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Having versus doing: The roles of moral identity internalization and symbolization for prosocial behaviors

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Abstract

Moral identity has been identified as a consistent predictor of prosocial behavior, but the specific relationship and predictive strength of its two dimensions, internalization ('having') and symbolization ('doing'), are less clear. The current article explores this through two self-report studies. In study 1 ($N = 228$) a series of hierarchical regression analyses showed that, for three out of four domains of prosocial behavior, symbolization was the only significant predictor and that its strength differed across outcomes. Building on these results, Study 2 ($N = 299$) proposed that the observed vs. anonymous nature of prosocial behavior could account for these differences. Unexpectedly, symbolization predicted both public and private behaviors, whereas internalization generally did not. Significant interactions between internalization and symbolization were also observed. These findings are discussed in relation to their theoretical implications and future moral identity research.

Keywords: moral identity, internalization, symbolization, prosocial behaviors

Having versus doing: The roles of moral identity internalization and symbolization for prosocial behaviors

Helping a friend move, donating blood, volunteering in the community, and empathizing with a sick friend are all examples of prosocial behaviors that can benefit both individuals and society at large (Penner, Dovidio, Piliavin, & Schroeder, 2005). Identifying the psychological antecedents and individual differences underlying such behaviors is important as it represents a step towards understanding how prosociality may be further promoted. One individual difference that has been linked to prosocial behavior in previous research is moral identity, defined as the degree to which being moral is fundamental to a person's identity (Aquino & Reed, 2002; Blasi, 1984). A recent meta-analysis indicates a positive relationship between moral identity and prosocial activity (Hertz & Krettenauer, 2016). However, a number of questions remain regarding the nature of this relationship, and its generalization across a variety of prosocial domains. The present study aims to extend prior research by empirically testing the relationships between the private (internalization) and public (symbolization) dimensions of moral identity and a range of self-reported prosocial behaviors measured using a new multifactorial scale.

1.1 Moral Identity

Individual differences in moral functioning were first acknowledged with the publication of Blasi's Self Model of moral action and identity (Blasi, 1983). Blasi asserted that the widely accepted cognitive-developmental account of moral cognition (Kohlberg, 1976) was insufficient for fully explaining moral performance. With the Self Model, he proposed moral identity as a self-regulatory mechanism in which the conception of morality can vary from one individual to another. For example, one person may highlight justice as central to their morality, while another accentuates kindness.

The concept of moral identity has since been further developed and refined, drawing on both trait-based and social cognitive perspectives (Aquino, Freeman, Reed II, Lim, & Felps, 2009; Aquino & Reed, 2002; Colby & Damon, 1992; Hardy & Carlo, 2005; Hart, Atkins, & Ford, 1998; Lapsley, 2004). Dominant in the current literature is the social cognitive perspective (Jennings, Mitchell, & Hannah, 2015), which describes moral identity as strengthening the accessibility of self-regulatory schemas that guide moral action (Aquino & Reed, 2002; Narvaez & Lapsley, 2009). The present article adopts Aquino and Reed's (2002) definition of moral identity as "a self-conception organized around a set of moral traits" (p. 1424). According to their view, the centrality of morality to an individual's identity creates chronically accessible self-schemas and moral behaviors.

They further suggest that there are two dimensions to moral identity: a private, 'having' side (*internalization*) and a public, 'doing' side (*symbolization*). Whereas internalization refers to the degree to which moral traits are central to one's self-concept, symbolization refers to the degree to which these moral traits are reflected in public choices and/or actions in identifiable social settings (Aquino & Reed, 2002). These two aspects of moral identity are conceptualized as being shaped by different motivational mechanisms (Winterich, Aquino, Mittal, & Swartz, 2013b). Internalization provokes a desire to maintain identity-behavior self-consistency (Blasi, 1984; Winterich et al., 2013b), whereas the motivation for symbolization may instead stem from self-presentational goals related to the recognition of the self as a social entity and self-affirming feedback of others (Baumeister, 1998; Jennings et al., 2015). To date, much of the research on moral identity has focused on internalization, which has led recent scholars to call for more attention to the 'doing' dimension (Jennings et al., 2015). As outlined below, current research on the relationship between moral identity and prosocial action, in particular, suggests that a clearer differentiation between the "having" and "doing" elements of moral identity is warranted.

1.2 Moral identity and prosocial behaviors

In a range of both correlational and experimental studies, moral identity has been identified as a significant independent predictor of prosocial behaviors (Hardy, Bean, & Olsen, 2015; Hertz & Krettenauer, 2016; Krettenauer & Casey, 2015; McFerran, Aquino, & Duffy, 2010; Reed, Aquino, & Levy, 2007; Reynolds & Ceranic, 2007) even when controlling for other possible motivational factors such as moral reasoning and emotions (Hardy, 2006). In multiple studies, the internalization dimension is used as a sole indicator of moral identity. In these studies, higher internalization has reliably predicted previous prosocial sports behavior (Sage, Kavussanu, Duda, Kavussanu, & Sage, 2006); previous charity and civic engagement in an adolescent population (Hardy et al., 2015); and donation intentions to both in- and out-groups (Winterich, Mittal, & Ross, 2009). While these studies provide important insights regarding the role of moral identity in general, and internalization in particular, they do not speak to the role of moral identity symbolization for prosocial behavior.

The current evidence suggests that when internalization and symbolization are scored separately, the nature of internalization as a predictor is empirically robust while that of symbolization is less consistent (Jennings et al., 2015). In studies using hypothetical vignettes and those measuring single-situation donation behaviors in an experimental context, internalization but not symbolization has significantly predicted concern for outgroups (Reed II & Aquino, 2003), hypothetical willingness to self-sacrifice (Crimston, Bain, Hornsey, & Bastian, 2016), willingness to donate (Aquino, McFerran, & Laven, 2011) and donation behavior in an adolescent population (Aquino & Reed, 2002). In contrast, the few studies that use self-reported measures of recalled real-world prosocial behaviors have all found symbolization to be a significant predictor. In a study of recalled volunteerism, for example, both dimensions of moral identity were significant, but symbolization appeared to be a stronger predictor for the effect (Aquino & Reed, 2002). In additional studies, symbolization but not internalization predicted past charitable donations (Reynolds & Ceranic, 2007), and only symbolization significantly moderated participants' tendencies to increase commitment to a prosocial initiative (Schaumberg & Wiltermuth, 2014). The extent to which the mixed results reported in previous work are explained by the varied types of prosocial outcomes examined, the different ways of measuring moral identity, or both, remains unclear.

