The Moral Identity Picture Scale (MIPS): Measuring the Full Scope of Moral Identity

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Abstract

Morality is core to people's identity. Existing moral identity scales measure good/moral vs. bad/immoral, but the Theory of Dyadic Morality highlights two-dimensions of morality: valence (good/moral vs. bad/immoral) and agency (high/agent vs. low/recipient). The Moral Identity Picture Scale (MIPS) measures this full space through 16 vivid pictures. Participants receive scores for each of four moral roles: hero, villain, victim, and beneficiary. The MIPS can also provide summary scores for good, evil, agent, and patient, and possesses test-retest reliability and convergent/divergent validity. Self-identified heroes are more empathic and higher in locus of control, villains are less agreeable and higher in narcissism, victims are higher in depression and lower in self-efficacy, and beneficiaries are lower in Machiavellianism. Although people generally see themselves as heroes, comparisons across known-groups reveals relative differences: Duke MBA students self-identify more as villains, UNC social work students self-identify more as heroes, and workplace bullying victims self-identify more as victims. Data also reveals that the beneficiary role is ill-defined, collapsing the two-dimensional space of moral identity into a triangle anchored by hero, villain, and victim.

Keywords: morality, self-perception, dyadic morality, measurement, moral character

The Moral Identity Picture Scale (MIPS): Measuring the Full Scope of Moral Identity

People often grapple with questions about their identity, wondering whether they are better understood as professional or a parent (Maurer et al., 2001), or as a soldier or a civilian (Vest, 2013). Given the centrality of morality to identity (Strohminger & Nichols, 2014), people also likely wonder how they fit into the moral world. Do they see themselves as an agent of good or of evil, or as a recipient of other people's kindness or cruelty? Although there is much prior work that assesses variability in moral judgments (e.g., Greene & Haidt, 2002; Haidt, 2001; Hofmann et al., 2014), and many measures that assess constructs related to moral identity (e.g., Barriga et al., 2001; Reimer & Wade-Stein, 2004), there are fewer measures that focus moral identity *per se*. Those that do examine moral identity often examine only side of morality, assessing either general self-perceived goodness (e.g. Aquino & Reed, 2002) or evilness (e.g., Christie & Geis, 2013). Here we present a new theoretically grounded image set—the Moral Identity Picture Scale (MIPS)—that can be used for many purposes, including a way to measure a fuller scope of moral identity.

This Picture Scale draws from an emerging perspective the Theory of Dyadic Morality, which argues that morality revolves around common template of two—an intentional agent and a vulnerable patient (see Gray, Young, & Waytz, 2012, Schein & Gray, 2018). Dyadic morality thus argues for two intersecting dimensions of morality: valence (good/moral vs. evil/immoral) and agency (high/agent vs. low/patient). Morality contains not only the *doers/agents* of moral or immoral acts—heroes and villains—but also its *recipients/patients*—victims and beneficiaries. Rather than the two moral roles of heroes and villains, there are four: hero (doer/agent of goodness), villain (doer/agent of evil), victim (recipient/patient of evil), beneficiary (recipient/patient of good). The research in this paper leverages this theory to measure a more

expansive view of moral self-perceptions through images, which makes these four moral exemplars both intuitive and vivid. Four studies demonstrate the validity of this approach.

Moral Identity

Identity is important. Much of our lives are spent attempting to answer the question of "who am I?" Indeed, this question is at the very core of the study of psychology. Our identity helps to organize our thoughts and direct our actions (Hutcheson, 1726), and helps define and shape who we see as an "in-group" member (Cunningham, 2005; Gaertner et al., 1996). People's identities can reveal what kind of personality traits people are likely to have (Lilgendahl, 2015; Luyckx et al., 2014); for example, someone who holds dear the identity of "volunteer" might be more likely to also have personality traits of helpfulness or altruism. Identities are so powerful that when we think or do something that violates an identity we hold dear, we often experience powerful cognitive dissonance (Alicke et al., 1995; Barkan, 2015; Festinger, 1962; Stets & Carter, 2011).

Moral identity is one of the most central facets of a person's identity (Aquino et al., 2009; Aquino & Reed, 2002; Stets & Carter, 2011; Strohminger & Nichols, 2014). Some research finds that morality can even be considered a basic psychological need, and is crucial for our "peak" experiences in life (Prentice et al., 2019). Indeed, morality seems to direct our cognitive processing such that people identify peak experiences in their life using morality need satisfaction as a barometer (Prentice et al., 2019). People often ask themselves whether they are a morally good person who helps others, or a morally bad person who acts only in self-interest (S. J. Reynolds & Ceranic, 2007)? Following past work on "positive illusions" about our traits and abilities (Taylor & Brown, 1988), recent work finds that these positive illusions extend self-perceptions of morality as well, with most people tending to see themselves as morally good

(Tappin & McKay, 2016). We are so strongly motivated to see ourselves as morally good that we deliberately work to alter or forget autobiographical memories about past moral transgressions (Stanley & De Brigard, 2019). When we are unable to forget our sins, we attempt to strategically compare our recent immoral behaviors to past immoral behaviors to create a narrative of personal moral improvement over time. While most people generally see themselves as morally good, the moral world is both dynamic and diverse. Our sense of our own moral identity can shift based on social comparisons (compared to Mother Teresa, am I *really* a good person?) and based on what exactly a group our culture defines as "good" (Janoff-Bulman & Carnes, 2013b; Rai & Fiske, 2011). A history of killing is acceptable for a wartime soldier's identity, but likely bad for a civilian's identity (Watkins & Laham, 2020).

There is a rich body of work emphasizing the importance of understanding—and measuring—morality. However, the vast majority of the work on measuring morality focuses on perceptions of *others'* actions, intentions, motivations, desires, beliefs, and mental states to evaluate (im)moral actions rather than on self-perceptions (Critcher et al., 2012; Gray et al., 2012; Pizarro et al., 2003; Reeder, 2009). For example, there are studies about how liberals and conservatives differentially evaluate acts (Graham et al., 2009; Janoff-Bulman et al., 2008; Janoff-Bulman & Carnes, 2018), the importance of intention and causation, and the role of mind perception (Schein & Gray, 2015). Most relevant to judgments of one's own moral character are studies on how we evaluate other's character (Alicke, 2000; Goodwin et al., 2014; Pizarro & Tannenbaum, 2011; Tannenbaum et al., 2011; for a review see Hartman et al., in press). People ascribed good moral character are those who take environmental inputs and translates them into socially acceptable outputs (Helzer & Critcher, 2018). The way that we see others' moral

character has strong implications for the way that we treat and talk about them (Aquino & Reed, 2002; Kohlberg, 1964).

Much work examines moral character judgments of others, but there is relatively less work on self-perceptions of moral character. There is one popular scale developed by Aquino and Reed (2002) that measures the self-importance of moral goodness, but otherwise little other explores this topic—despite the time, effort, and thought each of us put into creating and projecting our moral identities (Strohminger & Nichols, 2014). Some work shows that perceptions of our moral identities can direct our behavior in identity-consistent ways (Hertz & Krettenauer, 2016; Reed et al., 2007) and that we feel distressed when we perform moral identity-inconsistent actions (Stets & Carter, 2011). Other work suggests that self-esteem is often directly tied to perceptions of ourselves as a good person (Crocker & Park, 2004; Rosenberg, 1965; Sheldon et al., 2001).

Despite little work measuring moral self-perceptions *per se*, there are many measures that get at aspects of moral self-perceptions. For example, self-report scales on narcissism (Gentile et al., 2013) or Machiavellianism (Christie & Geis, 2013) may capture part of self-perceived *im*morality. Conversely, measure of empathy, such as the Interpersonal Reactivity Index (Davis, 1983), or positive social value orientation (Van Lange et al., 1997) may approximate positive, agentic moral self-regard. Beyond these measures, other scales help to capture self-perceptions of varieties of goodness or badness (e.g., self-esteem, self-efficacy), which likely feed into self-perceptions of morality. Despite the usefulness of these scales, they are relatively narrow, assessing one aspect (or sub-aspect) of morality. We suggest that the study of moral identity could benefit from a stimulus set that allows a broader examination of moral identity.

A Broader Structure of the "Who" of Morality

While work on the centrality, importance, and influence of our moral identities is abundant, much of this work uses a relatively narrow definition of morality: that one is either good or evil (Ayala, 2010). This valence-based definition of morality has been broadened in the last few decades to include the influence of different types of acts (Graham et al., 2013), identity (Hester & Gray, 2019), and character (Blasi, 2005). Even here, the vast majority of this research has focused on the "active" side of morality (e.g., Hardy & Carlo, 2005)—the heroes who do morally good acts, and the villains who do morally bad acts. One reason for this strong focus on the active side of morality is because we tend to think of ourselves in terms of agency—"doing" (Abele & Wojciszke, 2013). More generally, we are fascinated by moral agents/doers but not moral recipients/patients. There are many thousands of books on heroes and villains but many fewer on victims. Because of this domination of agency in social cognition, people may clearly be able to simulate the experience of being a moral agent, but that it may be harder to simulate the experience of being a moral patient. Although the doers—or "agents"—of morality are undoubtedly important, an emerging perspective highlights a fuller understand of the moral world

The Theory of Dyadic Morality (TDM; Schein & Gray, 2018) suggests that people understand the moral world through a dyadic template of an agent harming (or helping) a patient. TDM was initially developed to predict people's judgments of (im)moral deeds and explain why perceptions of harm robustly predict moral judgments across diverse scenario (Gray et al., 2012, 2014; Gray & Keeney, 2015; Gray & Schein, 2012). However, this theory can also be understood as a map of different kinds of moral *roles*, defined through the intersection of two dimensions of moral perceptions: a continuum of good versus evil, and a continuum of doer

versus recipient of moral acts. These two dimensions of agency (high: hero, villain; low: beneficiary, victim) and valence (good: hero, beneficiary; evil: villain, victim) divide morality into four cells: heroes who help others, villains who harm others, victims who receive harm, and beneficiaries who receive help. See Figure 1.

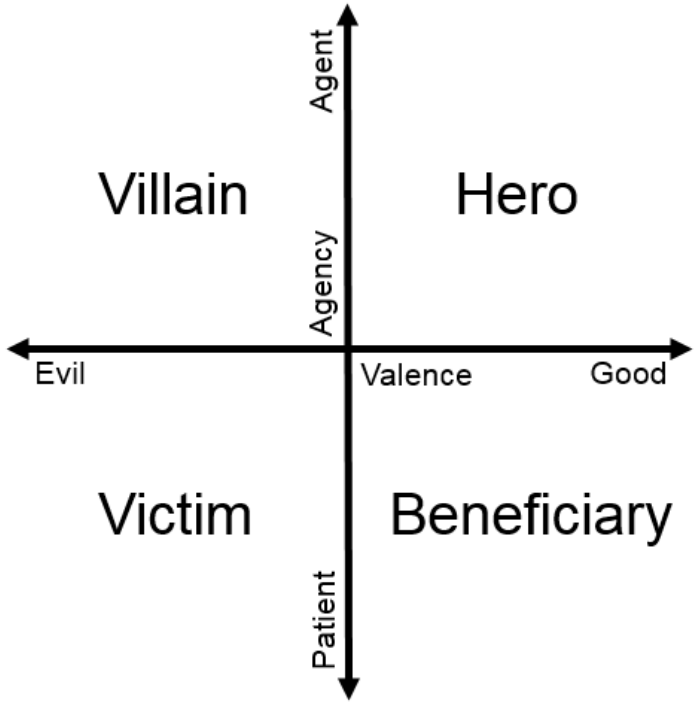

Figure 1. The two-dimensional structure of moral perceptions suggested by the Theory of Dyadic Morality

Most past work has examined the "agent" side of morality through perceptions of goodness and evil, but it can be useful to capture the "patient" side of morality. For example, moral emotions appear to map onto this two-dimensional space (Gray & Wegner, 2011a), with heroes like the Dalai Lama evoking emotions such as admiration or awe (Algoe & Haidt, 2009), villains like Hitler evoking disgust or anger (Rozin et al., 1999), victims of wrongdoing evoking

sympathy (Batson et al., 1981), and beneficiaries of help evoking relief (Cialdini et al., 1987). This two-dimensional framework may also well capture *self*-perceptions, as different people seem to see themselves along the axes of agency and valence—as heroes, villains, victims and beneficiaries.

