect to

the psychological states associated with these activities, symbolization appears to be more strongly related to these outcomes than internalization.

Study 5 has two notable limitations. First, the design is cross-sectional. Second, even though a measure of impression management was used as a control variable, the study relies on self-reports of volunteerism that are prone to errors of recollection or social desirability response bias. Study 6 was conducted to address these limitations. This study provides a stronger test of the conceptual arguments presented in the outset of this paper because the self-importance of moral identity is separated from the dependent variable in time. Furthermore, the dependent variable is actual behavior as recorded by an external observer.

Study 6: Moral Identity and Actual Donation Behavior

Following the basic argument of this paper that moral identity should be related to moral action, Study 6 used the explicit measure of moral identity to predict peoples' willingness to donate food to help the needy. It is predicted that people who are high in moral identity will be a) more willing to donate food and b) more willing to donate a larger quantity of food as compared to those who are lower in moral identity.

Participants and Procedure. Participants in this study were the high school students described in Study 4. Of the 160 students from the sample, 145 provided usable data on all study variables. Three months after completing the moral identity instrument and one month after completing the spontaneous self-concept writing assignment, students were given an opportunity to engage in a moral act. A food drive was instituted to the class by the teacher as a normal part of the end of school routine. The food drive provided a natural field experiment for studying the link between moral identity and moral behavior. The food drive was part of a broader school-based program to promote civic involvement and participation. The teacher gave the following description of the food drive:

“For the next two days, I will place a box near the front of the class in which you may deposit different food items that I will then donate to [the teacher stated the name of a local charity that donates food to the needy]. It is entirely up to you whether or not to donate any food items, and

whether you do so or not will have no effect on your grade in the class. You can give as many food items as you want, as long as the items are not perishable. This means that you should not donate fresh fruits, meats, vegetables, or any food that needs to be frozen. Canned foods, prepared foods that can be stored in the cupboard, or powdered drink or soup mixes are all fine.”

It can be seen from the description that the teacher fully explained to all students that their willingness to donate food would in no way affect their grade. At the end of the drive, the students were fully debriefed by the teacher about the purposes of collecting data on moral identity and how the survey they completed earlier might relate to the willingness to donate food to the needy.

Measures

Moral identity. The revised 10-item explicit measure developed in Phase 2 was used to measure this construct. The Cronbach’s alpha reliabilities were $(\alpha) = .78$ and $(\alpha) = .69$ for the internalization and symbolization scales, respectively.

Donation behavior. In order to not disrupt the class curriculum, students who intended to donate cans were told to drop off the cans in a plastic bag either 30 minutes before school or during a 35 minute lunch period during the two day collection period. Unbeknownst to the students, the teacher unobtrusively and secretly noted if students dropped off their cans. This procedure was used to minimize experimenter demand effects that might result from the teacher telling students that their donations would be directly recorded. The teacher, rather than an outside observer, recorded the students’ contributions because the food drive was just one of several other community service activities that the students participated in throughout the year. Using the teacher to record data therefore preserved the naturalistic properties of the environment in which the students performed their daily activities. This donation behavior was coded as either 0 (did not donate) or 1 (donated). Later, when the students were not around, the teacher counted the cans for each student who donated and compiled the counts in a master list. Finally, after the two-day collection period, the teacher put the cans in a centralized box and sent them to the charitable organization.

Normative influence. Since the teacher gave students instructions for the food drive, it is possible that some students may have complied because they were influenced by an authority. Therefore, a ten-item measure of susceptibility to influence ($\alpha=.61$) was included in the questionnaire assessing moral identity. These items were the reward dependence subscale of Cloninger, Svrakic, & Przybeck's (1993) character inventory scale.

Results, discussion and limitations. Two analyses were conducted. The first was a logistic regression predicting the dichotomous variable of whether or not students donated food; the second was a linear regression predicting the number of cans of food donated. Age, gender, and susceptibility to normative influence were included as control variables along with the measures of internalization and symbolization as independent variables. The means, standard deviations and correlations amongst all variables are shown in Table 9. The results of the logistic and linear regression analyses are shown in Table 10.

 Insert Table 9 and Table 10 about here

The Table shows that the strongest predictor of donation behavior was gender. The odds of females donating cans to the food drive were 2.33 times the odds of males donating cans to the food drive. The only other significant predictor in the model was internalization. Students who had a strongly internalized moral identity were more likely to donate food than those who did not. More specifically, for every unit increase in internalization, the odds of donating cans increased by 80%.

The model predicting the quantity of food donated shows that only internalization significantly predicted this variable. As expected, there was a significant positive effect of internalization on the number of cans donated ($b=.25$, $p<.05$). Of course, it should be pointed out that Study 6 only examines one objectively verifiable behavioral outcome: the donation of food to the needy. Additional evidence for the predictive validity of moral identity should be obtained with other moral and immoral behavioral outcomes. Nonetheless, taken together the above results are consistent with the findings from the self-

report study of volunteerism and the theoretical conception of moral identity outlined in this paper. Specifically, they show that at least one dimension of moral identity predicts behaviors that clearly further the interests of others. This dimension presumably measures the extent to which a person considers the moral traits to be an important part of his or her self-concept.