In addition to the relatively scant and ambiguous literature on the independent effects of internalization and symbolization, there is only a small body of research that considers what may be driving these variations. Two possible explanations have been proposed. One study suggests that symbolization could be more strongly predictive for behaviors that have a public dimension (Mayer, Aquino, Greenbaum, & Kuenzi, 2012). A public prosocial act (e.g. donating to a collection box stationed at a cash register) is visible and may be driven by recognition, whereas a private prosocial act (e.g. anonymously giving money to charity) is one that is anonymous and may be more linked to internal processes of altruism and empathy (Carlo & Randall, 2002). The current article is the first that directly tests whether symbolization is related more strongly to public and observable behaviors, whereas internalization is related more strongly to anonymous and private behaviors, across a range of self-report prosocial behaviors.

Another supposition is that internalization and symbolization have a synergistic effect, for public but not private prosocial behaviors. Only two studies have tested how the two dimensions of moral identity might relate to one another when distinguishing between the public and private realms of behavior. They show an interaction effect for publically recognized behavior such that those individuals high in symbolization, and low in internalization, are more likely to engage in recognized charitable giving (Winterich et al., 2013a; Winterich, Mittal & Aquino, 2013b). The authors' proposed explanation for this finding is that recognition makes the public aspect of symbolization salient, and therefore symbolization is a weak predictor for behaviors that are not publically recognized, where high internalization instead drives the behavior (Winterich et al., 2013b). These experimental studies are focused specifically on charitable behavior, however, which raises the question of whether similar interactions between symbolization and internalization are observed when measuring other types of real-world prosocial acts, in both public and private domains. The present study tests the interaction between internalization and symbolization with a variety of private and public prosocial behaviors.

1.3 Prosocial behaviors and their measurement

As is the case with moral identity, there is considerable variation in the approaches used to measure prosocial behavior in previous research. As noted above, one common method is to use singular measures in an experimental context (e.g. asking how much a participant would donate to charity) to investigate explicit questions about the correlates of the behavior being addressed. As Mulder and Aquino (2003) have argued, however, moral identity may be a more reliable predictor of prosocial behavior in real life when these behaviors are measured across a period of time, rather than in a single situation. In addition, a number of scholars warn against using a single type of behavior to indicate prosocialness in general (Caprara, Steca, Zelli, & Capanna, 2005; Carlo & Randall, 2002).

Another type of measurement conceptualizes prosocial behavior as a unidimensional global construct. The first scales of this type aimed to tap into a single dimension underlying a range of altruistic behaviors intended to benefit others (Johnson et al., 1989; Rushton, Chrisjohn, & Fekken, 1981). However, subsequent research has shown that prosociality is best understood as a multidimensional construct made up of several different behavioral domains (Carlo & Randall, 2002). Measuring prosocial actions as a unidimensional construct may thus mask interesting variations across distinct dimensions of prosocial behaviors (Caprara et al., 2005; Carlo & Randall, 2002).

A number of scales have been developed that capture a range of prosocial action beyond just altruism, including compliant, public, anonymous, dire, and emotional behaviors (Carlo & Randall, 2002), helping, sharing, care-taking and empathy (Caprara et al., 2005), and helping, co-operation and sharing, affective relationships, and normative behavior (Cheung, Ma, & Shek, 1998). While these scales address the multifaceted nature of prosocial behaviors, they are also somewhat limited in that they measure self-reported *tendencies* or *inclinations* (e.g. "I try to console those who are sad") rather than actual behavior. This can be problematic for predictive validity given that the intention-

behavior gap may be particularly pronounced in normative domains (Teper, Zhong, & Inzlicht, 2015) where individuals want to believe that they would act in a way that benefits others, but often fail to follow through due to the costly nature of many prosocial behaviors (Batson, Thompson, Seuferling, Whitney, & Strongman, 1999). To our knowledge, no measure of self-reported prosocial behavior exists that combines a wide range of the behaviors explored in previous research into a multifactorial scale (Caprara et al., 2005; Carlo & Randall, 2002). The current study develops and tests such a measure.

1.4 The present studies

A solid body of research has established that moral identity plays a role in prosocial behavioral outcomes. However, the nature of this link is still somewhat unclear (Hardy et al., 2015). In order to address some of the outstanding questions regarding the relationships between moral identity and prosocial behaviors noted above, the present studies empirically test the roles of moral identity internalization and symbolization for different domains of self-reported prosocial behaviors. In Study 1, we analyze whether their independent effects vary across four different domains of prosocial behaviors using a new scale developed using items from several previous unidimensional scales. In Study 2, we build on prior work (Winterich et al., 2013a; 2013b) using a modified version of the scale to test whether internalization and symbolization have different predictive strengths based on the public or private nature of the prosocial behavior, and whether the two dimensions of moral identity interact.

1.4.1 Hypotheses

In both Studies 1 and 2, we test the independent roles of internalization and symbolization across four domains of recalled prosocial behaviors. As previously noted, research on the unique roles of internalization and symbolization is sparse, and has been mainly based on single, discrete

behaviors (volunteering or charitable donations). Based on the variation in previous findings that use both scales, we predict that:

H₁: Internalization and symbolization will be differentially related to distinct types of prosocial behaviors.

Next, in Study 2, we consider whether differences in the predictive nature of internalization and symbolization are related to the public versus private nature of the prosocial behavior (Mayer et al., 2012; Schaumberg & Wiltermuth, 2014), testing the hypothesis that:

H₂: Internalization will significantly predict both private and public prosocial behaviors, whereas symbolization will only be significantly predictive of public prosocial behaviors.

In Study 2 we also test for a possible interactive effect between internalization and symbolization. Two prior experimental studies suggest that symbolization drives behavior when internalization is low, specifically when recognition of behavior is salient (Winterich et al., 2013a; 2013b). Given the survey design of the present study, a direct replication of this paradigm was not possible. However, guided by these findings, we predict that:

H₃: There will be a significant interaction effect between internalization and symbolization for public prosocial behaviors, such that symbolization will be dependent on an individual's level of internalization. This effect will not be significant for private behaviors that are less subject to recognition.