Heroes. Heroes are good moral exemplars and plenty of research suggests that people see themselves in a positive light; for example, individuals tend to rate themselves as better than average on a wide variety of traits or abilities (Alicke & Govorun, 2005), a finding that may be especially prevalent in moral situations (Tappin & McKay, 2016). Despite generally heroic self-perceptions, there is variance in these perceptions: negative affective states can suppress self-perceived heroism (Pacini et al., 1998) and narcissism can inflate these perceptions (John & Robins, 1994). Given the other-focused orientation of moral exemplars (Han et al., 2017), self-perceptions of heroes should also be high in self-rated empathy (Fagin-Jones & Midlarsky, 2007; Harvey et al., 2009; Jayawickreme & Di Stefano, 2012; Midlarsky et al., 2005) and the tendency to help others in need (Franco & Zimbardo, 2006; Kohen et al., 2019).

Heroic people may also be invested in developing and maintaining their self-perceived heroic identity. People like Martin Luther King Jr. and Nelson Mandela were driven in their quests to not only do good things, but also to be good people. For heroes, it is likely important that they see themselves as holding positive characteristics like being fair, caring, and honest (Aquino & Reed, 2002). Those who report moral identity to be important to them also reported higher levels of volunteerism and higher amounts of intrinsic satisfaction with participation. As being a moral agent is not only about inner goodness, but about doing good deeds, and so we suggest that seeing oneself as a hero should also involve higher perceptions of self-efficacy or an internal locus of control.

Villains. At first blush, few would seem to identify as villains. Who would want to see themselves as instrumental in the suffering of others? However, research suggests that there is variance in self-views, and that some individuals do hold negative self-views (Bernichon et al., 2003; Malle & Horowitz, 1995). Moreover, villains may not be as negative as one might initially think. In movies, villains are often more interesting than heroes, not only possessing moral complexity, but also doing the kind of anti-social deeds that many fantasize about (Gollwitzer & Denzler, 2009), such as enacting revenge or seizing power.

Perhaps most importantly, the harm that villains do is often *instrumental*, harming others for the expressed goal of helping some subset of people, or bettering the world (i.e., burning it down to build it back up). For example, the comic book hero Magneto is bent on the destruction of human beings but only because they pose an existential threat to his fellow mutants (Lee, 1963). Recent work has identified that instrumental harm plays a large role in those who hold a utilitarian moral ideology (Everett & Kahane, 2020; Kahane et al., 2018). This can be contrasted to those who follow more deontological or rule-based morality where doing harm may be considered wrong no matter the benefit. Indeed, many acts that people see as villainous may in fact be perceived as necessary by the perpetrator. Acts like honor killings, torture, following orders from authority or God can be rationalized into the "correct" choice (Fiske & Rai, 2014).

Those who identify as villains may see themselves as enacting necessary evils for eventual benefits, and may they recognize that others see them as morally flawed—and accept such judgements. Those who see themselves as doing necessary immoral deeds may also identify as a hero (because sometimes heroes must o make tough decisions). We can therefore expect some overlap between the hero and villain dimension, especially because both are agents/doers of deeds. Ultimately, viewing oneself as a villain can allow for more self-serving actions. The

confidence in one's own moral compass—however skewed—and the willingness to harm others suggests that those who identify as villains should be high on narcissism and low on empathy.

Victims. Victims occupy the "evil/patient" quadrant of the moral space as people who receive bad deeds. This is an important identity to investigate because many people experience victimization in one form or another throughout life, either by sexual assault (nearly half a million each year; *RAINN*, 2020), crime to one's home (about 25% of households; Gallup, 2014), or domestic violence (1 in 4 women, 1 in 9 men; Truman & Morgan, 2014). Sometimes people try to take on the mantle of victimhood in intergroup interactions (i.e., competitive victimhood; Sullivan et al., 2012), this is often employed to escape culpability for immoral actions like discrimination. Those who signal to others that they are victims with good morality also tend to be associated with the dark triad, and in particular Machiavellianism (Ok et al., 2020). Some people may use victimhood to gain resources like money and social support from others.

Though these findings seem to indicate a benefit of victimhood, it seems that identifying as a victim likely has downsides. Socially, victims can feel stigmatized as weak, vulnerable, and in some cases be blamed for their victimization (Fohring, 2018; Hafer, 2000). Victims may also feel like they will be socially cut off if they do not fill these perceptions. Negative reactions to disclosing a traumatic event can lead to poor health outcomes (Hakimi et al., 2018) and, as the recipient of harm, victims likely feel powerless and low in self-efficacy. Given that powerlessness can induce depression (Swearer et al., 2001) and is tied to emotional instability (Glasø et al., 2007), we suggest that those who identify as victims will be high on these constructs. Many people experience events in which they feel as if they have been victimized. People who have been repeatedly victimized may also identify as being a victim more generally

and while they might gain certain benefits, they also likely incur costs and adverse physical, social, and mental effects.

Beneficiaries. Beneficiaries are those who receive help. Out of all four roles, beneficiaries are the least studied, perhaps because they (arguably) represent the least pressing of social challenges. It is obviously important to stop people from doing evil and to foster good deeds, which is why most people study good and evil agents. It is also important to understand the psychology of victims because they clearly need help, but understanding those who have been helped seems less urgent. However, one could debate how important it is to understand identities of beneficiaries who are already receiving help. On one hand, those who identify as beneficiaries may feel positive emotions—with all their benefits (Cohn et al., 2009; Fredrickson, 2001)—and increased feelings of self-efficacy after being helped (DeSteno et al., 2010; Isen et al., 1976). On the other hand, they may also still feel "patient-like" and powerless (Aujoulat et al., 2007).

Identifying as a beneficiary could be strongly tied to identifying as a victim (because both are patients) or as a hero (because both are on the "good" side of valence). Victims are people who need help, and beneficiaries are those who receive help, so it makes sense that people who see themselves as beneficiaries likely have been victims at one point—they are now receiving the help they needed. In fact, the Theory of Dyadic Morality (Schein & Gray, 2018) argues that victims are the pre-eminent moral patient, and that—at least in third-party judgments—beneficiaries are simply a variety of victims (victim who have been helped). While those who identify as victims might not necessarily identify as a beneficiary, those who identify as beneficiaries may remember negative situations or parts of their life that also lead them to identifying as a victim. Thus, we may see a correlation between victims and beneficiaries.

We also could see a correlation between beneficiaries and heroes. Given prior work that shows that individuals are agency-focused rather than communion-focused in their self-related thoughts (Wojciszke et al., 2011), it is possible that individuals will more easily identify with agent-focused roles, especially given that we are asking participants to put themselves in the shoes of the individuals depicted in each scenario. This could make the beneficiary role particularly difficult to identify with, especially given that negative events tend to be more salient, so the most noticeable or impactful patient role is victimhood. Receiving help can be tied to feelings of empathy and gratitude (Bartlett & DeSteno, 2006; Dongjie et al., 2018).

Plenty of work has also found people's tendency to "pay-it forward" when someone else does something good for them (Bartlett & DeSteno, 2006; Chang et al., 2012; Chiang & Takahashi, 2011; Dongjie et al., 2018; Gray et al., 2014; Horita et al., 2016; Tang et al., 2021; Tsvetkova & Macy, 2014) . Those who receive help, give help, which is why those who see themselves as beneficiaries may also see themselves as heroes. How people view their life stories can also impact their identity. Studies of life narratives find that those with a generative lifestyle (one that helps others; the hero) are more likely to discusses times in their life in which they were a beneficiary or received an early advantage (McAdams et al., 1997, 2001). This is another reason why we would expect the hero and beneficiary parts of the scale to correlate.

Altogether, there is reason to suspect that the beneficiary role may collapse into other roles in self-perceptions of moral identity. Consistent with this idea, recent research suggests a more "triangular" structure for moral character judgments of other people (Giner-Sorolla et al., n.d.; Hartman et al., in press). This triangle is still mapped on the space of valence and agency, but excludes beneficiary—the vertices are hero, villain and victim.

The Moral Identity Picture Scale

In the current studies, we provide and assess a scale that helps to assess the fuller scope of self-perceived moral identity: the Moral Identity Picture Scale (MIPS). The "pictures" of the MIPS are stylized drawings of pairwise interactions, and they depict good and bad moral agents (heroes and villains) as well as moral patients (victims and beneficiaries), reflecting the four-cell design laid out by the Theory of Dyadic Morality. For the individual files of all 16 pictures, please see the OSF link: https://osf.io/faz85/. For the full scale, see Appendix A. For the scoring procedure, see Appendix B.

The MIPS consists of 16 images presented in a random order, each on its own screen. Each picture captures the connection between adjacent cells depicted in Figure 1. Four images depict a hero and villain, four depict a hero and beneficiary, four depict a villain and victim, and four depict a victim and beneficiary. Although TDM emphasizes heroes and beneficiaries and—especially—villains and victims—it is useful to measure within-agency pairs (i.e., both agents or both patients) to better contrast the roles.

To provide increased generalizability and reliability, there are four versions of each pairing, and each was created with a few criteria in mind. In creating the items, we first wanted scenarios that would show a dyad interacting. Second, we chose scenarios that could be drawn out with minimal context needed to understand what was happening between the two individuals pictured. Lastly, we wanted to make these scenarios diverse and relatable. We wanted to include a variety of actions from mundane situations—like comforting a friend who is feeling down or saying something cruel to a colleague—to more extreme examples—like being rescued from a burning building—that you might see in a comic book or television show. With these criteria in mind, we brainstormed possible scenarios with our extended lab group. We chose the 16 with the

highest level of consensus for clarity, simplicity, and vividness. Then, a professional artist—Canadian cartoonist and illustrator Shawn Daley—drew out each situation. We did another round of review and edited wording for clarity, which led to our final set of photos. The sampling of this space allows the MIPS to better cover the range of possible moral scenarios that might resonate with people. See Figures 2 and 3 for examples.

Not only does the MIPS differ from past measures by assessing a broader scope of moral identity, it also differs from past measures by using pictures rather than words. For each picture, participants indicate how much they identify with each person in the frame, which provides 32 individual ratings which are then combined into 4 moral identity subscale scores: one for each of hero, villain, victim, and beneficiary.

Picture-based questionnaires in research have been shown to increase engagement with the research process (Puleston, 2011) and be more fun, without sacrificing quality of responses (Puleston, 2013). Further, we chose this type of measure because it provides a richer narrative for each participant to engage in. Past work shows that being immersed in a narrative increases motivation (Barraza et al., 2015), improves memory (Cahill & McGaugh, 1995; Heath & Heath, 2007), and can even improve theory of mind (Kidd & Castano, 2013). Some have even gone so far as to claim that this penchant for narratives and storytelling is the very essence of our humanity (Gottschall, 2013). Whether or not the human mind is truly built for story, pictures can at least capture situations more succinctly than words. Again, see supplementary material for all items (Appendix A) and scoring procedures (Appendix B).

Figure 2. MIPS image 7: Villain/Victim

Figure 3. MIPS image 16: Hero/Beneficiary

Current Studies

In four studies, we use the MIPS to explore moral identity, testing its construct validity, test-retest reliability, and convergent validity with real-world known groups. Study 1 examines

the internal consistency of the hero, villain, victim, and beneficiary roles, and uses multidimensional scaling to explore the structure of moral self-perceptions. We expect that the multidimensional scaling will result in two dimensions with one representing valence (good/moral vs. bad/immoral) while the other closely resembles agency (high/agent vs low/recipient/patient). Study 2 examines the test-retest reliability of the MIPS over a period of approximately 30 days. We believe that moral identities will be stable over this time frame and that Time 1 identification should robustly predict of Time 2 identification.

Studies 3a and 3b examine the convergent and divergent validity of the MIPS with a variety of validated scales that should relate to moral self-identity, such as measures of depression, self-efficacy, and the importance of moral identity. We predict that hero identification should correlate with self-efficacy and empathy, villains should show high levels of Machiavellianism, and victims should be high in levels of depression and low in self-efficacy. Because of the relative vagueness of beneficiaries, we do not hold any specific predictions about how it will correlate with other key scales. We also predict that those who see themselves as heroic will score highly on the self-importance of moral identity questionnaire, which asks participants to imagine that they have positive moral characteristics like being kind, helpful, or honest (Aquino & Reed, 2002).