General Discussion

This paper presents evidence for the existence and predictive validity of the moral identity construct. Moral identity has been described as “the pivot that transforms a shouldn’t (or should) into a mustn’t (or must)” (Goodman, 2000, pg. 51). Although many theorists have discussed the importance of moral identity as a motivator of moral conduct, very few empirical studies have tested this relationship (e.g., Hart, et al., 1998; Younis & Yates, 1999). The main contribution of this research is to demonstrate the relevance of moral identity as a predictor of moral cognition and behavior, as well as to introduce a reliable, construct valid, and easily administered method for evoking and measuring the self-importance of this identity.

The Self-importance of Moral Identity: Internalization and Symbolization Dimensions

The results showed that the explicit measure of moral identity developed here taps two dimensions of self-importance – one private, the other public – consistent with Erikson’s (1964) theoretical definition of an identity. The notion of a public and private self has been a common theme in social psychology (cf. James, 1890; Fenigstein, et al., 1975; Schlenker, 1980) and the two dimensions of moral identity were presumed a priori to tap these distinct aspects of self. The stability of these dimensions was upheld in three separate analyses, suggesting that the public-private distinction is a valid theoretical property of moral identity. However, these dimensions did not show the same strength or pattern of association to various outcomes and theoretically related constructs. Whereas the internalization dimension appears to directly tap into the self-importance of the moral characteristics, the symbolization dimension taps a more general sensitivity to the moral self as a social object whose actions in the world can convey that one has these characteristics. The data showed that both dimensions predicted the emergence of a moral spontaneous self-concept (Study 4) and self-reported volunteering

(Study 5), but only the internalization dimension predicted actual donation behavior (Study 6).

Furthermore, in the tests of convergent validity, the internalization dimension showed the strongest relationships to normlessness and moral reasoning, whereas the symbolization dimension was more strongly correlated with religiosity (Study 3). Finally, Study 2 showed that compared to symbolization, internalization was more strongly related to the implicit measure that assesses the strength of association between the moral traits and the self-concept. One interpretation of these differential patterns is that symbolization was more strongly correlated to those outcomes or measures that had a self-presentational or public dimension. For example, symbolization was correlated with a measure of impression management, indicating its potential susceptibility to self-presentational concerns. Also, the relationship between symbolization and self-reported volunteering was significant, whereas it was not significantly related to donation behavior that was measured unobtrusively. Religiosity, which may be viewed as a symbolic expression of a person's underlying commitment to certain moral principles, was more strongly related to symbolization than internalization. In contrast, for measures that did not directly locate the person within a recognized social context (e.g., moral reasoning, normlessness, the implicit measure of the strength of moral associations and the self-concept), the relationship was strongest with respect to the internalization dimension. The results across all of the studies presented here provide preliminary evidence for the construct of moral identity as defined in this paper, and the predictive ability of the measure designed to assess its self-importance.

Two arguments in this paper are that the construct of moral identity as conceptualized here is distinct from other identities and that the trait-based approach used to tap this identity minimizes the potential trait overlap with other social identities. However, no claim was made that the approach for measuring the self-importance of moral identity described in this article completely eliminates any potential overlap with other social identities. Such a goal would be impossible given the multi-faceted nature of the self. For example, it is possible that a person's self-conception of themselves in terms of their "religious identity" (cf. Walker & Pitts, 1998; study one) may invoke a subset of some of the moral traits identified in this study (e.g., a highly religious person sees herself as caring, honest, generous, etc.).

Recent research by Walker and Pitts' (1998) suggests a more complex relationship between the two constructs. For example, Walker and Pitts' (1998) index of inter-prototype similarity (ratio of shared to unique attributes) suggested that the moral person-concept and the religious person-concepts overlap somewhat but are not synonymous. The statistical analysis based on proto-typicality ratings suggests that although the effect is highly statistically significant, the variance in average proto-typicality ratings is quite low and both the proto-typicality ratings of the moral person concept's unique features, and features shared with the religious person concept are above the midpoint of the proto-typicality scale. Walker and Pitts (1998) suggest that the moral person-concept (as a cognitive prototype) is somewhat independent of the religious moral concept. This raises the question of whether moral identity is conceptually and empirically distinct from religious identity such that the relative self-importance of the two constructs lead to different theoretical predictions in different behavioral domains. This is an empirical question that should be addressed in future research. It is proposed here, though, that although there may be some trait overlap with respect to the two different identities, they should be differentially related to certain types of outcomes. For example, one plausible hypothesis might be that compared to moral identity, religious identity might be less strongly related to voluntary participation in activities that help individuals who hold memberships in religious out-groups.

If these kinds of questions are to be answered, then reliable instruments are needed to measure the self-importance of various kinds of social identities. By developing such an instrument, this research makes an important methodological contribution to the study of social identities in general. An instrument for measuring the self-importance of moral identity was shown to be internally consistent, stable in its underlying factor structure, construct valid, and predictive of psychological and behavioral outcomes. The explicit measure of moral identity is one of the first attempts to measure a specific social identity at the trait level (for notable exceptions see Ethier & Deaux, 1994; Walker & Pitts, 1998; Lapsley & Lasky 2001). Therefore, the efficacy of the trait-based approach taken in this study suggests a promising alternative to more abstract measures in that the method presented here may represent a useful template

for measuring any social identity that is amenable to trait generation. It remains for future studies to determine if this methodology can be successfully extended to other types of social identities.