2. Study One

2.1 Methods and Materials[1]

2.1.1 Participants and procedure

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[1] Open Materials: To access all materials used in Study One and Study Two, please follow the link: https://osf.io/6udxr/ Using the materials provided, an independent researcher can reproduce the reported methodology.

Adult participants were recruited to complete an online survey on personality and decision-making in social situations. Of 234 respondents, 6 were excluded for instructional non-adherence. The final sample consisted of 228 participants (50.88% male; M_{age} = 35.73, SD = 10.52). All participants were native English speakers, U.S residents, and at least high school educated. The survey was programmed using Qualtrics software and piloted on 3 native English speakers prior to going online on Amazon's Mechanical Turk (MTurk). Literature demonstrates that MTurk is an effective source of data collection that produces robust findings comparable with more traditional methods (Buhrmester, Kwang, & Gosling, 2011; Horton, Rand, & Zeckhauser, 2011; Paolacci, Chandler, & Ipeirotis, 2010). After providing informed consent, participants filled in a questionnaire that took approximately 25 minutes to complete. Upon completion of all measures and two successful attention checks respondents were compensated 2.25 USD.

2.1.2 Measures

Self-Importance of Moral Identity Scale

The Self-Importance of Moral Identity Scale (Aquino & Reed, 2002) is a widely-used and psychometrically robust 10-item measure that assesses the extent to which one's moral identity is central to one's self-concept (Aquino & Reed, 2002; Reed et al., 2007; Reynolds & Ceranic, 2007). Participants are given a list of nine adjectives that could describe an individual (caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind) and instructed: "These are some characteristics that might describe a person […] please rate the degree to which these items represent you". Each statement was rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate greater importance of moral identity to an individual's self-concept. Five items each comprise the internalization subscale (α = .82) and the symbolization subscale (α = .82). An example of an item from the internalization subscale is, "Being

someone who has these characteristics is an important part of who I am". An example item from the symbolization subscale is, "The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics". For an exploratory factor analysis of the scale that confirms this dimensionality in our sample, please see online supplementary materials. In the present sample, the two subscales showed moderate correlation ($r = .35$, $p < .001$) and sufficient internal consistency comparable to that reported in previous studies (Aquino & Reed, 2002; Reynolds & Ceranic, 2007; Winterich et al., 2013a).

Prosocial Behaviors Rating Scale (PBRS)

Self-report of recalled prosocial behaviors was measured using a new composite scale constructed to capture a broader variety of behaviors than typically measured in previous moral identity research (see Appendix). Guided by prior literature that indicates that prosocialness is a multidimensional construct, we took 30 items from existing scales to measure a variety of prosocial behaviors across prosocial domains (Caprara et al., 2005; Johnson et al., 1989; Pancer, Pratt, Hunsberger, & Alisat, 2007; Rushton et al., 1981). Some items were modified slightly to specify that they were referring to recalled self-reported behaviors, instead of intentions or general tendencies. Participants rated the regularity with which they had demonstrated the named action in the past year on a 5-point Likert scale: 1 (never) to 5 (more than once per month). Initially, we examined the factorability of the 30 items. We removed 8 items that correlated < .4 with at least one other item. The remaining 22 items were tested via exploratory factor analysis (EFA) following Costello and Osborne (2005). The Kaiser-Meyer-Olkin measure of sampling adequacy (recommended value > .6) was .89, Bartlett's test of sphericity was significant, $\chi2$ (120) = 1858.19, $p < .001$, and all of the diagonals of the anti-image correlation matrix were above .7. Based on these indicators, we proceeded with an EFA using maximum likelihood estimation, which is appropriate when the observed variables are normally distributed. A total of 6 items had a low factor loading and were excluded. Finally, we performed an

EFA with Promax rotation of the remaining 16 items (see online supplementary materials for factor loadings). The final 16-item scale had a Cronbach's alpha of .88. Higher total scores indicate higher frequency of prosocial behaviors. Subscale scores were named (i) donation of time, labor and/or resources, α = .73 (ii) civic engagement, α = .79 (iii) prosocial group behaviors, α = .78, and (iv) emotional responding, α = .78.

2.1.3 Control variables

Social Desirability

In line with earlier studies that control for the theoretical assertion that self-report data may be sensitive to impression management (Aquino & Reed, 2002; Hertz & Krettenauer, 2016; Reynolds & Ceranic, 2007), the 10-item version of the Marlowe-Crowne Social Desirability Scale (Strahan & Gerbasi, 1972) was used to measure an individual's social desirability bias (α = .74). Each item is rated as true or false, with five of the items reversed scored. Higher scores indicate that the individual is more prone to impression management.

Gender

Gender scored as 1 (male), 2 (female) was controlled as per literature indicating that females may be more likely than males to display prosocial tendencies and behaviors (Penner et al., 2005).

2.2 Results

2.2.1 Descriptive statistics and correlations

An initial analysis of means, standard deviations, and zero-order correlations was carried out in IBM SPSS v.24 software. Descriptive statistics and bivariate correlations for all predictor, outcome and control variables are displayed in Table 1. Consistent with previous literature, the mean internalization subscale score was of high absolute size (M = 4.59 on a scale from 1 to 5), and substantially greater than the symbolization subscale (M = 3.13) (Aquino & Reed, 2002; Hardy,

Bhattacharjee, Reed II, & Aquino, 2010; McFerran et al., 2010). Mean internalization and symbolization scores were significantly different in a paired-samples t-test ($t(227) = 25.44$, $p < .001$, $d = 1.95$). Moral identity symbolization was more strongly correlated than internalization to all of the self-report behavioral outcomes.