Study 4 examines known groups validation by giving the MIPS to members of real-world groups that are perceived to occupy different moral roles in our society. We expect that those who are Masters of Social Work students at the University of North Carolina should be high in our hero identification. The villain identity is expected to be endorsed more by Masters of Business Administration students at Duke University, while those who identify as having been

bullied in the past should be endorse the victim identity. There was no group specifically selected to represent the beneficiary category due to theoretical indistinctness.

We present these studies the order that allows us to create a logical narrative flow, rather than the order in which they were conducted in the laboratory or online. We include information on a priori power analysis and pre-registration where appropriate. All materials including data, code, pre-registrations, and supplemental material can be found on https://osf.io/faz85/. All studies were approved by the UNC IRB #: 16-2315. Before proceeding we note that this measure is not argued to be "the best" measure of morality *per se* but rather an additional tool in the toolbox of identity and moral psychology researchers.

Study 1: Internal Consistency and Moral Map

Study 1 provided an initial investigation into the Moral Identity Picture Scale (MIPS), measuring the internal consistency reliability of each of four potential self-identifications—hero, villain, victim, and beneficiary—might relate to one another. We also examined the correlations between each four roles and submitted the scores to a multidimensional scaling procedure to provide a "map" of the structure of morality identity. We predicted that we would reproduce the structure found in Figure 1, with dimensions of agency (agent/patient) and valence (good/evil) and each four roles in the expected quadrant.

Method

Preregistration. We pre-registered this study using AsPredicted. We pre-registered a correlational design with 200 participants, which we deemed would provide sufficient power to reveal correlations in this within-subjects study. Pre-registered analyses were Pearson correlations between MIPS target identities, and multi-dimensional scaling of the relationships between the four MIPS target identities.

Participants. Two hundred and five participants (95 male, 109 female, 1 non-binary; M_{age} = 37.08, *SD* = 24.19) were collected via Amazon's Mechanical Turk (mTurk). After screening out those who failed all attention checks, we were left with 174 participants (77 male, 96 female, 1 non-binary; M_{age} = 35.99, *SD* = 12.56).

Procedure. Each participant saw the 16 pictures from the MIPS. Below each picture, participants answered, "How much do you identify with each person above?" on 1 (not at all) to 4 (extremely) Likert scale, for both the picture on the left and the picture on the right.

Results

Internal Consistency. Are each of the moral identity roles reliable across each of the 8 pictures that assess each role? Cronbach's alphas for hero items (α = 0.79), villain items (α = 0.86), victim items (α = 0.82), and beneficiary items (α = 0.73) suggest reasonable—but not extremely high—internal consistency. Given differences between story content in each picture and the intentional variation of factors including sex of characters and kind of harm/help, it is not surprising that there is variation within each role. Although all moral roles have alpha greater than .70—the recommended minimum for a measure (Nunnally, 1978)—we note that the beneficiary role is the least internally consistent. We suggest that this reflects the fuzziness of this very construct. Although people seem to have strong archetypes about heroes, villains, and victims—there seem to be little consensus about what a beneficiary is like. In fact, beneficiaries are often talked about in the same terms as victims, or grouped into one "moral patient" category in past research (e.g., Baumeister, 1997; Bernstein, 1998; Crimston et al., 2016). Moreover, as we have noted before, beneficiaries are usually first victims, and those who are helped usually help others making them hero like, further blurring the lines around this construct.

Mean Scores and Correlations. As both Figure 4 and Table 1 reveal, people generally self-identified most with the hero, next with the beneficiary, and next with the victim. They identified least with villain. In other words, they saw themselves most highly as good-doers, least highly as evil-doers, and intermediate moral recipients/patients, whether good or evil.

Correlations (Table 1) reveal that all roles are significantly related, except for identification as a hero and a villain. Please see Figure 4 for identifications across roles. While it might be intuitive to expect hero and villain to be inversely related, we suggest that the underlying dimensions of agency could increase the association between these constructs. Indeed, a dimensional structure—which we assess next, could give rise to positive associations across many roles.

Table 1: MIP Subscale Scores and Correlations

Variable	*M*	*SD*	α	1	2	3
1. Hero	2.75	0.62	0.79			
2. Villain	1.61	0.64	0.86	.05 [-.10, .19]		
3. Victim	2.07	0.68	0.82	.24** [.09, .37]	.38** [.25, .50]	
4. Beneficiary	2.33	0.58	0.73	.56** [.45, .66]	.34** [.21, .47]	.44** [.31, .55]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$.

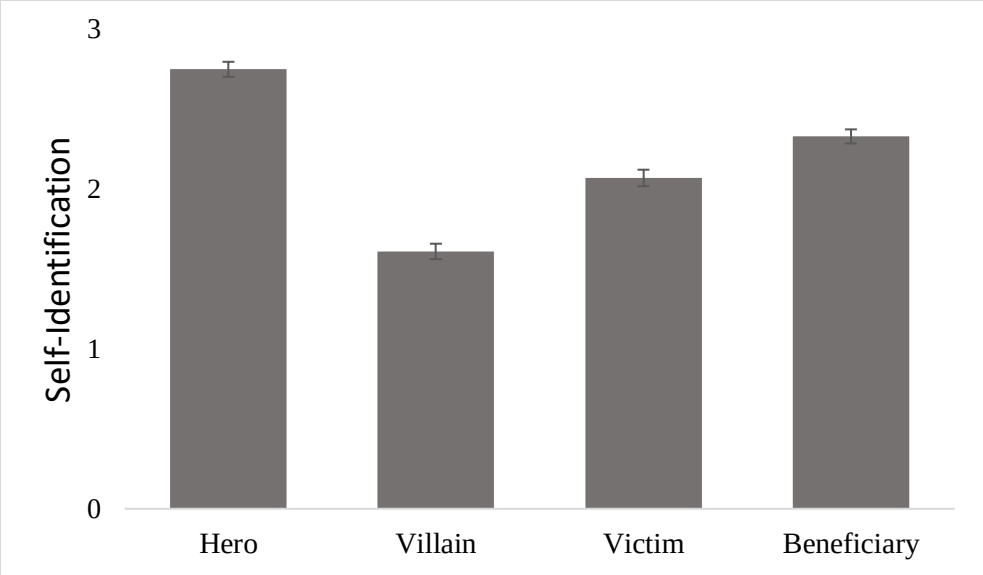

Figure 4. MIPS Subscale Means in Study 1, across MTurk participants.

Multidimensional Scaling. Scores for each role were submitted to PROXSCAL in SPSS, which yielded the structure in Figure 5. The model showed a stress value of 0.027, indicating an excellent fit (Kruskal, 1964). Largely consistent with the structure outlined by the Theory of Dyadic Morality (Figure 1), this MDS analysis appears to reveal two dimensions—a valence dimension (good/evil) running left-right, and an agency dimension running up-down. Although the villain, hero and victim are where one might predict, the beneficiary role appears poorly distinguished. Again, we suggest that this because this role is cognitively ill-defined and likely has stronger ties to other roles.

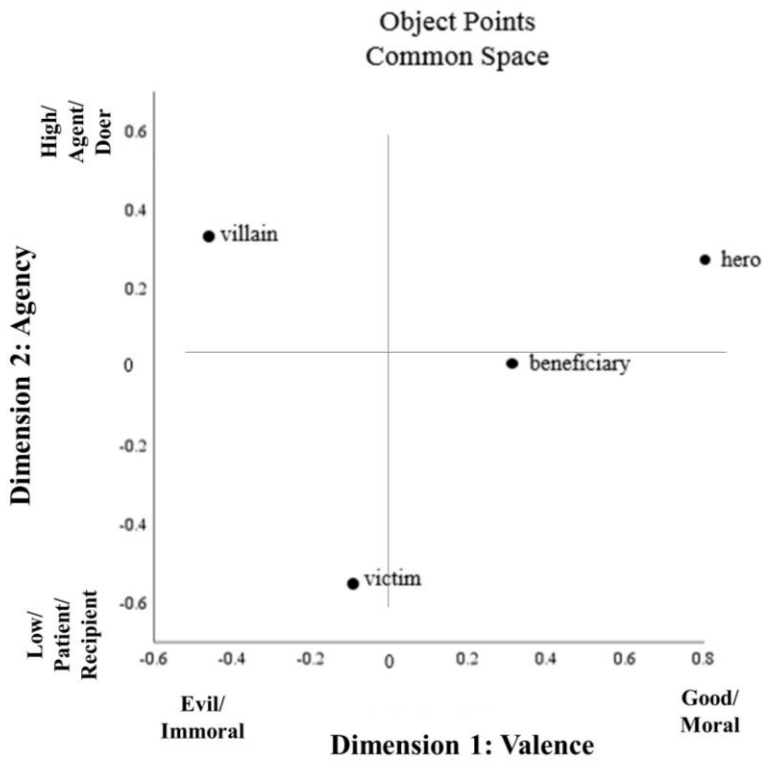

Figure 5. Multi-Dimensional Scaling results for the MIPS (Study 1).

Discussion

Study 1 examined initial properties of the MIPS. Ratings revealed reasonable internal consistency ratings for each role, indicating that the pictures assessed some breadth of situations and interpretations of each role. Inter-correlations were positive for all roles except for heroes and villains. There may be some common variance in just being willing to assign yourself a role in a story, but part of this overlap is also likely explained by the findings of the MDS, which revealed an underlying structure of moral self-perception consisting of two dimensions—one related to valence (good/evil) and one related to agency (agent/patient) consistent with the predictions of dyadic morality. Here we see the mutability of the beneficiary role as it seems to fall directly between the victim and hero roles. As discussed previously this is likely due to those who identify as victims and heroes also acknowledging that they've been helped along the way.

This provides some basic confidence in the psychometric properties of the MIPS. Next, we examined the temporal stability of the MIPS with a test-retest design.

Study 2: Temporally Stable Moral Identity

Although some aspect of people's identities can vary from day to day and across situations, identity is often considered to be something relatively stable, with self-perceptions of "who I am" possessing some temporal integrity. Past work on moral typecasting (e.g., Gray & Wegner, 2009) suggests that perceptions of the moral identity of others can remain stable over time. In this study we examined the temporal stability of self-perceived moral identity as assessed by the MIPS. We predicted a significant correlation for test-retest reliability across a span of approximately one month.

Method

Participants. One hundred thirty-eight undergraduate students (35 male, 103 female; M_{age} = 19.34, *SD* = 3.03) participated in this study for course credit, providing us with sufficient statistical power to detect a small-to-medium effect with 80% power based on an a prior power analysis.

Procedure. Participants signed up for two lab sessions, approximately one month apart from each other. They completed the same procedure at each session, including evaluating the MIPS and providing demographic information. The participants were fully debriefed upon completion of the study. We hypothesize that moral self-identification should be relatively stable across time. Thus, we would expect Time 1 responses to correlate with Time 2 responses across the participants in Study 2.

Results

We examined the relationship of participant answers at Time 1 to those at Time 2. We first examined all item-level correlations across participants. Participants' responses at Time 1 was significantly correlated to their responding at Time 2 across all items (*p*s < .05). For ease of reporting, we collapsed item identification into four categories: hero ($r = 0.68$, $p < .001$), villain ($r = 0.79$, $p < .001$), victim ($r = 0.77$, $p < .001$), and beneficiary ($r = 0.70$, $p < .001$), all of which showed significant Time 1 - Time 2 agreement. Please see Table 2 for all Time 1 – Time 2 correlations.

Table 2: Scores and Test-Retest Reliability for MIPS Sub-Scales (Study 2)

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Hero (T1)	3.00	0.46							
2. Hero (T2)	2.92	0.53	.68** [.57, .76]						
3. Villain (T1)	1.81	0.50	-.05 [-.21, .12]	-.01 [-.18, .16]					
4. Villain (T2)	1.79	0.54	-.03 [-.20, .14]	.09 [-.08, .26]	.79** [.72, .84]				
5. Victim (T1)	2.30	0.55	.36** [.21, .50]	.32** [.16, .46]	.20* [.03, .35]	.16 [-.00, .32]			
6. Victim (T2)	2.25	0.61	.30** [.14, .45]	.43** [.28, .56]	.13 [-.04, .29]	.18* [.02, .34]	.77** [.69, .83]		
7. Beneficiary (T1)	2.44	0.48	.50** [.36, .61]	.53** [.39, .64]	.09 [-.08, .25]	.07 [-.09, .24]	.41** [.26, .54]	.30** [.14, .44]	
8. Beneficiary (T2)	2.42	0.48	.45** [.31, .57]	.61** [.49, .70]	.08 [-.09, .24]	.15 [-.01, .31]	.35** [.19, .49]	.41** [.26, .54]	.70** [.60, .78]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in

square brackets indicate the 95% confidence interval. * indicates $p < .05$. ** indicates $p < .01$.