Conclusions

In conclusion, the definition of moral identity proposed here is based on a view of the self-concept as multi-faceted. The definition draws on social identity theory (Tajfel, 1959; Tajfel & Turner, 1979; Turner & Oakes, 1986) to suggest that moral identity is one possible component of a person's social self-schema. This is important because any one of a person's social identities can become the basis of perception, conduct and behavior (e.g., Giles & Johnson, 1987; Turner, et al., 1987; Hinkle & Brown, 1990; Hogg, 1992). That a person's sense of who they are should relate to their actions is an extremely simple idea that is not new. But even though researchers have acknowledged "some [people] may consider their morality to be central to their self-identities, whereas others may consider it to be peripheral," (Damon, 1984, p. 110) almost no empirical research has systematically examined the relationship between the self-importance of moral identity and moral cognition and behavior. Therefore, this paper makes three relevant contributions to research in moral psychology. First, it presents a definition of the moral identity construct grounded in theories of social identity and the self-concept. Second, it provides evidence for the relationship between the self-importance of this identity on moral thought and action. And, third, it provides evidence for the construct and predictive validity of an easily administered explicit measure of moral identity.

References

- Ahmed, Sadrudin A. & Jackson, Douglas N. (1979), Psychographics for Social Policy Decisions: Welfare Assistance, *Journal of Consumer Research*, 5 (March), 229-239.
- Abrams, D. (1994). Social self-regulation. *Personality and Social Psychology Bulletin*, 20, 473-83.
- Anderson, J. R. (1983). The Architecture of Cognition. Cambridge, MA: Harvard University Press.
- Anderson, J. G., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, 3, 193-209.
- Bandura, A., Barbaranelli, C., Caprara, G.V., & Pastorelli C. (1996). Mechanisms of Moral Disengagement in the Exercise of Moral Agency. *Journal of Personality and Social Psychology*, 71, 364-374.
- Bennett, W.J. (1991). Moral literacy and the formation of character. In J.S. Benninga (Ed.), Moral, character, and civic education in the elementary school (pp. 131-138). New York: Teachers College Press.
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107, 238-46.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88(1), 1-45.
- Blasi, A. (1984). Moral Identity: Its role in moral functioning. In W. Kurtines & J. Gewirtz, (Eds.), Morality, moral behavior and moral development (pp. 128-139). New York: Wiley.
- Blasi, A. (1993). The development of identity: Some implications for moral functioning. In G.G. Naom & T.E. Wren (Eds.), The moral self (pp. 99-122). Cambridge, MA: MIT Press.
- Bollen, K.A. (1989), Structural Equations with Latent Variables. New York: Wiley.
- Brown, L.B. (1962). A study of religious belief. *British Journal of Psychology*, 53, 259-72.

- Campbell, D., & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.
- Center for the Study of Ethical Development (1993). Guide for the defining issues test. University of Minnesota.
- Chatman, C. M., & von Hippel, W. (2001). Attributional mediation of in-group bias. Journal of Experimental Social Psychology, 37(3), 267-272.
- Cheryan, S., & Bodenhausen, G. V. (2000). When positive stereotypes threaten intellectual performance: The psychological hazards of model minority status. Psychological Science, 11(5), 399-402.
- Cloninger, C. R., Svrakic, D. M., & Przybeck, T. R. (1993). A psychobiological model of temperament and character. Archives of General Psychiatry, 50(12), 975-990.
- Damon, W. (1977). The social world of the child. San Francisco: Jossey-Bass.
- Damon, W. (1984). Self-understanding and moral development from childhood to adolescence. In W. Kurtines & J. Gewirtz (Eds.), Morality, moral behavior and moral development (pp. 109-127). New York: Wiley.
- Damon, W., & Hart, D. (1992). Self-understanding and its role in social and moral development. In M. Bornstein & M. E. Lamb (Eds.), Developmental psychology: An advanced textbook, (3rd ed., pp. 421-464). Hillsdale, NJ: Lawrence Erlbaum.
- Dasgupta, N. McGhee, D. E., Greenwald, A. G., & Banaji, M.R. (2000). Automatic preference for White Americans: Eliminating the familiarity explanation. Journal of Experimental Social Psychology, 36, 316-328.
- Deaux, K., Reid, A., Mizrahi, K., & Ethier, K. A. (1995). Parameters of social identity. Journal of Personality & Social Psychology, 68(2), 280-291.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. Annual Review of Psychology, 51, 665-697.
- Eisenberger, R., Lynch, P., & Rohdieck, S. (2002). Biocultural influences on revenge. Unpublished manuscript, University of Delaware.