----------Insert Table 1 around here------------

2.2.2 Regression analyses

Following Aiken & West (1991), a series of hierarchical linear regression models were used to test for the independent effects of internalization and symbolizations for each domain of prosocial behavior and the total score. Prior to the analysis, internalization and symbolization were mean-centered and standardized. In order to confirm and replicate results of prior studies on the role of internalization, all the regressions were run first with internalization as the sole predictor, and gender and social desirability as covariates. Symbolization was then entered in a second step in order to identify its unique contribution to the prediction of the various prosocial outcomes. Table 2 presents the results addressing H_1. When entered as a single predictor in the first step, internalization positively predicted all of the prosocial behavioral outcomes with the exception of civic engagement. When moral identity symbolization was added to the models in a second step, however, internalization ceased to be a significant independent predictor in all cases. In the full models, symbolization was the strongest and only significant predictor for all of the behavioral outcomes, with the exception of donation of time, labor and/or resources. These results confirm H_1, that different types of prosocial behaviors are related differentially to internalization and symbolization. The control variables, gender and social desirability, did not contribute to the prediction of any of the behavioral outcome measures.

----------Insert Table 2 around here------------

2.3. Study One Discussion

Building on prior work, this study examined the distinct roles of internalization and symbolization for multiple domains of prosocial behaviors. The findings suggest that for the total composite prosocial behavior scale score, symbolization, but not internalization, is a direct predictor of self-reported prosocial behaviors. However, when divided into four behavioral domains factors, there was variation in the predictive strength of internalization and symbolization. When treated as the sole predictor, internalization was significant for all recalled behavioral domains except civic engagement. This is in line with theory suggesting that those high in internalization display more prosocial action, and with previous research reporting the same (e.g Aquino & Reed, 2002; Hardy et al., 2015). However, the lack of effect for civic engagement is contradictory to prior results based on a study of adolescents (Hardy et al., 2015). This anomaly could make civic engagement a special target for future research.

With the addition of symbolization to the regression models, internalization was no longer significant for any of the prosocial behavior outcomes measured. In contrast, symbolization was significant, albeit with varying strength, for all domains except donation of time, effort and/or resources. The direct and significant effect of symbolization, above and beyond internalization, for a wide variety of prosocial behaviors, is a novel finding. Comparing findings across prosocial domains, symbolization was the strongest predictor for civic engagement, followed by emotional responding, and then prosociality in groups. The varying strength of this effect supports H_1, and the underlying theory that prosocial behavior is a multifaceted construct (Carlo & Randall, 2002). In addition, these results illustrate that both moral identity internalization and symbolization must be included in research fully investigating prosocial outcomes.

3. Study Two

Whereas Study 1 made an important step in identifying different strengths of relationships between internalization, symbolization and different domains of prosocial behaviors, Study 2 aimed to explore one possible explanation for these differences. Prior research suggests that internalization and symbolization may be distinctly associated with prosocial behaviors depending on whether these behaviors are public or private (Mayer et al., 2012; Schaumberg & Wiltermuth, 2014; Winterich et al., 2013b). Drawing on this work, we created a modified version of the PBRS scale used in Study 1 by revising the items to explicitly measure public and private behaviors. This allowed us to test the hypothesis that internalization and symbolization will be differentially related to public and private behaviors (H$_2$). Furthermore, we built on previous experimental work (Winterich et al., 2013b) proposing that internalization and symbolization interact for public (but not private) behaviors by testing whether they also have an interactive effect across public and private prosocial behaviors (H$_3$).

3.1 Methods and Materials

3.1.1 Participants and procedure

Adult participants were recruited as in Study 1 to complete an online survey on personality and behaviors in social situations. The final Study 2 sample consisted of 299 participants (47.2% male; M$_{age}$ = 37.11, SD = 11.59). All participants were native English speakers, U.S residents, and at least high school educated. The survey was programmed using Qualtrics software and administered online on Amazon's Mechanical Turk (MTurk). After providing informed consent, participants filled in a questionnaire that took on average 8.5 minutes to complete. Upon completion of all measures and two successful attention checks respondents were compensated .90 USD.

3.1.2 Measures

As in Study 1, participants filled in the internalization (α = .82) and the symbolization (α = .88) subscales of the Self-Importance of Moral Identity Scale, the Marlowe-Crowne Social Desirability Scale (α = .73). In addition, participants also completed the following two scales:

Prosocial Behaviors Rating Scale-Public Private (PBRS-PP)

The original PBRS was revised (PBRS-PP) to include 16 public items and 7 private items that fit thematically into the 4 factors identified in Study 1 (see Appendix). Before completing the measure, participants were given examples of the difference between a public prosocial behavior (e.g. donating money into a collection box at a cash register) and a private prosocial behavior (e.g. donating money anonymously) and asked to confirm that they understood the distinction. Participants were randomly assigned to answer either the public or the private section of the scale first. No significant differences were found between these two groups in an independent samples t-test ($t(297) = -.90$, $p = .37$, $d = -.09$). As in Study 1, participants rated frequency of the behavior in the past year on a 5-point Likert scale ranging from 1 (never) to 5 (twelve times or more). The scale was tested via confirmatory factor analysis (CFA) using the maximum likelihood method in AMOS Graphics v.24 following Byrne (2013). To confirm the multidimensional nature of the PBRS, first we compared a one-factor first-order solution to a two-factor first-order solution that split the items into public and private subscales ($\Delta \chi^2 (1) = 37.36$, $p < .001$). The two-factor solution was a significantly better fit than the one-factor solution. Next, we compared the two-factor model with the four-factor domain-based model that was specified by the EFA in Study 1. The four-factor solution had a better model fit, $\Delta \chi^2 (5) = 190.23$, $p < .001$, cross-validating the EFA from Study 1. Two items with a low factor loading were removed from the scale. Modification indices recommended the addition of eight covariance paths between error terms. To assess the goodness of model fit of the four-factor solution, we used two indicators: the Comparative Fit Index (CFI; >0.95 good, >0.90 acceptable) and the Root Mean Squared Error of Approximation (RMSEA; <0.06 good, <0.08

acceptable). The final model fit the data well, $\chi^2 = 366.09$, $df = 175$, $p = < .001$, CFI = .93, RMSEA = .06 (90% CI = .05-.07). Standardized factor loadings of all items were significant (p < .001). The final 21-item scale had a Cronbach's alpha of .92. See the online supplementary materials for factor loadings from the two- and four- factor models. As in the original PBRS, higher scores indicate higher frequency of prosocial action. Individual factor reliabilities were as follows: donation of time, effort and/or resources: $\alpha = .75$, civic engagement: $\alpha = .81$, prosociality in groups: $\alpha = .82$, and emotional responding: $\alpha = .82$. In order to test H_2 and H_3, we also split the final PBRS-PP items into public (15 items, $\alpha = .88$) and private (6 items, $\alpha = .82$) dimensions.