We next examined whether identification at Time 1 would predict identification at Time 2 in regression models. Hero identification at Time 2 was significantly predicted by both hero ($b = .63$, $t(133) = 7.54$, $p < .001$) and beneficiary ($b = .28$, $t(133) = 3.39$, $p = .001$) identification at Time 1; villain ($b = -.01$, $t(133) = -.11$, $p = .91$) and victim ($b = .02$, $t(133) = 0.18$, $p = .79$) identification were not significant predictors, $R^2 = 0.51$, $F(4, 133) = 34.13$, $p < .001$. Villain identification at Time 2 was significantly predicted only by villain identification at Time 1 ($b = .86$, $t(133) = 14.35$, $p < .001$); hero ($b = .003$, $t(133) = 0.04$, $p = .97$), victim ($b = .01$, $t(133) = 0.12$, $p = 0.91$), and beneficiary ($b = .003$, $t(133) = 0.04$, $p = .97$) identification at Time 1 were all non-significant predictors, $R^2 = 0.62$, $F(4, 133) = 54.99$, $p < .001$. Victim identification at Time 2 was significantly predicted only by victim identification at Time 1 ($b = .87$, $t(133) = 12.07$, $p < .001$); hero ($b = .06$, $t(133) = 0.71$, $p = .48$), villain ($b = -.02$, $t(133) = -.24$, $p = 0.81$), and beneficiary ($b = -.05$, $t(133) = -.63$, $p = .53$) identification at Time 1 were all non-significant predictors, $R^2 = 0.59$, $F(4, 133) = 47.46$, $p < .001$. Finally, beneficiary identification at Time 2 was significantly predicted only by beneficiary identification at Time 1 ($b = .62$, $t(133) = 8.41$, $p < .001$); hero ($b = .14$, $t(133) = 1.81$, $p = .07$), villain ($b = .02$, $t(133) = .40$, $p = 0.69$), and victim ($b = .04$, $t(133) = 0.57$, $p = .57$) identification at Time 1 were all non-significant predictors of beneficiary identification, $R^2 = 0.51$, $F(4, 133) = 34.21$, $p < .001$.

Discussion

The results of Study 2 supported our hypothesis that ratings on the MIPS are relatively stable over time, at least within a month-long period. Not only do we find that Time 1 identifications positively correlate with corresponding identification at Time 2, but we also find

in regression analyses that identification for each role at Time 1 is the key predictor of that role at Time 2. This lends support to the idea that moral self-identification as measured by the MIPS is a relatively stable over time, indicating that people may group themselves based on their moral self-perceptions. This second study also finds ambiguity with the beneficiary role. Here identification of being a beneficiary at Time 1 significantly predicted identifying as a hero at Time 2. One explanation for this finding is that participants who identified with being helped ended up helping others and therefore saw themselves as more of a hero in the follow-up. In Studies 1 and 2, we find support for the 4 identities in our scale and support for the test-retest reliability of the Moral Identity Picture Scale. In the next two studies, we turn to tests of validity.

Study 3a: Assessing Convergency with Other Measures

This study examined convergence between the elements of the MIPS and other measures that have been previously — or plausibly — related to moral identity. Participants took a battery of existing scales as well as the MIPS and we explored both convergent and divergent validity. Among the predictions are that those who self-identify as 1) heroes would show high levels of perceived self-efficacy or empathy, 2) villains would show high levels of Machiavellianism, 3) victims would show high levels of depression and low self-efficacy. The predictions regarding beneficiaries were less clear. One important thing to note is that this study omitted the self-importance of moral identity measure (Aquino & Reed, 2002). Given the popularity of this measure and its clear relevance to moral character, we wanted to have a separate dedicated study to examine the links between this measure and the MIPS (Study 3b).

Method

Participants. Power analysis based on a small-to-medium effect size and 80% power to detect effects demonstrated that our sample should include 70 participants. Seventy-one mTurk

workers participated in this study (25 male, 46 female, M_{age} = 32.11, *SD* = 15.94), which took approximately 20-30 minutes to complete. This timing was pre-tested by undergraduate research assistants before collecting our final sample.

Procedure. Each participant rated the Moral Identity Picture Scale followed by 14 validation scales in randomized order. To yield scores for each of the four moral identity types, we averaged across all images that assessed each type, reverse coding where appropriate.

The various scales were Deceptive Behavior Scale (Phillips et al., 2011), the Empathic Concern and Perspective Taking Subscales of the Interpersonal Reactivity Index (IRI, Davis, 1983), Risk Taking Tendency Measure (Brache & Stockwell, 2011), Strength Self-Efficacy Scale (Tsai et al., 2014), Machiavellianism Scale (Christie & Geis, 2013), Social Value Orientation (Van Lange et al., 1997), Ten-Item Personality Inventory (TIPI, Gosling, Rentfrow, & Swann, 2003), Narcissistic Personality Inventory (NPI, Gentile et al., 2013), Willingness to Engage in Help Seeking (Hammer & Vogel, 2013), Rotter Locus of Control (Rotter, 1966), Adult Victim Scale (Rigby & Slee, 1993), and Beck Depression Inventory (BDI, suicide question omitted; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). In addition, participants took 2 scales that should be unrelated to our moral self-perception measures as controls: Paranormal Belief Scale (Tobacyk, 2004) and Materialism Scale (Sirgy et al., 2012) and completed two attention check items ("I can fly"—only accepted strongly disagree; "No one has ever disliked me in my entire life"—only accepted "strongly disagree"), which were presented alongside the measures. Finally, participants provided demographics and were debriefed.

Results

We analyzed the data to examine correlations between MIPS ratings and other existing scales that should be related to aspects of moral self-identification. We primarily examined these

correlations both within each of our four moral types – heroes, villains, victims, and beneficiaries – as well as across agents and patients, and positive and negative moral valence. See Table 3 for these correlations (full correlational table provided in the supplementary material).

Table 3. Correlations between MIPS items and other scales (Study 3a).

	MIPS Hero	*MIPS Villain*	*MIPS Victim*	*MIPS Beneficiary*	*MIPS Agents*	*MIPS Patients*	*MIPS Positives*	*MIPS Negatives*
MIPS Hero								
MIPS Villain	0.081							
MIPS Victim	-0.014	0.117						
MIPS Beneficiary	0.620***	0.241*	0.279*					
MIPS Agents	0.833***	0.620***	0.040	0.609***				
MIPS Patients	0.351**	0.219	0.827***	0.771***	0.378**			
MIPS Positives	0.915***	0.186	0.141	0.886***	0.814***	0.613***		
MIPS Negatives	0.051	0.648***	0.830***	0.378**	0.377**	0.771***	0.237*	
Self-Efficacy	0.505***	0.114	-0.324**	0.319**	0.465***	-0.030	0.477***	-0.189
Empathy	0.405***	-0.223	-0.130	0.256*	0.205	0.061	0.376**	-0.228
Risk Taking	-0.145	-0.233	-0.013	0.110	-0.261*	0.056	0.002	-0.136
Machiavellianism	-0.408***	0.015	0.042	-0.297*	-0.310*	-0.146	-0.408***	0.040
Narcissism	0.164	0.578***	-0.086	0.156	0.458***	0.034	0.200	0.240*
Deceptive Behavior	-0.014	0.448***	0.263*	0.080	0.209	0.219	0.027	0.469***
Help Seeking	0.011	0.014	0.097	0.131	0.002	0.140	0.095	0.102
Adult Victim	-0.168	0.180	0.316**	-0.067	-0.026	0.170	-0.146	0.327**
TIPI Extraversion	0.283*	0.127	-0.256*	0.141	0.308*	-0.087	0.252*	-0.127
TIPI Agreeableness	0.163	-0.405***	-0.204	0.185	-0.120	-0.027	0.208	-0.354**
TIPI Conscientiousness	0.191	-0.125	-0.181	0.153	0.064	-0.025	0.185	-0.186
TIPI Emotional Stability	0.340**	-0.155	-0.378**	0.110	0.198	-0.186	0.260*	-0.380**
TIPI Openness to Experience	0.112	-0.098	-0.176	-0.043	0.031	-0.142	0.058	-0.174
Locus of control	-0.270*	0.006	0.249*	-0.159	-0.219	0.071	-0.258*	0.216
Social Value Orientation	0.115	0.185	0.079	0.057	0.206	0.084	0.098	0.149
Depression	-0.239*	-0.224	0.529***	-0.059	-0.322**	0.317**	-0.172	0.284*
Materialism	0.028	0.369**	-0.187	0.075	0.236	-0.080	0.021	0.066
Paranormal Belief	-0.067	-0.191	-0.238	-0.080	-0.147	-0.203	-0.075	-0.295*

*Computed correlation used pearson-method with pairwise-deletion. P-Values are 2-Tailed *p<.05, **p<.01, ***p<.001*

Hero. Our analyses reveal that identifying with the hero character in our measure is positively related to self-efficacy, r (69) = 0.51, $p < .001$, empathy, $r(69) = .41$, $p = .001$, extraversion, $r(70) = 0.28$, $p = .018$, emotional stability, $r(70) = 0.51$, $p < .001$, and an internal locus of control, $r(67) = 0.27$, $p = .027$, and negatively related to Machiavellianism, $r(69) = -0.41$, $p < .001$ and depression, $r(69) = -0.24$, $p = .048$.

Villain. Identifying with the villain in our measure is positively related to deceptive behavior, $r(64) = 0.49$, $p < .001$, and materialism, $r(68) = 0.37$, $p = .002$, and narcissism, $r(67) = 0.58$, $p < .001$. Surprisingly, we did not observe a significant relationship with Machiavellianism, $r(68) = 0.01$, $p = .91$. However, it was negatively related to agreeableness, $r(67) = -0.45$, $p < .001$.

Victim. Identifying positively with our victim character was positively related to adult victimhood, $r(70) = 0.32$, $p = .008$, depression, $r(69) = 0.53$, $p < .001$, and deceptive behavior, $r(65) = 0.26$, $p = .034$; victim identification was negatively related to self-efficacy, $r(69) = -0.32$, $p = .007$, extraversion, $r(70) = -0.26$, $p = .032$, and emotional stability $r(70) = -0.38$, $p < .001$.

Beneficiary. Lastly, identifying with the beneficiary character was positively correlated with self-efficacy, $r(69) = 0.32$, $p = .008$ and empathy, $r(68) = 0.26$, $p = .035$. It was also negatively related to Machiavellianism, $r(69) = -0.30$, $p = .013$.

Agent. Averaging across heroes and villains to create an "agent" score, we find that being rated high on agent was correlated significantly with self-efficacy, $r(67) = 0.47$, $p < .001$, extraversion, $r(68) = .31$, $p = .011$, and narcissism $r(66) = 0.46$, $p < .001$. Agent identification negatively correlated with Machiavellianism, $r(67) = -0.32$, $p = .011$ and depression, $r(67) = -0.32$, $p = .008$.

Patient. Averaging across beneficiaries and victims to create a "patient" score, we find that patients are likely to rate higher on depression, $r(69) = 0.32$, $p = .008$.

Positive moral valence. Averaging across hero and beneficiary, we created a "positive moral valence" identification score. Self-efficacy, $r(70) = 0.48$, $p < .001$, empathy, $r(69) = 0.38$, $p < .001$, and emotional stability, $r(71) = 0.26$, $p = .03$, were positively associated with positive moral valence. Machiavellianism, $r(70) = -0.41$, $p < .001$, and an internal locus of control, $r(68) = -0.26$, $p = .03$, were negatively associated with positive moral valence identification.

Negative moral valence. Averaging across villain and victim identification, we created a "negative moral valence" identification score. Narcissism, $r(68) = 0.24$, $p = .05$, deceptive behavior, $r(65) = 0.47$, $p < .001$, adult victim, $r(70) = 0.33$, $p = .01$, and depression, $r(69) = 0.28$, $p = .02$, were all positively correlated with negative moral valence identification. Agreeableness, $r(68) = -0.35$, $p < .001$, emotional stability, $r(68) = -0.38$, $p < .001$, and paranormal belief, $r(65) = -0.30$, $p = .02$, were all negatively correlated with negative moral valence.