- Erikson, E.H. (1964). Insight and Responsibility. New York: Norton.
- Ethier, K., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. Journal of Personality and Social Psychology, 67(2), 243-251.
- Fekken, G. C., & Holden, R. R. (1992). Response latency evidence for viewing personality traits as schema indicators. Journal of Research in Personality, 26(2), 103-120.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and Theory. Journal of Consulting and Clinical Psychology, 43(4), 522-527.
- Forehand, M. R., & Deshpandé, R. (2001). What we see makes us who we are: Priming ethnic self-awareness and advertising response. Journal of Marketing Research, 38(3), 336-348.
- Forehand, M., Deshpandé, R., & Reed, A. II (in press). Identity salience and the influence of differential activation of the social self-schema on advertising response. Journal of Applied Psychology.
- Gibbs, J.C., Basinger, K.S., & Fuller, D. (1992). Moral maturity: Measuring the development of sociomoral reflection. Hillsdale, NJ: Erlbaum.
- Giles, H., & Johnson, P. (1987). Ethnolinguistic identity theory: A social psychological approach to language maintenance. International Journal of the Sociology of Language, 68, 256-269.
- Gilligan, C. (1982). In a different voice. Cambridge, MA: Harvard University Press.
- Goodman, J. F. (2000). Moral Education in Early Childhood: The Limits of Constructivism. Early Education & Development, 11, 37-54.
- Gouldner, A.W. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25, 161-178.
- Greenwald, A. G., & Farnham, S. D. (2000). Using the implicit association test to measure self-esteem and self-concept. Journal of Personality and Social Psychology, 79(6), 1022-38.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: the implicit association test. Journal of Personality and Social Psychology, 74, 1464-80.

- Grier, S. A., & Deshpande, R. (2001). Social Dimensions of consumer distinctiveness: The influence of group social status and identity on advertising persuasion. Journal of Marketing Research, 38(2), 216-224.
- Haidt, J. (2001). The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment. Psychological Review, 108(4), 814-834.
- Haan, N., Smith, B., & Block, J. (1968). Moral reasoning of young adults. Journal of Personality and Social Psychology, 36, 286-305.
- Hart, D., & Fegley, S. (1995). Prosocial behavior and caring in adolescence: Relations to moral judgment and self-understanding. Child Development, 66, 1346-1359.
- Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a Context for the Development of Moral Identity in Adolescence. Journal of Social Issues, 54, 513-530.
- Hinkle, S., & Brown, R. J. (1990). Intergroup comparisons and social identity: Some links and lacunae. In D. Abrams & M. A. Hogg (Ed.), Social Identity Theory: Constructive and critical advances (pp. 48-70). London: Harvester Wheatsheaf.
- Hofman, J.E. (1985). Arabs and Jews, Blacks and Whites: Identity and group relations. Journal of Multilingual and Multicultural Development, 6, 217-237.
- Hogg, M. A. (1992). The Social Psychology of Group Cohesiveness: From attraction to social identity. Hemel Hempstead and New York: Harvester Wheatsheaf and New York University Press.
- Hong, Y., Morris, M. W., Chiu, C., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. American Psychologist, 55(70), 709-720.
- James, W. (1890). The Principles of Psychology. Cambridge, MA: Harvard University Press (repr. 1950, New York: Dover Publications).
- Joreskog, K.G. & Sorbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language. Chicago, IL: Scientific Software.
- Kihlstrom, J. R., & Cantor N. (1984). Mental representations of the self. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 15). New York: Academic Press.

- Kihlstrom, J. F., & Klein, S. B. (1994). The self as a knowledge structure. In R. S. Wyer, Jr. & K. Thomas (Ed.), Handbook of social cognition: Vol. 1. Basic processes; Vol. 2. Applications (2nd ed.). (pp. 153-208). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Kohlberg, L., & Kramer, R. (1969). Continuities and discontinuities in childhood and adult moral development. Human development, 12, 93-120.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), Handbook of socialization theory and research (pp. 348-480). Chicago: Rand McNally.
- Kohlberg, L. (1971). From is to ought: How to commit the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.), Cognitive development and epistemology. New York: Academic Press.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive development approach. In T. Lickona (Ed.), Moral Development and Behavior: Theory, research, and social issues. New York: Holt.
- Kohlberg, L. (1984). Moral stages and moralization: The cognitive developmental approach. In Essays on moral development: Vol. 2. The psychology of moral development: The nature and validity of moral stages (pp. 170-205). San Francisco: Harper Row.
- Kohlberg, L., & Candee, D. (1984). The relationship of moral judgment to moral action. In L. Kohlberg, Essays on moral development: Vol. 2. The psychology of moral development (pp. 498-581). San Francisco: Harper & Row.
- Kohlberg, L., & Hersh, R. H. (1977). Moral development: A review of the theory. Theory into Practice, 16(2), 53-59.
- Kohn, M., & Schooler, C. (1983). Work and Personality: An inquiry into the impact of social stratification. Norwood, NJ: Ablex.
- Lapsley, D. K., & Lasky, B. (2001). Prototypic moral character. Identity, 1, 345-363.