3.2 Results

3.2.1 Descriptive statistics and correlations

An initial analysis of means, standard deviations, and zero-order correlations was carried out in IBM SPSS v.24 software. Descriptive statistics and bivariate correlations for all predictor, outcome and control variables are displayed in Table 3. Consistent with Study 1, internalization and symbolization were significantly different in a paired-samples t-test ($t(298) = 20.06$, $p < .001$, $d = 1.56$) and symbolization was more strongly correlated than internalization to all of the self-report behavioral domains. The pattern of significant correlations between the sub-factors of reported prosocial behaviors was also similar to Study 1, indicating that higher levels of prosocial behavior in one domain are correlated with higher frequency in other domains.

----------Insert Table 3 around here------------

3.2.2 Regression analyses

In order to test H_1, a series of linear regression models following Aiken & West (1991) were employed. Prior to the analysis, internalization and symbolization were mean-centered and standardized. The four PBRS-PP subscales and the total composite score were the outcomes in five separate models. In order to confirm and replicate results of Study 1 on the roles of both

internalization and symbolization, each model included a single step adding internalization and symbolization as predictors, and gender and social desirability as covariates (see the results presented in Table 4). All models were significant. Neither of the covariates were significant predictors of any outcomes. These results confirm H_1, and generally replicate the findings from Study 1, that different domains of prosocial behaviors are related differentially to internalization and symbolization.

Similar to the full models in Study 1, symbolization was the sole significant predictor for all prosocial domains. Unexpectedly, however, internalization's relationship to donation behaviors, civic engagement, and to the composite score were all negative, albeit only significantly for civic engagement. As in Study 1, this suggests that higher moral identity internalization is related to fewer prosocial behaviors in these domains.

----------Insert Table 4 around here------------

In a second set of regression analyses, H_2 and H_3 were tested through a series of two-step hierarchical linear regressions using the public and private PBRS-PP subscales as outcomes (see results presented in Table 5). In the first step, internalization and symbolization were included as predictors, and gender and social desirability as covariates. Only symbolization had a significant main effect for both outcomes. These results partially confirm H_2, specifically in respect to symbolization predicting public prosociality. Contrary to the hypothesis, however, symbolization was also a significant predictor of private prosocial behaviors.

In the second step, an interaction term between internalization and symbolization was added to test behaviors H_3. The interactions were significant for both the public subscale and the private subscale. The addition of the interaction term significantly improved both models: public $\Delta R^2 = .03$,

$p = .002$, and private $\Delta R^2 = .02$, $p = .01$. Neither of the control variables contributed to the prediction of any of the outcome measures in either step 1 or 2.

In order to explore the interaction effect in more detail, we tested the simple slopes of symbolization for participants low (-1 SD) and high (+1 SD) in internalization (as per Aiken & West, 1991). The analyses revealed the same pattern for both public and private outcomes, namely, that higher symbolization was associated with higher displays of prosocial behaviors, particularly when internalization was low. The effect of symbolization on public prosocial behaviors was significant for both those low in internalization ($b = .40$, $t = 5.94$, $p < .001$), and high in internalization ($b = .15$, $t = 3.04$, $p = .003$). In relation to private prosocial behaviors, the effect of symbolization was similarly significant for those low in internalization ($b = .40$, $t = 5.03$, $p < .001$), and high in internalization ($b = .16$, $t = 2.82$, $p = .01$). Graphical displays of the interactions are presented in Figure 1. The results partially confirm H_3 in respect to public behaviors, such that for individuals low in internalization, high symbolization predicts higher frequency of prosocial behaviors. The results did not confirm H_3, which posited that there would be no significant interaction for private behaviors.

----------Insert Table 5 around here------------

----------Insert Figure 1 around here------------

3.3 Study Two Discussion

This study investigated a series of interrelated aims related to testing the predictive power of moral identity internalization and symbolization for a variety of prosocial behaviors. Specifically, it tested the dimensionality of the PBRS-PP scale, and explored both the independent and interactive roles of internalization and symbolization across a range of public and private prosocial behaviors. The study contributes to existing literature in two important ways. First, we confirm the

multidimensional nature of prosocial behaviors suggested by previous authors and shown in Study 1 (Caprara et al., 2005; Carlo & Randall, 2002). The four-factor model confirmed here supports the assertion from Study 1 that single-item outcomes and unidimensional scales do not provide an adequate measure of the spectrum of real-world prosocial behaviors. Secondly, the results build a more nuanced picture of moral identity by empirically illustrating the independent effects of symbolization and internalization and how they interact in relation to the distinction between public and private prosocial actions.

In many social contexts, individuals use the observation and acknowledgement from others to frame their self-concept and motivate their behaviors (Baumeister, 1998). In the moral domain, symbolization is said to capture this self-presentational motivation, both in the drive to appear moral to others and to convey the moral self to the outside world (Aquino & Reed, 2002; Jennings et al., 2015). Based on this theory and prior empirical findings (Winterich et al., 2013a; 2013b) we hypothesized that symbolization would only have a significant independent and interactive relationship with recognized or public behaviors; however, this was not the case. It appears that the role of symbolization extends beyond observable behaviors and may, in fact, be applicable to all prosocial acts. With respect to internalization, the results were similarly unexpected. The non-significant associations between internalization and prosocial behavior in some of the regression models were contrary to prior literature demonstrating a significant positive relationship between these two constructs (for a meta-analysis, see Hertz & Krettenauer, 2016). One possible explanation is that many of the previous studies investigating this association only include internalization. These results suggest that internalization, as a sole predictor, does not sufficiently explain the role of moral identity for real-world prosocial behaviors.

As for the relationship between the two dimensions of moral identity, the present study did not replicate the interaction effect seen in prior work (Winterich et al., 2013a; 2013b), nor support the argumentation that the effect of symbolization is dependent on one's level of internalization. In both the public and private domains, individuals low in internalization and high in symbolization

displayed the greatest number of prosocial acts. Taken together, these results suggest that symbolization is not dependent on level of internalization, and is related to all forms of prosociality, regardless of their public or private dimensionality.