Discussion

These results revealed some convergent and divergent validity for self-perceived moral identity as assessed by the MIPS. For each of hero, villain, victim, and beneficiary, moral identity seem to cohere with the most relevant subscales. This provides us with further confidence that identification on the MIPS will map onto (im)moral identification as an agent or patient in the world at large. While we strived to use a wide variety of previously validated measures in Study 3a, there are certainly other psychological constructs that could relate to moral self-identification, such as subjective socio-economic status, importance of interpersonal relationships, or emotion regulation. Future research should continue to examine how other

potentially relevant social psychological constructs relate to moral self-identity. Next, we examine the validity of the MIPS in the specific context of moral identity.

Study 3b: Convergence with a Moral Identity Measure

In Study 3b, we continue our investigation of the validity of the MIPS, this time using a pre-registered study to compare the MIPS to the most popular moral self-identification measure: the self-importance of moral identity scale (SIM-Q) proposed by Aquino & Reed (2002). Since the SIM-Q asks participants to imagine themselves as having positive moral characteristics like honesty or generosity, we hypothesize that those who find these important would identify as high on the MIPS hero identity. Conversely, we hypothesize that participants who rate those same types of traits as unimportant may rate highly on the MIPS villain identity.

Method

Participants. Two hundred and four (104 male, 100 female; M_{age} = 35.64, *SD* = 10.52) mTurk workers completed our survey for compensation. The study was pre-registered using AsPredicted. After screening out individuals who failed attention checks, we were left with 123 participants (57 male, 66 female; M_{age} = 36.96, *SD* = 11.50). This study was conducted at a time when mTurk was overrun with bots/server farms, hence the high number of exclusions.

Procedure. Participants took the MIPS as well as the self-importance of moral identity measure (SIM-Q) by Aquino & Reed (2002). Finally, they provided demographic information and were debriefed.

Results

First, we examined internal consistency of our measures. We found sufficient internal consistency for hero items (α = 0.85), villain items (α = 0.81), victim items (α = 0.83), and beneficiary items (α = 0.78); we made indices for each subscale.

We also examined internal consistency for the self-importance of moral identity scale, which was sufficient (α = 0.78) and similar to the internal consistencies for the MIPS. Next, we checked for sufficient internal consistence of the two Aquino & Reed (2002) subscales: symbolization (α = 0.89) and internalization (α = -0.08)[1].

Consistent with our predictions, we also find that self-identifying with the hero role on the MIPS is positively related to seeing one's moral identity as important on the self-importance of moral identity scale as a whole (r = 0.40, p < .001), and on both subscales (symbolization: r = 0.34, p < .001; internalization: r = 0.38, p < .001). MIPS villain identification was not significantly related to moral self-identification broadly (r = 0.11, p = .23), or on either subscale (symbolization: r = 0.11, p = .25; internalization: r = 0.08, p = .40). Inter-correlations between MIPS identifications are similar to earlier studies, showing consistency across samples. See Table 4 for all correlations.

Table 4. Correlations between MIPS subscales and SIM-Q.

Variable	*M*	*SD*	1	2	3	4	5	6
1. Hero	2.79	0.72						
2. Villain	1.48	0.54	.03 [-.15, .20]					
3. Victim	2.04	0.69	.39** [.23, .53]	.16 [-.02, .33]				
4. Beneficiary	2.30	0.64	.72** [.62, .79]	.24** [.07, .40]	.45** [.30, .58]			
5. SIM-Q (all)	3.18	0.62	.40** [.24, .54]	.11 [-.07, .28]	.16 [-.02, .33]	.40** [.24, .54]		
6. SIM-Q (symbolization)	3.08	1.03	.34** [.18, .49]	.10 [-.07, .28]	.14 [-.03, .31]	.34** [.18, .49]	.96** [.95, .97]	

[1] This value is negative due to a negative covariance among items, a violation of reliability model assumptions. However, item codings were verified accurate. Please interpret with caution.

7. SIM-Q (internalization)	3.27	0.38	.38** [.21, .52]	.08 [-.10, .25]	.14 [-.04, .31]	.39** [.23, .53]	.68** [.57, .76]	.45** [.30, .58]

Note. M and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. * indicates $p < .05$. ** indicates $p < .01$.

Discussion

Study 3b provides additional evidence that the MIPS captures moral identity. When compared to a previously validated measure of moral identity, we find similar results. Namely, those who find a positive moral self-identity important by Aquino & Reed's (2002) measure also seem to rate highly on the hero identity of the MIPS. Further, beneficiary identity is also related to centrality of a positive moral self-identity on the SIM-Q, emphasizing that beneficiaries structurally lie on the positive side of valence within the moral identity space. Identifying as a villain, on the other hand, is not significantly related to Aquino & Reed's (2002) SIM-Q measure. Since the SIM-Q measures moral self-identification with positive moral traits such as honesty and generosity, the lack of relationship between villain identification and SIM-Q score suggests that those identifying as villains may not value these characteristics. Interestingly, our results suggest that self-identified villainy and the SIM-Q are not negatively related—this lack of relationship between these variables may indicate that MIPS villains are simply not concerned with possessing positive moral traits identified by the SIM-Q or that they are rationalizing what others may deem to be immoral as necessary or beneficial for oneself. Rather than a mustache-twirling, sadistic supervillain from traditional conceptions of immorality, these may be individuals who do not place high value on being seen as or self-identifying with a positive moral identity. They may see moral concerns as simply irrelevant or outdated, and may prioritize self-interested actions regardless of whether they may be interpreted negatively by others. While

they may not strive to be actively dishonest, they likely do not prioritize honesty in their personal actions.

In Study 4, we continue our validation of the MIPS by testing all 4 identities/subscales on known groups of individuals.

Study 4: Known Groups Validation

In Study 4, we examine this idea of moral self-perception in more detail. For example, do those who dedicate their lives to helping others identify with the hero character in our measure? We examine four groups of individuals who should classify themselves into the four characters of our measure – Master of Social Work (MSW) students from the University of North Carolina, Master of Business Administration (MBA) students from Duke University, individuals who self-identify as being bullied in the workplace, and mTurk workers.

We predicted that UNC MSW students, who devote their careers to helping others when they are in need, would identify more with our hero profile than other known groups (e.g., Duke MBA students and workplace bullying victims). Indeed, past work shows that social workers hold central the ideals that they can enact positive change on the world and aid those in need (Fine & Teram, 2013; Olin, 2013).

We predicted that Duke MBA students might self-identify more with the villain profile compared with the other known groups. Although there are many heroes among business leaders, who lead the way with sustainable practices, charitable giving, and community engagement, past work argues that those with MBAs are more likely to act in self-interested ways compared to those without MBAs (Miller & Xu, 2019). In terms of perceptions, business people are typically stereotyped as more narcissistic (Mark Young & Pinsky, 2006) and cold-hearted (Fiske, Cuddy,

Glick, & Xu, 2002) than the general population, and MBAs may internalize those stereotypes as self-perceptions. Acknowledging that no two business schools or business school students are alike, we suggest that Duke MBA students might, on average, identity themselves as higher in villain compared with the other groups. Note that we—as researchers—are not arguing anyone in any sample is objectively higher in "villainy," but instead suggest that our sample of Duke MBA students may, relative to the other groups examined, *self*-identify more with pictured characters who harm others for instrumental means, perhaps because they see instrumental harm as important to achieving desired outcomes.

We predicted that those who stated they had experienced high levels of workplace bullying would identify with the victim profile. Finally, we suggest that mTurk workers should be relatively representative of the average person and would serve as a comparison condition for the other three groups, especially in comparison to typical psychological study samples. Research shows that mTurk workers are more demographically diverse than typical internet or college student samples and provide reliable, high quality data (Buhrmester et al., 2011) from a sample much larger than the typical university participant pool (Stewart et al., 2015).

Method

Participants. We had four groups of participants for this study: 94 UNC MSW students (80 female, 12 male, 1 self-described, M_{age} = 26. 02, *SD* = 3.22), 37 Duke MBA students (12 female, 25 male, M_{age} = 28.08, *SD* = 3.90), 50 individuals who self-identified as having been bullied in their place of work (28 female, 22 male, M_{age} = 33.90, *SD* = 9.76), and 101 mTurk workers (53 female, 48 male, M_{age} = 36.53, *SD* = 10.31). While we strove for approximately equal sample sizes across groups, we note that we experienced some difficulty in collecting our in-person groups. We collected data from all MSW students to which we were able to gain

access and note that our MBA sample was more difficult to collect than the other groups. Both MSW and MBA students were collected on university campuses; anecdotally, the Duke MBA students were generally unwilling to give a few moments to take the survey, some even telling their peers—in front of our research assistants—not to participate as the task was a waste of time. In stark contrast, we often did not have enough research assistants to accommodate all the willing UNC MSW participants. Thus, it took longer to collect fewer MBA students in comparison to MSW students. While we initially wanted to collect all samples in person, it was very difficult to obtain both access and IRB approval to administer surveys to victim groups in person, so we collected this group online using those who self-identified as having been bullied at work.

Procedure. Each of the above groups were recruited either from on campus at large, public universities, or were selected this task from mTurk. Once they consented to participate, each participant took the MIPS. Unlike the other groups, those who identified as workplace-bullying-victims first went through a screening process in which they filled out the Negative Acts Questionnaire-Revised (Nam et al., 2010), which measures mistreatment at work with items such as frequency of "Being humiliated or ridiculed in connection with your work" or " Being ignored or facing a hostile reaction when you approach." Those who scored into the top category of the scale (scores over 45; Notelaers & Einarsen, 2013) were categorized as victims of workplace bullying and were included in the study in which they took the MIPS, which occurred 2-3 weeks after they took the screener.

Results

Although a look at the results (Figure 6) reveals that all groups saw themselves self-identified most as a hero—consistent with Study 1—we were interested in comparing subscale scores *across* groups. To compare identification across these four groups, we ran a one-way ANOVA. We found significant differences between groups for hero ($F(3, 279) = 8.18$, $p < .001$), villain ($F(3, 279) = 9.45$, $p < .001$), victim ($F(3, 279) = 3.27$, $p = .022$), and beneficiary ($F(3, 279) = 6.08$, $p = .001$) groups. See Figure 6. Post-hoc tests reveal that, as predicted, MSW students ($M = 2.99$, $SE = 0.05$) rate themselves as higher on our heroism profile when compared to mTurk workers ($M = 2.71$, $SE = 0.07$, $p = .004$) and those who have been bullied ($M = 2.54$, $SE = 0.09$, $p < .001$). MBA students ($M = 2.92$, $SE = 0.07$) also identify as more significantly heroic than those who have been bullied ($p = .01$).

Consistent with hypotheses, MBA students ($M =1.95$, $SE = .09$) self-identify as significantly higher on the villain profile when compared to MSW students ($M =1.43$, $SE = .04$, $p < .001$), mTurk workers ($M =1.58$, $SE = .06$, $p = .001$), and those who have been bullied ($M =1.53$, $SE = .06$, $p < .001$). Those who have been bullied ($M =2.24$, $SE = .11$) identify significantly higher on the victim profile than MBA students ($M =2.11$, $SE = .08$, $p = .02$), marginally higher than MSW students ($M =2.01$, $SE = .06$, $p = 0.18$), and non-significantly different than mTurk workers ($M = 2.11$, $SE = .06$, $p = .66$).

Finally, those who have been bullied ($M =2.14$, $SE = .07$) identify significantly less on the beneficiary profile than MSW ($M =2.49$, $SE = .04$, $p < .001$) or MBA ($M = 2.41$, $SE = .08$, $p = 0.05$) students; mTurk workers were not significantly different in beneficiary identification ($M =2.30$, $SE = .06$, $p = 0.23$). See supplementary material for full post hoc results. Finally, we also ran a repeated-measures ANOVA to examine MIPS identification within each group. Please see

supplemental materials for results of this test (Appendix D) and for visualizations of the multidimensional scaling of each group (Appendix E).