- Larkey, L.K., & Hecht, M.L. (1995). A comparative study of African American and European American ethnic identity. International Journal of Intercultural Relations, 19, 483-504.
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), Research with the locus of control construct (Vol. 1, pp. 15-63). New York: Academic Press.
- Lips, H. M. (1996). Through the lens of mathematical/scientific self-schemas: Images of students' current and possible selves. Journal of Applied Social Psychology, 25 (19), 1671-1699.
- Markus, H. (1977). Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 35(2), 63-78.
- McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test, discriminatory behavior, and explicit measures of racial attitudes. Journal of Experimental Social Psychology, 37, 435-442.
- McGuire, W. J., McGuire, C. V., & Winton, W. (1979). Effects of household sex composition on the salience of one's gender in the spontaneous self-concept. Journal of Experimental Social Psychology, 15, 77-90.
- McGuire, W. J., McGuire, C. V., Child, P., & Fujioka, T. (1978). Salience of ethnicity in the spontaneous self-concept as a function of one's ethnic distinctiveness in the social environment. Journal of Personality and Social Psychology, 36(5), 511-520.
- Paulhus, D. (1989). Measurement and control of response bias. In J.P. Robinson, P.R. Shaver, & L. Wrightsman (Eds.), Measures of social psychological attitudes. NY: Academic Press.
- Piaget, J. (1932). The moral judgment of the child. NY: Free Press.
- Reed, A. II (2002). Social identity as a useful perspective for self-concept-based consumer research. Psychology and Marketing, 19(3), 235-266.
- Rest, J. (1979). Development in judging moral issues. Minneapolis: University of Minnesota Press.
- Rest, J., & Navarez, D. (1994). Moral development in the professions: Psychology and applied ethics. Hillsdale: Elbaum.

- Rest, J. R. (1979). Development in judging moral issues. Minneapolis: University of Minnesota Press.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Rudam, L. A., Greenwald, A. G., Mellott, D. S., & Schwartz, J. L. K. (1999). Measuring the automatic components of prejudice: Flexibility and generality of the implicit association test. Social Cognition, 17, 437-465.
- Schlenker, B. R. (1980). Impression management: The self concept, social identity and interpersonal relations. Monterey: Brooks/Cole.
- Selman, R. L. (1980). Growth of interpersonal understanding: Developmental and clinical analysis. New York: Academic.
- Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. Psychological Science, 10(1), 80-83.
- Skitka, L. J., & Maslach, C. (1996). Gender as schematic category: A role construct approach. Social Behavior and Personality, 24(1), 53-73.
- Tajfel, H. (1959). Quantitative judgment in social perception. British Journal of Psychology, 50, 16-29.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), The Social Psychology of Intergroup Relations (pp. 33-47). Monterey, CA: Brooks-Cole.
- Taylor, S. E., & Brown, J. (1988). Illusion and well-being: A social psychological perspective on mental health. Psychological Bulletin, 103, 193-210.
- Turner, J. C., Hogg, M. A., Oakes, P.J., Reicher, S. D., & Wetherell, M.S. (1987). Rediscovering the Social Group: A self-categorization theory. Oxford: Blackwell.
- Turner, J.C., & Oakes, P.J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism, and social influence. British Journal of Social Psychology, 25, 237-52.
- Unger, L., & Kernan, J. B. (1983). On the meaning of leisure: An investigation of some determinants of the subjective experience. Journal of Consumer Research, 9(3), 381-392.

Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. Developmental Psychology, 34, 403-419.

Younis, J., & Yates, M. (1999). Youth service and moral-civic identity: A case of everyday morality. Educational Psychology Review, 11, 361-376.

Table 1

Pilot study 2: Samples used and descriptive statistics

Sample	Gender	Age (SD)	Race
			White=37, African-
University of Chicago MBAs (N=59)	21 F, 38 M	30.0, (4.7)	American=3, Asian=14, Hispanic=1, Middle- Eastern=1, Other=1
			White=17, African-
High School students (N=47)	28 F 19 M	17.7, (.58)	American=15, Asian=1, Hispanic=11, Native American=1, Other=1
			White=27, African-
University of Delaware undergraduates (N=35)	7 F 28 M	20.1, (2.2)	American=1, Asian=2, Native American=1, Middle-Eastern=1, Other=2

Table 2

Pilot study 2: Validation of Moral Traits

	Mean	SD
Caring	4.2	(.91)
Compassionate	4.1	(.96)
Fair	4.5	(.72)
Friendly	3.6	(1.2)
Generous	3.5	(1.1)
Hard Working	3.5	(1.2)
Helpful	3.8	(1.1)
Honest	4.8	(.58)
Kind	3.8	(.99)
Ruthless	1.7	(.97)
Selfish	1.5	(.79)
Distant	2.0	(.82)

Table 3
Principal Components Analysis of Moral Identity Items

Item	Factor Loadings	
	Symbolization	Internalization
1. It would make me feel good to be a person who has these characteristics.	.00	<u>.62</u>
2. Being someone who has these characteristics is an important part of who I am	.22	<u>.70</u>
3. A big part of my emotional well-being is tied up in having these characteristics.	.04	.21
4. I would be ashamed to be a person who has these characteristics (R)	-.25	<u>.59</u>
5. Having these characteristics is not really important to me (R)	.08	<u>.71</u>
6. Having these characteristics is an important part of my sense of self.	.40	.61
7. I strongly desire to have these characteristics.	.32	<u>.66</u>
8. I often buy products that communicate the fact that I have these characteristics.	<u>.66</u>	-.02
9. I often wear clothes that identify me as having these characteristics.	<u>.67</u>	-.06
10. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.	<u>.60</u>	.26
11. The kinds of books and magazines that I read identify me as having these characteristics.	<u>.63</u>	.09
12. The fact that I have these characteristics is communicated to others by my membership in certain organizations.	<u>.72</u>	.16
13. I am actively involved in activities that communicate to others that I have these characteristics.	<u>.69</u>	.22
Eigenvalue	3.86	1.92
% of Variance explained	29.7	14.8

Note: Numbers in boldface indicate high factor loadings.