4. General Discussion

To our knowledge, this is the first set of studies to address the independent and interactive roles of internalization and symbolization for a wide variety of prosocial behaviors, and to investigate whether their effects differ across behavioral domains and public/private dimensions. In Study 1, we demonstrated differential relationships of internalization and symbolization to four domains of self-reported prosocial behaviors, measured using a new scale. Study 2 investigated whether the public versus private nature of prosocial behavior could explain these differences. The results of Study 2 indicated that symbolization has a significant main effect for prosocial behaviors regardless of their public or private nature. Furthermore, for both recognized and anonymous prosocial behaviors we found a significant interaction effect between internalization and symbolization, in an unexpected direction.

With respect to the specific hypotheses tested in these studies, we confirmed H_1, that symbolization and internalization have differential effects across distinctive domains of prosocial behaviors. Specifically, in the full regression models that include both internalization and symbolization, the effect of symbolization was significant across all four domains of real-world prosocial behaviors, while internalization was non-significant in all cases but one. The negative direction of the relationship between internalization and some types of prosocial behaviors was not expected based on prior literature (for a meta-analysis, see Hertz & Krettenauer, 2016). While these results appear puzzling at first, it may be that when probed about a range of behaviors across a cumulative year-long timespan, respondents demonstrate a moral licensing effect in certain behavioral domains. Literature in the field of moral licensing posits that when people have

established a self-image as a moral person, they can have lessened incentive to participate in costly moral behaviors (Blanken, van de Ven, & Zeelenberg, 2015; Sachdeva, Iliev, & Medin, 2009). In several studies, individuals with primed moral self-schemas were less likely to engage in prosocial actions (Jordan, Mullen, & Murnighan, 2011; Mazar & Zhong, 2010; Sachdeva et al., 2009). This effect is particularly evident when the past behaviors are linked to the individual's self-concept and intrinsic motivation, as internalization is (Jordan et al., 2011; Khan & Dhar, 2006). Individuals who score high on internalization may believe that they are the "sort of person" who ly acts in a prosocial way, and use this belief to justify performing *fewer* effort-consuming prosocial behaviors over a prolonged period of time, than those with lower ratings of internalization. Such a process could potentially explain the observed negative relationship between internalization and some costly prosocial behaviors in this study. Future work that explicitly examines moral licensing as it relates to multiple domains of prosocial behaviors would be useful to further explore these novel and interesting findings. For example, experience sampling methodology that asks participants in real-time to detail their prosocial intentions and behaviors could be used to investigate the positive and negative relationships between internalization and different behaviors in a more nuanced way that helps to further elucidate both these and prior findings.

The results connected to the first hypothesis call attention to the importance of multi-dimensional measurement of both moral identity and prosocial behaviors. Consideration of the methods used to measure these constructs is important both to interpretation of prior work and to the design of future projects. Specifically, many previous studies have failed to include symbolization as a predictor, or have only tested single-behaviors in an experimental manipulation. However, the non-significant effect of internalization when including symbolization in the full regression models in both studies provides evidence that using only the internalization subscale is insufficient to understand the full relationship between moral identity and prosocial behaviors. Our results echo prior work demonstrating that internalization and symbolization have unique predictive properties

(Reynolds & Ceranic, 2007). This study empirically demonstrates that, at least where the measurement of behavioral outcomes is concerned, both subscales should be used. Moreover, our findings highlight the importance of investigating a variety of prosocial behaviors, as the relationships to moral identity are not uniform across domains. That the predictive strength of internalization and symbolization differed by PBRS domains supports the supposition that the scales measures a multidimensional construct. Even so, the predictors tested in the models accounted for only a small proportion ($3 - 16\%$) of the overall variance in the PBRS scale scores. While this is not surprising for a complex behavior such as prosociality, and is in line with other research in the area (e.g. Reynolds & Ceranic, 2007), future work further developing and testing this scale, and using a greater number of predictors, would be useful.

In an attempt to explain the pattern of results we observed in Study 1, Study 2 tested the hypothesis that the public versus private nature of the prosocial behavior in question may be driving the relationship between internalization, symbolization, and behavior (H_2). This hypothesis was not supported. The significant relationship of symbolization to prosocial behavior did not depend on the level of public recognition of the behavior in question. In our samples, elevated levels of symbolization drove prosocial behavior regardless of behavioral domain or public/private dimension. These findings align with work hypothesizing that symbolization may not only measure a desire to *appear* moral to observers, as previously supposed, but also a wish to *feel* like a moral person (Schaumberg & Wiltermuth, 2014) in some way that is connected to both public and private prosocial activities. For example, the prosocial domain 'emotional responding' probed empathetic actions, which are arguably the *least* recognition-based prosocial behaviors questioned. However, this domain had the second strongest association to the symbolization predictor in Study 1 and it was also significant in Study 2. Our results conflict with prior work suggesting that public recognition is the salient factor in activating symbolization (Winterich et al., 2009; Winterich et al., 2013a), and contradicts the theory that the chronic accessibility of internalized moral identity is the driving

motivational force in the absence of such recognition (Aquino et al., 2009). We do not argue against recognition and social reinforcement being important factors motivating prosocial behaviors, but the current studies demonstrate that there must be other driving forces as well. The only two previous examinations of the relationship of symbolization to public versus private behaviors only tested donation behavior in an experimental setting (Winterich et al., 2013a; 2013b). The present study suggests that investigating a wider variety of behaviors is necessary for a fuller picture of the complex relationship between symbolization, internalization, and recognition.