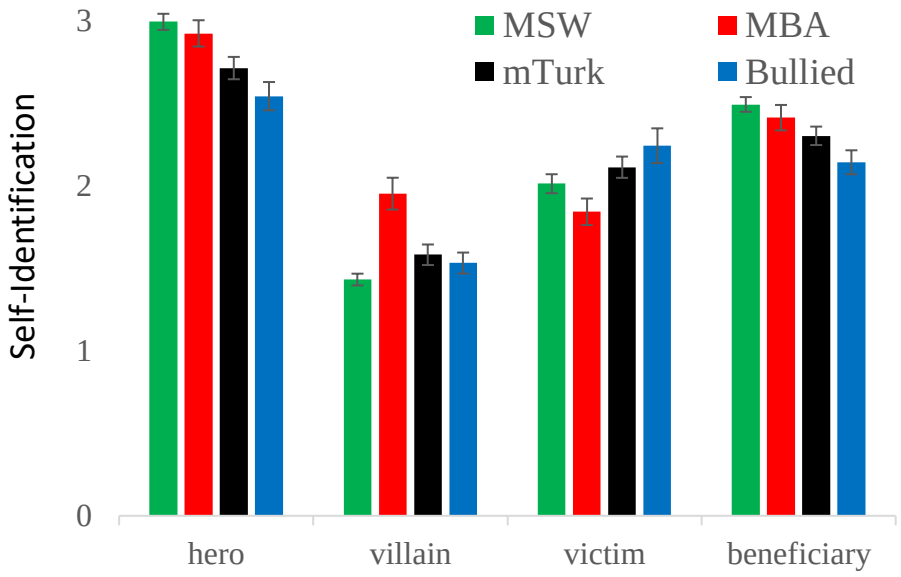

Figure 6. MIPS self-identification by known-groups. MSW: University of North Carolina Masters of Social Work students at UNC; MBA: Duke University Masters of Business Administration students; mTurk: sample of mTurk workers; Bullied: sample of people who self-report being bullied. Error bars represent standard errors.

Discussion

Study 4 provides further support that the MIPS measures moral self-identification. Known groups responded to the MIPS in the anticipated fashion. Relative to the other groups, UNC MSW students identified more as heroes, Duke MBA students identified more as villains, and those who have been bullied identified more as victims. We find that multiple groups identify with the beneficiary role, as both MSW students and MBA students identify significantly higher as beneficiaries in comparison to those who have been bullied. This fits with prior work, such as that on redemptive life narrative, that suggests that those who have achieved success in life often craft narratives that include themes of gratefulness at having received help from others in attaining that success (McAdams, 2013; McAdams et al., 2001).

It is again important to note that we, as researchers, are not claims that these groups are necessarily captured by these moral roles, but rather than members of groups themselves *self*-identify with these moral roles. It also bears noting again that these are relative differences across groups: within each group everyone sees themselves as generally more like a hero than any other role, consistent with the results from our previous studies.

General discussion

These four studies provide support for the MIPS as a measure of moral self-perception for hero, villain, and moral patient identities. Study 1 provides initial evidence that the MIPS taps into self-identification along two axes: as a moral agent (hero, villain) or patient (victim, beneficiary) and positive (hero, beneficiary) or negative (villain, victim) valence. As potentially expected, the beneficiary identity was less defined than the identities of hero, villain, and victim. Rather than a full 2 x 2 space created by agency and valence, the scope of self-perceived moral identity is more of a triangle, anchored by heroes, villains, and victims (Figure 5).

Study 2 suggests that moral identity self-perceptions seem to be stable over time. In our sample, participants self-rated moral identity was very similar approximately thirty days apart. Studies 3a and 3b provide evidence of the MIPS's convergent validity—those who identify as heroes also self-rate as possessing more empathy and self-efficacy; those who identify as villains rate themselves as higher on traits like narcissism; those who identify as victims also rate themselves as higher on previously validated victimhood measures; beneficiaries are higher on empathy. Further, hero identification is positively related to finding your moral identity important on Aquino & Reed's (2002) measure. Study 4 examines target groups and finds that UNC MSW students score comparatively higher on the hero profile, Duke MBA students scored comparatively higher on the villain profile, and those who have been bullied at work scored comparatively higher on the victim profile. While we believe these studies establish preliminary support for the MIPS as a useful tool in moral psychology research, future work is needed to further establish credibility and usefulness of the MIPS.

We hope that, in providing this new measure of moral identity, future work can examine a broader sense of the moral world—beyond simple identifications of good vs. evil—using our expanded measure that captures not only valence but also role as a moral agent or patient. This measure expands upon previous measures related to moral identity (e.g., Aquino & Reed, 2002; Barriga et al., 2001; Reimer & Wade-Stein, 2004), replicating prior work that we divide the moral world up into good and evil, but demonstrating that the moral identification space includes another component as well: moral agency and moral patiency. Most past work has examined this "agent" side of moral identity—heroes and villains—but we can gain a fuller and more nuanced view of the moral world if we also examine their counterparts—moral patients/recipients. The

MIPS provides us with the ability to examine moral identity across these 2 dimensions of valence (positive vs. negative) and agency (agent vs. patient).

Limitations & Future Directions

Taken together, these findings suggest that the MIPS is a measure of moral self-perception that could be adapted to many areas of research. This scale not only measures moral self-perception in a stable and valid way, but is also short and engaging, making it well suited for multiple experimental designs. While this paper provides initial support for the use of MIPS in moral self-perception research, future research should examine responding on this measure in a wider variety of samples. For example, it might be useful to examine how an individual identifies immediately after doing a good ("heroic) or bad ("villainous") act, and to compare this to how an individual responds without this moral or immoral prime. Further validating this measure with other target groups that are typically seen as heroes, villains, victims, or beneficiaries would also be helpful in identifying the applicability of this measure to broader populations; such an examination would also be helpful in identifying any boundary conditions or special cases to be aware of with this type of measure.

Future work could also expand upon this research by examining the MIPS directly in relation to moral behavior. Study 4 reveals that those who work to actively improve the lives of those in need—Master of Social Work students—identify more strongly as heroes than those who have been bullied or the general mTurk worker, which may be influenced by their training of helping those in need. Duke MBA students, in contrast, identify more strongly as villains compared MSW students, reflecting the self-perception that they may have to harm others to achieve their business goals. It bears noting again, that not all MBA students—or programs—are alike and many to go pains to teach ethics, and emphasize pro-social goals, such as sustainability

and positive social impact. Interestingly, both these MSW and MBA students—those who exert moral agency regularly in day-to-day life—rate lower on victim self-identification than those who have experienced bullying at work. While Study 4 provides a promising glimpse of how the MIPS might relate to real-world behavior, future studies should further examine this relationship between behavioral tasks in laboratories and real life and moral self-identification on this measure.

Further research can also investigate the way social categorization interacts with individual's moral identification. For instance, recent work has shown that women compared to men are more likely to be seen as a victim (T. Reynolds et al., 2020). Because of societal linked gender roles, it's possible that women are less likely to categorize themselves into either of the agent roles and instead place themselves more into the patient roles. There is also potential that other categorized populations like race and sexual orientation could present meaningful differences in identification. When these stimuli were developed, we focused on including gender diversity in our stimuli, but have not explicitly examined gender differences in response patterns to the MIPS. Further, these stimuli could be further diversified to be more inclusive of ages, race and ethnic backgrounds, and gender identities. Future research should work to increase inclusivity of both stimuli and research participants.

Additionally, it will be useful to examine moral self-perception over a longer time scale. While Study 2 suggests that these perceptions are likely to remain stable over time, this was only tested within one time frame: approximately 30 days. In the future, examining moral self-perception over a longer timeframe—months, or years—will be useful in determining how stable these perceptions are throughout the lifespan. For example, perhaps these perceptions are quite malleable through adolescence, but solidify in adulthood. Or perhaps they can be strongly

molded by transformative or traumatic life events such as the birth of a child or the onset of a medical condition. While there is certainly much to be explored in this area, this paper provides initial evidence that MIPS will be a useful, stable tool by which moral self-perception can be measured.

Finally, future work should seek to further understand how individuals see the moral patient role—both in themselves and others. People clearly make distinctions between moral agents with positive (hero) and negative (villain) valence. The distinctions between moral patients, however, are less clear. While our work suggests that individuals think of themselves as victims—our participants who experienced workplace bullying, for example—it is less murky whether these victimhood perceptions are meaningfully different than those who received needed help—beneficiaries. We see consistently that identifying as a beneficiary correlates well with the hero role. Study 3 suggests that beneficiary identification is related valuing a positive moral self-identity. In Study 4, we find that UNC MSW and Duke MBA students identify more strongly as beneficiaries than do those who experienced workplace bullying. Many questions about beneficiaries remain—is this role meaningfully separate from victimhood? Is a catch-all "moral patient" a more appropriate model of the moral self-identification space? Do people lack a distinct identification for beneficiaries and instead think that everyone gets help at some point in time? The lack of literature on moral beneficiary leaves this a large, open question for future work.

Conclusion

We hope this paper serves as a call to think about the broader nature of morality and provides a measure that will be of use to future research. While much research examines the way that individuals think about good and evil when making moral judgments of others, we argue that

considering one's self-perception as a hero, villain, beneficiary, and victim allows a fuller understanding of moral identity.

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References

Abele, A. E., & Wojciszke, B. (2013). *The Big Two in social judgment and behavior.*

Algoe, S. B., & Haidt, J. (2009). Witnessing excellence in action: The 'other-praising' emotions of elevation, gratitude, and admiration. *The Journal of Positive Psychology: Dedicated to Furthering Research and Promoting Good Practice*, *4*(2), 105–127. https://doi.org/10.1080/17439760802650519

Alicke, M. D. (2000). Culpable control and the psychology of blame. *Psychological Bulletin*, *126*(4), 556–574.

Alicke, M. D., & Govorun, O. (2005). The better-than-average effect. In *The Self in Social Judgment* (p. 304). Psychology Press.

Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & et al. (1995). Personal contact, individuation, and the better-than-average effect. *Journal of Personality and Social Psychology*, *68*(5), 804–825. https://doi.org/10.1037/0022-3514.68.5.804

Aquino, K., Freeman, D., Reed, A., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, *97*(1), 123–141. https://doi.org/10.1037/a0015406

Aquino, K., & Reed, A., II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, *83*(6), 1423–1440. https://doi.org/10.1037//0022-3514.83.6.1423

Aujoulat, I., Luminet, O., & Deccache, A. (2007). The Perspective of Patients on Their Experience of Powerlessness. *Qualitative Health Research*, *17*(6), 772–785. https://doi.org/10.1177/1049732307302665

Ayala, F. J. (2010). The difference of being human: Morality. *Proceedings of the National Academy of Sciences*, *107*(Supplement_2), 9015–9022. https://doi.org/10.1073/pnas.0914616107

Barkan, R. (2015). Ethical dissonance, justifications, and moral behavior. *Current Opinion in Psychology*, 6.

Barraza, J. A., Alexander, V., Beavin, L. E., Terris, E. T., & Zak, P. J. (2015). The heart of the story: Peripheral physiology during narrative exposure predicts charitable giving. *Biological Psychology*, *105*, 138–143. https://doi.org/10.1016/j.biopsycho.2015.01.008

Barriga, A. Q., Morrison, E. M., Liau, A. K., & Gibbs, J. C. (2001). Moral cognition: Explaining the gender difference in antisocial behavior. *Merrill-Palmer Quarterly (1982-)*, 532–562.

Bartlett, M. Y., & DeSteno, D. (2006). Gratitude and prosocial behavior: Helping when it costs you. *Psychological Science: A Journal of the American Psychological Society / APS*, *17*(4), 319–325. https://doi.org/10.1111/j.1467-9280.2006.01705.x

Batson, C. D., Duncan, B. D., Ackerman, P., Buckley, T., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation? *Journal of Personality and Social Psychology*, *40*(2), 290–302. https://doi.org/10.1037/0022-3514.40.2.290

Baumeister, R. F. (1997). *Evil. Inside human violence and cruelty. New York: W. H*. Freeman and company.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *4*, 561–571.

Bernichon, T., Cook, K. E., & Brown, J. D. (2003). Seeking self-evaulative feedback: The interactive role of global self-esteem and specific self-views. *Journal of Personality and Social Psychology*, *84*(1), 194–204. https://doi.org/10.1037/0022-3514.84.1.194

Bernstein, M. H. (1998). *On moral considerability: An essay on who morally matters*. Oxford University Press.