Table 4

Construct Validity: Samples used and descriptive statistics

Sample	Gender	Age, (SD)	Race
<u>A</u> University of Pennsylvania Undergraduates N=44	29 F, 15 M	20.1, (1.1)	White=27, African-American=1, Asian=13 Hispanic=1, Middle Eastern=1, Other=1
<u>B</u> University of Washington Undergraduates N=53	30 F, 23 M,	20.9, (1.5)	White=31, African-American=2, Asian=17, Middle-Eastern=1, Other=2
<u>C</u> Georgia State University undergraduates N=51	29 F, 22 M	26.5, (5.4)	White=25, African American=19, Asian=3, Middle-Eastern=1, 3=Other
<u>D</u> University of Pennsylvania Undergraduates N=138	71 F, 66 M	19.4, (.89)	White=69, African-American=4, Asian=48 Hispanic=7, Middle Eastern=2, Other=7
<u>E</u> University of Delaware MBAs N=52	16 F, 39 M	29.1, (6.0)	White=49, African-American=2, Asian=3, Middle Eastern=1

Table 5

Study 2: Measures of Explicit Moral Identity and Implicit Measure of
Strength of Association of Moral Traits and Self-concept Classified by Gender

Measure	Gender	
	Male	Female
	(n=60)	(n=64)
Implicit Measure (ms)		
M	397	412
SD	254	219
Explicit Moral Identity		
Internalization (I)		
M	4.49	4.45
SD	.603	.488
Symbolization (S)		
M	3.27 ^b	2.90
SD	.816	.676

Note: Total N=124. ^a $p < .0001$, ^b $p < .01$ is main effect of gender

Table 6

Study 3: Correlations Between the Explicit Measure of Moral Identity, Other Theoretically Related Constructs, and Theoretically Unrelated Constructs

Comparison Measure	Observed Correlations		
	Internalization (I)	Symbolization (S)	I+S
Theoretically Related Constructs			
Normlessness	-.27**	-.14	-.23**
Religiosity	.13	.27**	.26**
Moral Reasoning	.32*	.05	.22
Sympathy	.32***	.27**	.35***
Negative Reciprocity	-.29***	-.28**	-.34***
Theoretically Unrelated Constructs			
Self-Esteem	.07	.17*	.16
Locus of Control	.02	-.03	-.01
Social Anxiety	.04	-.01	.01
Impression Management	.18*	.26*	.27**

Note: (N=148). *** $p < .001$, ** $p < .01$, * $p < .05$

Table 7

Study 5: Means, Standard Deviations and Correlations amongst Independent and Dependent variables

Independent Variable(s)	Variable(s)											
	(á)	M	s.d.	(A)	(F)	(IM)	(I)	(S)	(V)	(IS)	(PF)	(DI)
Age (A)		42.3	10.8	---	.30** *	.24** *	- .13**	-.06	.15**	-.09	-.04	- .21**
Female (F)				---	---	.02	-.02	- .14**	-.02	-.04	-.06	-.08
Impression Management (IM)	.80	3.18	.53	---	---	---	.05	.17**	.03	.15**	.17**	-.00
Internalization (I)	.70	4.57	.42	---	---	---	---	.43** *	.19** *	.07	.33** *	.03
Symbolization (S)	.80	3.06	.67	---	---	---	---	---	.21** *	.30** *	.19**	.29** *
Dependent Variables												
Self-Reported Volunteerism (V)				---	---	---	---	---	---	.08	.21**	.07
Intrinsic Satisfaction (IS)	.88	3.21	.70	---	---	---	---	---	---	---	.27** *	.38** *
Perceived Freedom (PF)	.77	4.08	.49	---	---	---	---	---	---	---	---	.14**
Depth of Involvement (DI)	.74	2.74	.73	---	---	---	---	---	---	---	---	---

Note: ***p<.001, **p<.05, *p<.10

Table 8

Study 5: Results of Binary Logistic Regression and Multiple Regression Analysis on Self reported Moral Behavior

Independent variables	Dependent variables							
	<u>Self-Reported Volunteerism</u>		<u>Intrinsic satisfaction</u>		<u>Perceived Freedom</u>		<u>Depth of Involvement</u>	
	<i>b</i> (SE)	Wald	<i>b</i> (SE)	t	<i>b</i> (SE)	t	<i>b</i> (SE)	t
Age	.04 (.01)	8.52**	-.16 (.01)	-2.17**	.05(.00)	.69	-.19(.01)	-2.52**
Female	-.13 (.27)	.26	.06 (.15)	.79	-.07 (.07)	-1.00	.02(.11)	.28
Impression Management	-.20 (.24)	.73	.10 (.14)	1.41	.13(.06)	1.79	.03(.10)	.46
Internalization (I)	.61 (.32)	3.70*	-.11 (.21)	-1.48	.32(.10)	4.48***	-.09(.15)	-1.20
Symbolization (S)	.59 (.20)	8.98**	.29 (.084)	3.82***	.08(.05)	1.12	.35(.08)	4.83***
Model P ²	28.65***							
Cox and Snell R ²	.08							
Nagelkerke R ²	.11							
Adjusted R ²			.08		.16		.12	
F			4.20***		7.87***		6.28***	
df			5, 188		5, 188		5, 188	