The final hypothesis tested in this work was that symbolization and internalization would have a significant interaction only for public behaviors (H_3). However, it appears that for both public and private behaviors, high symbolization has a dominant effect regardless of level of internalization. The consistent significance of symbolization across all analyses suggests that this subdimension may not only capture presentational concerns, as per Jennings et al. (2015), but also the tendency of individuals to infer their moral identity internalization from their actions. This reasoning in is in line with Bem's (1967) classic self-perception theory, which postulates that people use their behaviors to draw conclusions about themselves. Accordingly, when an individual performs actions that are helpful, caring, and altruistic, they may perceive both that morality is important to them and that they exemplify moral characteristics, hence increasing internalization. While it was not possible to pinpoint the causal directional of the relationship between internalization and symbolization in this study, the findings raise the interesting possibility that individuals who score high on symbolization may use their external behaviors to boost their sense of internalized moral identity, rather than being motivated to act prosocially solely because of self-identification as a moral person. This proposed ordering of constructs is somewhat of a modification to the original moral identity theory (Aquino & Reed, 2002; Blasi, 1984) but it would be an interesting hypothesis to test via a time-lagged mediation model that is able to more conclusively determine whether the relationship of internalization and symbolization for real-world prosocial behaviors is causal or interactive. In

addition, these findings further reinforce the importance of future work that uses both dimensions of moral identity. Additional research that addresses the specific roles of, and differences between, internalization and symbolization would be of both great theoretical and applied value.

4.1 Limitations and future research

While we believe that this research has provided important new knowledge, some limitations must also be acknowledged. First, our use of self-reports of prior prosocial actions raises the possibility that compared to observational laboratory studies, the results may be victim to inflated effect sizes due to self-presentation biases or recall error. However, there was no systematic evidence of social desirability bias in this study. Future experimental manipulations testing the public/private behavior distinction across a wider variety of behaviors types would build on the current findings to further investigate the true role of recognition in activating symbolization.

Second, while the scales developed in this study represent an important first-step towards developing tools to capture the multifactorial nature of real-world prosocial behavior, they were primarily developed using items from previously published scales. Including and testing alternative and/or additional items in future work would also advance the field. In particular, developing additional public and private items for each of the subscales would be useful. Identifying private items to add to the civic engagement scale was a challenge. Incorporating such items in future research would allow for further analysis of the relationships between internalization, symbolization, and an array of both public and private outcomes.

Finally, as noted above, another limitation is the cross-sectional design of the current study, which does not allow for a clear test of the directionality of the relationship between the constructs. It remains unclear whether an individual is motivated to behave more prosocially in order to maintain internal self-consistency, or whether an individual who demonstrates more prosocial

behaviors in turns boosts their internal self-importance of morality. Research using longitudinal and experimental designs better able to assess directionality and causality is needed.

In conclusion, the present pair of studies builds a more complete picture of the roles of both dimensions of moral identity as they relate to real-world prosociality. The results presented here also raise some interesting avenues for future work in both the laboratory and the field, all of which will contribute to the ultimate applied goal of developing interventions designed to promote more helpful and beneficial interpersonal behaviors.

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Table 1
Study 1: Means, Standard Deviations, and Bivariate Correlations of Research Variables (N = 228)

	Variable	*M(SD)*	1	2	3	4	5	6	7	8	9
1.	Gender	-	-								
2.	Social Desirability	1.48 (.25)	-.19*	-							
3.	Internalization (Moral Identity)	4.60 (.57)	.15*	-.09	-						
4.	Symbolization (Moral Identity)	3.13 (.89)	.22*	-.29***	.35***	-					
	Prosocial Behaviors:										
5.	Donation of time, effort, resources	2.55 (.77)	.14*	-.11	.20**	.21**	-				
6.	Civic Engagement	1.76 (.67)	.14*	-.05	.06	.29***	.50***	-			
7.	Prosociality in groups	2.44 (.99)	.08	.06	.14	.18**	.49***	.37***	-		
8.	Emotional responding	1.93 (.72)	.16*	-.07	.16*	.28***	.52***	.67***	.48***	-	
9.	Total composite score	2.20 (.64)	.16*	-.03	.18**	.29***	.78***	.77***	.79***	.80***	-

Notes: *p < .05, **p < .01, ***p < .001

Table 2

Study 1: Hierarchical Regression Analyses for Variables Predicting PBRS Domains (N = 228)

Model		Donation[a]			Civic Engagement[b]			Prosociality in Groups[c]			Emotional[d]			Composite[e]		
		β	t	p	β	t	p	β	t	p	β	t	p	β	t	p
1	Gender	.10	1.45	.15	.13	1.88	.06	.07	1.09	.28	.13*	1.98	.05	.14*	2.02	.05
	Social Desirability	-.07	-1.11	.27	-.03	-.48	.63	.09	1.29	.20	-.03	-.40	.69	.01	.17	.87
	Internalization (Moral Identity)	.17**	2.60	.01	.04	.54	.59	.13*	1.96	.05	.14*	2.09	.04	.16*	2.46	.02
2	Gender	.08	1.22	.23	.09	1.37	.17	.05	.78	.44	.10	1.55	.12	.10	1.57	.12
	Social Desirability	-.04	-.64	.52	.04	.60	.55	.13	1.86	.06	.03	.47	.64	.07	1.08	.28
	Internalization (Moral Identity)	.13	1.93	.06	-.06	-.84	.38	.08	1.09	.28	.06	.88	.38	.08	1.18	.24
	Symbolization (Moral Identity)	.13	1.76	.08	.31***	4.30	<.001	.17*	2.38	.02	.25**	3.47	.001	.26***	3.67	<.001
	Model 2 R²	.07			.10			.05			.09			.11		
	ΔR²	.01			.08***			.02*			.05***			.05***		

Notes: *$p < .05$, **$p < .01$, ***$p < .001$
[a] $F(4, 223) = 4.07$, $p = .003$
[b] $F(4, 223) = 6.00$, $p < .001$
[c] $F(4, 223) = 3.11$, $p = .02$
[d] $F(4, 223) = 5.77$, $p < .001$
[e] $F(4, 223) = 6.52$, $p < .001$

Table 3
Study 2: Means, Standard Deviations, and Bivariate Correlations of Research Variables (N = 299)