Blasi, A. (2005). *Moral Character: A Psychological Approach.*

Brache, K., & Stockwell, T. (2011). Drinking patterns and risk behaviors associated with combined alcohol and energy drink consumption in college drinkers. *Addictive Behaviors*, *36*(12), 1133–1140. https://doi.org/10.1016/j.addbeh.2011.07.003

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*(1), 3–5. https://doi.org/10.1177/1745691610393980

Cahill, L., & McGaugh, J. L. (1995). A Novel Demonstration of Enhanced Memory Associated with Emotional Arousal. *Consciousness and Cognition*, *4*(4), 410–421. https://doi.org/10.1006/ccog.1995.1048

Chang, Y. P., Lin, Y. C., & Chen, L. H. (2012). Pay It Forward: Gratitude in Social Networks. *Journal of Happiness Studies*, *13*(5), 761–781. https://doi.org/10.1007/s10902-011-9289-z

Chiang, Y. S., & Takahashi, N. (2011). Network homophily and the evolution of the pay-it-forward reciprocity. *PLoS ONE*, *6*(12). https://doi.org/10.1371/journal.pone.0029188

Christie, R., & Geis, F. L. (2013). *Studies in Machiavellianism*. Academic Press.

Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., & Beaman, A. L. (1987). Empathy-based helping: Is it selflessly or selfishly motivated? *Journal of Personality and Social Psychology*, *52*(4), 749–758.

Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness Unpacked: Positive Emotions Increase Life Satisfaction by Building Resilience. *Emotion (Washington, D.C.)*, *9*(3), 361–368. https://doi.org/10.1037/a0015952

Crimston, D., Bain, P. G., Hornsey, M. J., & Bastian, B. (2016). Moral expansiveness: Examining variability in the extension of the moral world. *Journal of Personality and Social Psychology*, *111*(4), 636–653. https://doi.org/10.1037/pspp0000086

Critcher, C. R., Inbar, Y., & Pizarro, D. (2012). How quick decisions illuminate moral character. *Social Psychological and Personality Science*, *4*(3), 308–315. https://doi.org/10.1177/1948550612457688

Crocker, J., & Park, L. E. (2004). The Costly Pursuit of Self-Esteem. *Psychological Bulletin*, *130*(3), 392–414. https://doi.org/10.1037/0033-2909.130.3.392

Cunningham, G. B. (2005). The importance of a common in-group identity in ethnically diverse groups. *Group Dynamics: Theory, Research, and Practice*, *9*(4), 251–260. https://doi.org/10.1037/1089-2699.9.4.251

Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, *51*(2), 167–184.

DeSteno, D., Bartlett, M. Y., Baumann, J., Williams, L. A., & Dickens, L. (2010). Gratitude as moral sentiment: Emotion-guided cooperation in economic exchange. *Emotion*, *10*(2), 289–293. https://doi.org/10.1037/a0017883

Dongjie, X. I. E., Hao, L. U., & Yanjie, S. U. (2018). Pay-forward effect of resource allocation in preschoolers: Role of theory of mind and empathy. *Acta Psychologica Sinica*, *50*(9), 1018–1028.

Everett, J. A. C., & Kahane, G. (2020). Switching Tracks? Towards a Multidimensional Model of Utilitarian Psychology. *Trends in Cognitive Sciences*, *24*(2), 124–134. https://doi.org/10.1016/j.tics.2019.11.012

Fagin-Jones, S., & Midlarsky, E. (2007). Courageous altruism: Personal and situational correlates of rescue during the Holocaust. *The Journal of Positive Psychology*, *2*(2), 136–147. https://doi.org/10.1080/17439760701228979

Festinger, L. (1962). *A Theory Of Cognitive Dissonance*. Stanford University Press.

Fine, M., & Teram, E. (2013). Overt and covert ways of responding to moral injustices in social work practice: Heroes and mild-mannered social work bipeds. *British Journal of Social Work*, *43*(7), 1312–1329.

Fiske, A. P., & Rai, T. S. (2014). *Virtuous violence: Hurting and killing to create, sustain, end, and honor social relationships*. Cambridge University Press.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, *82*(6), 878–902. https://doi.org/10.1037/0022-3514.82.6.878

Fohring, S. (2018). What's in a word? Victims on 'victim.' *International Review of Victimology*, *24*(2), 151–164. https://doi.org/10.1177/0269758018755154

Franco, Z., & Zimbardo, P. (2006). The banality of heroism. *Greater Good*, *3*(2), 30–35.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218

Gaertner, S. L., Dovidio, J. F., & Bachman, B. A. (1996). Revisiting the contact hypothesis: The induction of a common ingroup identity. *International Journal of Intercultural Relations*, *20*(3), 271–290. https://doi.org/10.1016/0147-1767(96)00019-3

Gallup. (2014). *About One in Four U.S. Households Victimized by Crime*. Gallup.Com. https://news.gallup.com/poll/179174/one-four-households-victimized-crime.aspx

Gentile, B., Miller, J. D., Hoffman, B. J., Reidy, D. E., Zeichner, A., & Campbell, W. K. (2013). A test of two brief measures of grandiose narcissism: The Narcissistic Personality Inventory–13 and the Narcissistic Personality Inventory-16. *Psychological Assessment*, *25*(4), 1120–1136. https://doi.org/10.1037/a0033192

Giner-Sorolla, R., Hilton, D., Erb, H.-P., Durante, F., Flaßbeck, C., Fülöp, E., Mari, S., Petrović, N., Sekerdej, M., Studzinska, A., Skitka, L. J., Washburn, A. N., & Zadora, A. (n.d.). Assigning moral roles within the Second World War in Europe: National similarities, differences, and implications for group-level moral representations. *Asian Journal of Social Psychology*, *n/a*(n/a). https://doi.org/10.1111/ajsp.12450

Glasø, L., Matthiesen, S. B., Nielsen, M. B., & Einarsen, S. (2007). Do targets of workplace bullying portray a general victim personality profile? *Scandinavian Journal of Psychology*, *48*(4), 313–319. https://doi.org/10.1111/j.1467-9450.2007.00554.x

Gollwitzer, M., & Denzler, M. (2009). What makes revenge sweet: Seeing the offender suffer or delivering a message? *Journal of Experimental Social Psychology*, *45*(4), 840–844. https://doi.org/10.1016/j.jesp.2009.03.001

Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, *106*(1), 148–168. https://doi.org/10.1037/a0034726

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*(6), 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Gottschall, J. (2013). *The Storytelling Animal: How Stories Make Us Human* (1 edition). Mariner Books.

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral Foundations Theory. In *Advances in Experimental Social Psychology* (Vol. 47, pp. 55–130). Elsevier. https://doi.org/10.1016/B978-0-12-407236-7.00002-4

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*(5), 1029–1046. https://doi.org/10.1037/a0015141

Gray, K., & Keeney, J. E. (2015). Impure, or just weird? Scenario sampling bias raises questions about the foundation of moral cognition. *Social Psychological and Personality Science*, *6*(8), 859–868.

Gray, K., & Schein, C. (2012). Two minds vs. two philosophies: Mind perception defines morality and dissolves the debate between deontology and utilitarianism. *Review of Philosophy and Psychology*, *3*(3), 1–19. https://doi.org/10.1007/s13164-012-0112-5

Gray, K., Schein, C., & Ward, A. F. (2014). The myth of harmless wrongs in moral cognition: Automatic dyadic completion from sin to suffering. *Journal of Experimental Psychology: General*, *143*(4), 1600–1615. https://doi.org/10.1037/a0036149

Gray, K., & Wegner, D. M. (2009). Moral typecasting: Divergent perceptions of moral agents and moral patients. *Journal of Personality and Social Psychology*, *96*(3), 505–520. https://doi.org/10.1037/a0013748

Gray, K., & Wegner, D. M. (2011a). Dimensions of moral emotions. *Emotion Review*, *3*(3), 227–229.

Gray, K., & Wegner, D. M. (2011b). Morality takes two: Dyadic morality and mind perception. In M. Mikulincer & P. R. Shaver (Eds.), *The social psychology of morality: Exploring the causes of good and evil*. APA Press.

Gray, K., Young, L., & Waytz, A. (2012). Mind perception is the essence of morality. *Psychological Inquiry*, *23*, 101–124. https://doi.org/10.1080/1047840x.2012.651387

Greene, J. D., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, *6*(12), 517–523.

Hafer, C. L. (2000). Do innocent victims threaten the belief in a just world? Evidence from a modified Stroop task. *Journal of Personality and Social Psychology*, *79*(2), 165–173. https://doi.org/10.1037/0022-3514.79.2.165

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*(4), 814–834.

Hammer, J. H., & Vogel, D. L. (2013). Assessing the utility of the willingness/prototype model in predicting help-seeking decisions. *Journal of Counseling Psychology*, *60*(1), 83–97. https://doi.org/10.1037/a0030449

Han, H., Kim, J., Jeong, C., & Cohen, G. L. (2017). Attainable and Relevant Moral Exemplars Are More Effective than Extraordinary Exemplars in Promoting Voluntary Service Engagement. *Frontiers in Psychology*, *8*. https://doi.org/10.3389/fpsyg.2017.00283

Hardy, S. A., & Carlo, G. (2005). Identity as a Source of Moral Motivation. *Human Development*, *48*(4), 232–256. https://doi.org/10.1159/000086859

Hartman, R., Blakey, W., & Gray, K. (in press). Deconstructing Moral Character Judgments. *Current Opinion in Psychology*.

Harvey, J., Erdos, G., & Turnbull, L. (2009). How do we perceive heroes? *Journal of Risk Research*, *12*(3–4), 313–327. https://doi.org/10.1080/13669870802519430

Heath, C., & Heath, D. (2007). *Made to Stick: Why Some Ideas Survive and Others Die*. Random House Publishing Group.

Helzer, E. G., & Critcher, C. R. (2018). What do we evaluate when we evaluate moral character? In K. Gray & J. Graham (Eds.), *Atlas of Moral Psychology* (pp. 99–107). Guilford Press.

Hertz, S. G., & Krettenauer, T. (2016). Does Moral Identity Effectively Predict Moral Behavior?: A Meta-Analysis. *Review of General Psychology*, *20*(2), 129–140. https://doi.org/10.1037/gpr0000062

Hester, N., & Gray, K. (2019). The moral psychology of raceless genderless strangers. *Perspectives on Psychological Science*, 47.

Hofmann, W., Wisneski, D. C., Brandt, M. J., & Skitka, L. J. (2014). Morality in everyday life. *Science*, *345*(6202), 1340–1343. https://doi.org/10.1126/science.1251560

Horita, Y., Takezawa, M., Kinjo, T., Nakawake, Y., & Masuda, N. (2016). Transient nature of cooperation by pay-it-forward reciprocity. *Scientific Reports*, *6*(January), 1–11. https://doi.org/10.1038/srep19471

Hutcheson, F. (1726). *An inquiry into the original of our ideas of beauty and virtue: In two treatises*. J. Darby...[and 8 others].

Isen, A. M., Clark, M., & Schwartz, M. F. (1976). Duration of the effect of good mood on helping:" Footprints on the sands of time.". *Journal of Personality and Social Psychology*, *34*(3), 385.

Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape: Moral motives and group-based moralities. *Personality and Social Psychology Review*, *17*(3), 219–236. https://doi.org/10.1177/1088868313480274

Janoff-Bulman, R., & Carnes, N. C. (2018). The model of moral motives. In K. Gray & J. Graham (Eds.), *Atlas of Moral Psychology*. Guilford Publications.

Janoff-Bulman, R., Sheikh, S., & Baldacci, K. G. (2008). Mapping moral motives: Approach, avoidance, and political orientation. *Journal of Experimental Social Psychology*, *44*(4), 1091–1099. https://doi.org/10.1016/j.jesp.2007.11.003

Jayawickreme, E., & Di Stefano, P. (2012). How Can We Study Heroism? Integrating Persons, Situations and Communities. *Political Psychology*, *33*(1), 165–178. https://doi.org/10.1111/j.1467-9221.2011.00861.x

John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, *66*(1), 206.

Kahane, G., Everett, J. A. C., Earp, B. D., Caviola, L., Faber, N. S., Crockett, M. J., & Savulescu, J. (2018). Beyond sacrificial harm: A two-dimensional model of utilitarian psychology. *Psychological Review*, *125*(2), 131–164. https://doi.org/10.1037/rev0000093

Kidd, D. C., & Castano, E. (2013). Reading Literary Fiction Improves Theory of Mind. *Science*, *342*(6156), 377–380. https://doi.org/10.1126/science.1239918

Kohen, A., Langdon, M., & Riches, B. R. (2019). The Making of a Hero: Cultivating Empathy, Altruism, and Heroic Imagination. *Journal of Humanistic Psychology*, *59*(4), 617–633. https://doi.org/10.1177/0022167817708064

Kohlberg, L. (1964). Development of moral character and moral ideology. *Review of Child Development Research*, *1*, 381–431.