Note: ***p<.001, **p<.05, *p<.10

Table 9

Study 6: Means, Standard Deviations and Correlations amongst Independent and Dependent variables

Independent Variable(s)	Variable(s)									
	(á)	M	SD	(A)	(F)	(NI)	(I)	(S)	(O)	(NC)
Age (A)	--	16.68	1.28	---	-.03	.01	-.15	.03	.06	-.15
Female (F)	--	.52	.50		---	.13	.29**	.28**	.25**	.16
Normative Influence (NI)	.61	3.40	.70			---	.40** *	.28**	.17*	.11
Internalization (I)	.78	4.05	.67				---	.40** *	.25**	.28**
Symbolization (S)	.69	3.10	.62					---	.14	.06
Dependent Variables										
Observed Donation (O)	--	.54	.50						---	.76** *
Number of Cans (NC)	.79	.97								---

Note: (N=145). ***p<.001, **p<.01, *p<.05

Table 10

Study 6: Results of Binary Logistic Regression and Multiple Regression Analysis on Actual Donation Behavior

Independent variables	Dependent variables			
	<u>Observed Donation</u>		<u>Number of Cans</u>	
	<i>b (SE)</i>	χ^2	<i>b (SE)</i>	t
Age	.17 (.14)	1.39	-.11 (.06)	-1.33
Gender	.85 (.37)	5.31**	.10 (.17)	1.17
Normative Influence	.23 (.28)	.656	.02 (.12)	.167
Internalization (I)	.59 (.32)	3.37*	.25 (.14)	2.63**
Symbolization (S)	-.05 (.32)	.022	-.06 (.14)	-.676
Model P ²	16.56**			
Cox and Snell R ²	.11			
Nagelkerke R ²	.14			
Adjusted R ²	.07			
F	3.13**			
df	5, 139			

Note: ***p<.001, **p<.05, *p<.10

Appendix A

Overview of Studies and Samples used for each

Study and Purpose	Sample
<u>Phase I (Measuring Moral Identity)</u>	
Pilot Study 1 (free-listing of moral traits)	1. Undergraduates (Delaware)
Pilot Study 2 (trait-validation)	2. High-school students, (Florida)
	3. Undergrads (Delaware)
	4. MBAs / (Chicago)
Study 1 (Instrument development)	5. Undergraduates (Delaware)
	6. Undergraduates (Florida)
	7. Undergraduates (Georgia)
	8. Adult Residents (Across country)
<u>Phase II (Establishing construct validity)</u>	
Study 2 (Convergent – Implicit Measure)	9. Undergraduates (Pennsylvania)
Study 3 (Convergent Discriminant)	10. Undergraduates (Pennsylvania)
	11. Undergraduates (Seattle)
	12. Undergraduates (Georgia)
	13. MBAs (Delaware)
<u>Phase III (Predicting outcomes)</u>	
Study 4 (Spontaneous self)	14. High-school students (Florida)
Study 5 (Self report volunteering)	Sample 8
Study 6 (Donation Behavior)	Sample 14

Appendix B

Revised 10 item Explicit Moral Identity Measure*

-
- I 1. It would make me feel good to be a person who has these characteristics.
- I 2. Being someone who has these characteristics is an important part of who I am.
- S 3. I often wear clothes that identify me as having these characteristics.
- I 4. I would be ashamed to be a person who had these characteristics. (R)
- S 5. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.
- S 6. The kinds of books and magazines that I read identify me as having these characteristics.
- I 7. Having these characteristics is not really important to me. (R)
- S 8. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
- S 9. I am actively involved in activities that communicate to others that I have these characteristics.
- I 10. I strongly desire to have these characteristics.

*I=Internalization items

S=Symbolization items

R=Reverse Coded

Appendix C

Implicit Test Procedure

Apparatus. To assess the strength of association between the self-concept and the moral traits identified in study one, participants performed the Implicit Association Test (IAT) developed by Greenwald, et. al (1998) and modified by the authors. Participants were administered the implicit measure using twelve Pentium-class IBM compatible workstations (display resolution 1024 x 768) in a networked classroom environment. Each computer station was separated by a cubicle partition to minimize distractions. Participants viewed the display from approximately 65 cm and gave left responses with the left forefinger (using the 'A' key) and right responses with the right forefinger (using the '5' key on the numeric pad). There was no significance in using these keys, other than duplicating key configuration in past research.