	Variable	*M(SD)*	1	2	3	4	5	6	7	8	9	10	11
1.	Gender	-	-										
2.	Social Desirability	1.48 (.25)	.06	-									
3.	Internalization (Moral Identity)	4.47 (.65)	.17**	.01	-								
4.	Symbolization (Moral Identity)	3.23 (.91)	.14*	.10	.10	-							
	Prosocial Behaviors:												
5.	Donation of time, effort, resources	2.47 (.69)	.10	.02	.02	.28***	-						
6.	Civic Engagement	1.79 (.75)	.01	.04	-.17**	.34***	.65***	-					
7.	Prosociality in groups	2.73 (.86)	.06	-.07	.11	.24***	.67***	.46***	-				
8.	Emotional responding	2.72 (.83)	.08	-.01	.13*	.24***	.67***	.46***	.76***	-			
9.	Total composite score	2.40 (.65)	.07	-.01	.02	.33***	.88***	.74***	.84***	.87***	-		
10.	Public subscale	2.37 (.66)	.03	-.01	-.01	.31***	.86***	.78***	.81***	.80***	.98***	-	
11.	Private subscale	2.50 (.77)	.13*	-.02	.08	.30***	.78***	.52***	.77***	.87***	.88***	.76***	-

Notes: *p < .05, **p < .01, ***p < .001

Table 4

Study 2: Linear Regression Analyses for Variables Predicting PBRS-M Outcomes (N = 299)

	Donation[a]			Civic Engagement[b]			Prosociality in Groups[c]			Emotional[d]			Composite[e]		
	β	t	p	β	t	p	β	t	p	β	t	p	β	t	p
Gender	.07	1.19	.24	-.01	-.15	.88	.02	.29	.77	.04	.64	.52	.03	.49	.62
Social Desirability	-.01	-.13	.90	.01	.13	.90	-.09	-1.61	.11	-.04	-.66	.51	-.05	-.83	.41
Internalization (Moral Identity)	-.02	-.42	.67	-.21	-3.76	<.001	.08	1.40	.16	.10	1.70	.09	-.02	-.34	.74
Symbolization (Moral Identity)	.27	4.79	<.001	.36	6.66	<.001	.24	4.18	<.001	.23	3.94	<.001	.32	5.86	<.001
Model R^2		.08			.16			.07			.07			.11	

Notes: [*]$p < .05$, [**]$p < .01$, [***]$p < .001$
[a] $F_{(4, 294)} = 6.57, p < .001$
[b] $F_{(4, 294)} = 13.84, p < .001$
[c] $F_{(4, 294)} = 5.78, p < .001$
[d] $F_{(4, 294)} = 5.54, p < .001$
[e] $F_{(4, 294)} = 8.97, p < .001$

Table 5
Study 2: Hierarchical Regression Analyses for Public and Private Prosocial Behaviors (N = 299)

	Public Prosocial Behaviors						Private Prosocial Behaviors					
	Step 1			Step 2[a]			Step 1			Step 2[b]		
	β	t	p	β	t	p	β	t	p	β	t	p
Gender	-.01	-.02	.98	-.01	-.23	.82	.08	1.49	.14	.08	1.33	.18
Social Desirability	-.04	-.67	.51	-.04	-.77	.45	-.06	-1.02	.31	-.06	-1.09	.28
Internalization (MI)	-.04	-.75	.46	-.03	-.61	.54	.03	.59	.56	.04	.71	.48
Symbolization (MS)	.32***	5.73	<.001	.36***	6.37	<.001	.29***	5.07	<.001	.32***	5.55	<.001
MI x MS				-.17**	-3.10	.002				-.14	-2.48*	.01
R^2		.10			.13			.10			.12	
ΔR^2				.03**						.02*		

Notes: *$p < .05$, **$p < .01$, ***$p < .001$
[a] $F(5, 293) = 8.76, p < .001$
[b] $F(5, 293) = 7.76, p < .001$

Appendix
Study 1: Items in the Prosocial Behaviors Ratings Scale

Item	Source
Donation of time, effort and/or resources	
I have donated clothing or goods to charity	Rushton et al.
I have delayed an elevator in order to hold the door open for a stranger	Rushton et al.
I have allowed somebody to go ahead of me in a line	Rushton et al.
I have bought something deliberately because I knew some of the proceeds would go to charity	Rushton et al. (modified)
Prosociality in groups	
I have shared credit for an accomplishment when I could have taken it all	Johnson, et al.
As part of a group I have done menial jobs without being asked, even though it is not directly my responsibility	Johnson et al.
I have shared knowledge with colleagues in order to help them get ahead	Johnson et al.
I have 'picked up the slack' at work for a colleague who could not keep up the pace	Johnson et al.
Civic engagement	
I have participated in a political party, club or organization	Pancer et al.
I have helped with a fund-raising project	Pancer et al.
I have done volunteer work	Rushton et al.
I have contributed time and/or labor to community involvement activities	Johnson et al.
I have helped people who were new to my country	Pancer et al.
Emotional responding	
I volunteered to help those in need prior to being asked	Caprara et al. (modified)
I felt empathetic to those in need and therefore chose to help out in some way	Caprara et al. (modified)
I went out of my way to help a friend that expressed they felt emotionally distressed	Caprara et al. (modified)

Study 2: Items in the Prosocial Behaviors Ratings Scale – Public Private

Item	Public/Private
Donation of time, effort, resources	
Delayed an elevator in order to hold the door open for a stranger	Public
Allowed somebody to go ahead of you in a line	Public
Given clothing or goods to charity publically	Public
Given money to charity publically	Public
Donated clothing or goods through an anonymous drop-off box	Private
Donated money anonymously	Private
Civic engagement	
Participated in a political party, club or organization	Public
Helped with a fund-raising project	Public
Done volunteer work, other than fundraising	Public
Publically contributed time and/or labor to community involvement activities	Public
Helped people who were new to your country	Public
Prosociality in groups	
Shared credit for an accomplishment when you could have taken it all	Public
Done small tasks as part of a group, even though they were not directly your responsibility	Public
'Picked up the slack' for somebody that needed help, through a visible action	Public
Shared knowledge with somebody in order to help them get ahead	Public
'Picked up the slack' for somebody that needed help, without being noticed	Private
Emotional responding	
Did something kind for an upset/sick friend to explicitly express your distress	Public
Comforted somebody who was distressed	Public
Volunteered to help somebody in need because you felt empathy towards them	Private
Gone out of your way to help a friend without telling them it was inconvenient for you	Private
Helped somebody in need without them knowing it was you	Private

Note: Some items were added to capture both a public and private versions of the same behavior. In cases where no private version of a public behavior could be identified, new items were created.

Figure 1
Simple slope analyses of public and private prosocial behavior frequencies as a function of moral identity symbolization and internalization, ±1SD (Study 2)