Overview. Participants completed the implicit measure in a series of 5 steps: a practice target-concept discrimination task (step 1), a practice attribute discrimination task (step 2), a combined target-concept/attribute discrimination task (step 3), a practice target-concept discrimination task with a reversed sorting procedure (step 4), and a final combined target-concept/attribute discrimination task with a reversed sorting procedure (step 5). The exact procedures used in each of these steps are described below. Steps 1, 2, and 4 constitute practice blocks used to familiarize participants with the sorting procedure and keys; steps 3 and 5 constitute critical test blocks used to measure response latencies. Practice blocks included 24 individual discrimination trials, critical test blocks included 40 trials. Each block began by describing the category discriminations required and assignment of response keys ('A' or '5') to categories. Throughout the test, reminder labels describing the assignment of response keys appear on the upper corners of the computer screen. Participants were able to progress through the 5 steps of the implicit measure at their own pace, using the space bar to move from task to task. All instructions and feedback were presented so that participants could fully read and comprehend before moving on. However, once a trial block began, participants could not pause or stop the procedure. Stimuli were presented in black letters on a white background, centered on the computer screen. The stimuli remained

on the screen until the participant provided a response. In the event of an error, a red 'X' replaced the stimuli word on the screen, disappearing when the participant pressed the appropriate key. At the end of each block, participants received feedback on their percentage correct. Error rates of 10-15 percent were ideal.

Implicit procedure

Step 1. Participants viewed a computer monitor that asked them to type in a set of “me” items that correspond to different aspects of their selves (e.g., their first name, nickname, birthday, city that they most identify with, and so forth). Participants were then asked to choose a set of “not me” items from various lists of different names, cities, possible dates etc. Participants were specifically instructed to choose items that they felt indifferent toward (as opposed to negative). These not me items corresponded to the same categories (i.e., different names, cities, possible dates etc.) chosen for the me items. Before beginning the practice discrimination task, participants were randomly assigned to one of two counterbalancing orders (these groups will heretofore be referred to as group 1 and group 2). Group 1 participants were instructed to press the A key with their left forefinger if the displayed word was a “me” item and to press the 5 key with their right forefinger if the displayed name was a “not me” item. The A and 5 keys contained small, round green stickers to help participants identify the correct keys. Group 2 participants were given reverse instructions that instructed them to press the A key for “not me” items and the 5 key for “me” items.

Step 2. Participants completed a practice discrimination task between “Positive” (i.e., the sixteen moral traits) and “Negative” (antonyms to the sixteen moral traits) concepts. All participants were instructed to press the A key (left) for positive concepts and the 5 key (right) for negative concepts.

Step 3. Participants completed a combined discrimination task. Group 1 participants were instructed to press the A key (left) if the presented concept was either an example of a “me” item or a positive concept (moral trait) and press the 5 key (right) if the presented concept was either an example of “not me” item or a negative concept (moral trait antonyms). Group 2 participants were instructed to press the A key (left) if the presented concept was either an example of a “not me” item or a positive concept

(moral trait) and press the 5 key (right) if the presented concept was either a “me” item or a negative concept (moral trait antonyms) sorted to the right. This speed with which participants could complete this discrimination task provided the first critical latency measure that will be used to calculate the implicit effect.

Step 4. Participants completed a second practice discrimination task between “me” and “not me” names that reversed the keys used in step 1. Group 1 participants were now instructed to press the A key with their left forefinger if the displayed name was a “not me” item and press the 5 key with their right forefinger if the displayed name was a “me” item. Group 2 participants were now instructed to press the A key with their left forefinger if the displayed name was a “me” item and press the 5 key with their right forefinger if the displayed name was a “not me” item.

Step 5. Participants completed a second combined discrimination task that reversed the “me” / “not me” used in step 3. Group 1 participants were instructed to press the A key (left) if the presented concept was either an example of a “not me” item or a positive (moral trait) concept and press the 5 key (right) if the presented concept was either an example of a “me” item or a negative (moral trait antonym) item sorted to the right. Group 2 participants were instructed to press the A key (left) if the presented concept was either an example of a “me” item or a positive (moral trait) item and press the 5 key (right) if the presented concept was either an example of “not me” item or a negative (moral trait antonym) item sorted to the right. This speed with which participants could complete this discrimination task provided the second critical latency measure that will be used to calculate the implicit effect.

Strength of Association between Moral traits and self-concept. To determine participant strength of association between “me” items and positive concepts (moral traits), an IAT score was calculated by comparing the participant’s response latencies in steps 3 and 5. To the extent that an individual associates the self (me items) with positive concepts (moral traits), he or she should respond more quickly during a combined discrimination task in which the “me” items and moral traits share a discrimination key than in a combined discrimination task in which the “me” items and negative concepts (moral trait antonyms) share a discrimination key. To calculate this IAT effect a difference score was calculated between the

average response latencies observed in steps 3 and 5. For group 1 participants, this score was calculated by subtracting the average latency in step 3 from the average latency in step 5. For group 2 participants, this score was calculated by subtracting the average latency in step 5 from the average latency in step 3.

Stimuli: Words were selected randomly and without replacement in each of the trials. The “me” and “not me” items consisted of 10 items each. The positive concepts (moral traits) consisted of the 19 moral traits identified in study 1 and the negative concepts consisted of their antonyms. Each stimulus word was viewed in random order an equal number of times during each trial (this format reflects a number of procedural changes made since publication of Greenwald, McGhee & Schwartz, 1998).

Endnotes

¹ This sample differed from the sample used to identify the traits that define a moral person.

² The effect for age indicated that for every unit increase in age, participants were 4.1% ($\chi^2 = 9.45$, $p=.002$) more likely to have engaged in some volunteering activity in the past two years.