Kruskal, J. B. (1964). Multidimensional scaling by optimizing goodness of fit to a nonmetric hypothesis. *Psychometrika*, *29*(1), 1–27. https://doi.org/10.1007/BF02289565

Lee, S. (1963). *X-Men*. *1*.

Lilgendahl, J. P. (2015). The dynamic role of identity processes in personality development: Theories, patterns, and new directions. In *The Oxford handbook of identity development* (pp. 490–507). Oxford University Press.

Luyckx, K., Teppers, E., Klimstra, T. A., & Rassart, J. (2014). Identity processes and personality traits and types in adolescence: Directionality of effects and developmental trajectories. *Developmental Psychology*, *50*(8), 2144–2153. https://doi.org/10.1037/a0037256

Malle, B. F., & Horowitz, L. M. (1995). The puzzle of negative self-views: An exploration using the schema concept. *Journal of Personality and Social Psychology*, *68*(3), 470.

Mark Young, S., & Pinsky, D. (2006). Narcissism and celebrity. *Journal of Research in Personality*, *40*(5), 463–471. https://doi.org/10.1016/j.jrp.2006.05.005

Maurer, T. W., Pleck, J. H., & Rane, T. R. (2001). Parental Identity and Reflected-Appraisals: Measurement and Gender Dynamics. *Journal of Marriage and Family*, *63*(2), 309–321. https://doi.org/10.1111/j.1741-3737.2001.00309.x

McAdams, D. P. (2013). *The Redemptive Self: Stories Americans Live By-Revised and Expanded Edition*. Oxford University Press.

McAdams, D. P., Diamond, A., de St. Aubin, E., & Mansfield, E. (1997). Stories of commitment: The psychosocial construction of generative lives. *Journal of Personality and Social Psychology*, *72*(3), 678–694. https://doi.org/10.1037/0022-3514.72.3.678

McAdams, D. P., Reynolds, J., Lewis, M., Patten, A. H., & Bowman, P. J. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin*, *27*(4), 474–485.

McKiernan, P. S., & Gary, L. (2009). Some HBS students adopt ethical code. *Harvard Gazette*. https://news.harvard.edu/gazette/story/2009/06/some-hbs-students-adopt-ethical-code/

Midlarsky, E., Jones, S. F., & Corley, R. P. (2005). Personality Correlates of Heroic Rescue During the Holocaust. *Journal of Personality*, *73*(4), 907–934. https://doi.org/10.1111/j.1467-6494.2005.00333.x

Miller, D., & Xu, X. (2019). MBA CEOs, Short-Term Management and Performance. *Journal of Business Ethics: JBE*, *154*(2), 285–300. http://dx.doi.org/10.1007/s10551-017-3450-5

Nam, W., Kim, J.-W., Kim, Y.-K., Koo, J.-W., & Park, C.-Y. (2010). The Reliability and Validity of the Negative Acts Questionnaire-Revised (NAQ-R) for Nurses for the Assessment of Workplace Bullying. *Korean Journal of Occupational and Environmental Medicine*, *22*(2), 129–139. https://doi.org/10.35371/kjoem.2010.22.2.129

Notelaers, G., & Einarsen, S. (2013). The world turns at 33 and 45: Defining simple cutoff scores for the Negative Acts Questionnaire–Revised in a representative sample. *European Journal of Work and Organizational Psychology*, *22*(6), 670–682. https://doi.org/10.1080/1359432X.2012.690558

Nunnally, J. C. (1978). *Psychometric Theory: 2d Ed*. McGraw-Hill.

Ok, E., Qian, Y., Strejcek, B., & Aquino, K. (2020). Signaling Virtuous Victimhood as Indicators of Dark Triad Personalities. *Journal of Personality and Social Psychology*, *2*(999). https://doi.org/10.1037/pspp0000329

Olin, J. (2013). The public and the profession's perception of social work. *Columbia Social Work Review*, *11*(1), 92–102.

Pacini, R., Muir, F., & Epstein, S. (1998). Depressive Realism From the Perspective of Cognitive-Experiential Self-Theory. *Journal of Personality and Social Psychology*, *74*(4), 1056–1068.

Phillips, M. C., Meek, S. W., & Vendemia, J. M. C. (2011). Understanding the underlying structure of deceptive behaviors. *Personality and Individual Differences*, *50*(6), 783–789. https://doi.org/10.1016/j.paid.2010.12.031

Pizarro, D., & Tannenbaum, D. (2011). Bringing character back: How the motivation to evaluate character influences judgments of moral blame. In M. Mikulincer & P. R. Shaver (Eds.), *The social psychology of morality: Exploring the causes of good and evil* (pp. 91–108). APA Press.

Pizarro, D., Uhlmann, E., & Bloom, P. (2003). Causal deviance and the attribution of moral responsibility. *Journal of Experimental Social Psychology*, *39*(6), 653–660. https://doi.org/10.1016/S0022-1031(03)00041-6

Prentice, M., Jayawickreme, E., Hawkins, A., Hartley, A., Furr, R. M., & Fleeson, W. (2019). Morality as a Basic Psychological Need. *Social Psychological and Personality Science*, *10*(4), 449–460. https://doi.org/10.1177/1948550618772011

Puleston, J. (2011). Online Research: Now & Next 2011 (Warc), Kings Fund, London, 1 March 2011. *International Journal of Market Research*, *53*(4), 557–562. https://doi.org/10.2501/IJMR-53-4-557-562

Puleston, J. (2013). Gamification of Market Research. In *Social Media, Sociality, and Survey Research* (pp. 253–293). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781118751534.ch11

Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review*, *118*(1), 57–75. https://doi.org/10.1037/a0021867

Reed, A., Aquino, K., & Levy, E. (2007). Moral Identity and Judgments of Charitable Behaviors. *Journal of Marketing*, *71*(1), 178–193. https://doi.org/10.1509/jmkg.71.1.178

Reeder, G. D. (2009). Mindreading: Judgments About Intentionality and Motives in Dispositional Inference. *Psychological Inquiry*, *20*(1), 1–18. https://doi.org/10.1080/10478400802615744

Reimer, K., & Wade-Stein, D. (2004). Moral Identity in Adolescence: Self and Other in Semantic Space. *Identity*, *4*(3), 229–249. https://doi.org/10.1207/s1532706xid0403_2

Reynolds, S. J., & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology*, *92*(6), 1610–1624. https://doi.org/10.1037/0021-9010.92.6.1610

Reynolds, T., Howard, C., Sjåstad, H., Zhu, L., Okimoto, T. G., Baumeister, R. F., Aquino, K., & Kim, J. (2020). Man up and take it: Gender bias in moral typecasting. *Organizational Behavior and Human Decision Processes*, *161*, 120–141. https://doi.org/10.1016/j.obhdp.2020.05.002

Rigby, K., & Slee, P. T. (1993). Dimensions of Interpersonal Relation Among Australian Children and Implications for Psychological Well-Being. *The Journal of Social Psychology*, *133*(1), 33–42. https://doi.org/10.1080/00224545.1993.9712116

Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and Commitment Therapy. Measures Package*, *61*(52), 18.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monogrpahs: General and Applied*, *80*(1). https://pdfs.semanticscholar.org/161c/b7ac92d7571042bb11ebdaaa1175be8079f8.pdf

Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, *76*(4), 574–586. https://doi.org/10.1037/0022-3514.76.4.574

Schein, C., & Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral template. *Personality and Social Psychology Bulletin*, *41*(8), 1147–1163. https://doi.org/10.1177/0146167215591501

Schein, C., & Gray, K. (2018). The Theory of Dyadic Morality: Reinventing moral judgment by redefining harm. *Personality and Social Psychology Review*, *22*(1), 32–70.

Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, *80*(2), 325.

Sirgy, M. J., Gurel-Atay, E., Webb, D., Cicic, M., Husic, M., Ekici, A., Herrmann, A., Hegazy, I., Lee, D.-J., & Johar, J. S. (2012). Linking Advertising, Materialism, and Life Satisfaction. *Social Indicators Research*, *107*(1), 79–101. https://doi.org/10.1007/s11205-011-9829-2

Stanley, M. L., & De Brigard, F. (2019). Moral Memories and the Belief in the Good Self. *Current Directions in Psychological Science*, *28*(4), 387–391. https://doi.org/10.1177/0963721419847990

Stets, J. E., & Carter, M. J. (2011). The Moral Self: Applying Identity Theory. *Social Psychology Quarterly*, *74*(2), 192–215. https://doi.org/10.1177/0190272511407621

Stewart, N., Ungemach, C., Harris, A. J. L., Bartels, D. M., Newell, B. R., Paolacci, G., & Chandler, J. (2015). The Average Laboratory Samples a Population of 7,300 Amazon Mechanical Turk Workers. *Judgment and Decision Making*, 16.

Strohminger, N., & Nichols, S. (2014). The essential moral self. *Cognition*, *131*(1), 159–171. https://doi.org/10.1016/j.cognition.2013.12.005

Swearer, S. M., Song, S. Y., Cary, P. T., Eagle, J. W., & Mickelson, W. T. (2001). Psychosocial correlates in bullying and victimization: The relationship between depression, anxiety, and bully/victim status. *Journal of Emotional Abuse*, *2*(2–3), 95–121.

Tang, W., Wu, D., Yang, F., Wang, C., Gong, W., Gray, K., & Tucker, J. D. (2021). How kindness can be contagious in healthcare. *Nature Medicine*, *27*(7), 1142–1144. https://doi.org/10.1038/s41591-021-01401-x

Tannenbaum, D., Uhlmann, E. L., & Diermeier, D. (2011). Moral signals, public outrage, and immaterial harms. *Journal of Experimental Social Psychology*, *47*, 1249–1254.

Tappin, B. M., & McKay, R. T. (2016). The illusion of moral superiority. *Social Psychological and Personality Science*, 1948550616673878.

Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, *103*(2), 193–210. https://doi.org/10.1037/0033-2909.103.2.193

Tobacyk, J. J. (2004). A Revised Paranormal Belief Scale. *International Journal of Transpersonal Studies*, *23*(1), 94–98. https://doi.org/10.24972/ijts.2004.23.1.94

Truman, J. L., & Morgan, R. E. (2014). Nonfatal Domestic Violence, 2003-2012. *Bureau of Justice Statistics*.

Tsai, C.-L., Chaichanasakul, A., Zhao, R., Flores, L. Y., & Lopez, S. J. (2014). Development and Validation of the Strengths Self-Efficacy Scale (SSES). *Journal of Career Assessment*, *22*(2), 221–232. https://doi.org/10.1177/1069072713493761

Tsvetkova, M., & Macy, M. W. (2014). The social contagion of generosity. *PLoS ONE*, *9*(2). https://doi.org/10.1371/journal.pone.0087275

Van Lange, P. A. M., Otten, W., De Bruin, E. M. N., & Joireman, J. A. (1997). Development of Prosocial, Individualistic, and Competitive Orientations: Theory and Preliminary Evidence. *Journal of Personality and Social Psychology*, *73*(4), 733–746.

Vest, B. M. (2013). Citizen, Soldier, or Citizen-Soldier? Negotiating Identity in the US National Guard. *Armed Forces & Society*, *39*(4), 602–627. https://doi.org/10.1177/0095327X12457725

Victims of Sexual Violence: Statistics. (2020). RAINN. https://www.rainn.org/statistics/victims-sexual-violence

Watkins, H. M., & Laham, S. M. (2020). The principle of discrimination: Investigating perceptions of soldiers. *Group Processes & Intergroup Relations*, *23*(1), 3–23. https://doi.org/10.1177/1368430218796277

Wojciszke, B., Baryla, W., Parzuchowski, M., Szymkow, A., & Abele, A. E. (2011). Self-esteem is dominated by agentic over communal information. *European Journal of Social Psychology*, *41*(5), 617–627. https://doi.org/10.1002/ejsp.791

Appendices for the Moral Identity Picture Scale (MIPS)

Appendix A: The Full MIPS

Instructions:

Next, you will view a series of photos and read some statements. Please indicate your opinion about each statement by filling in the box that corresponds to the answer you would like to give. Please be honest. Try not to let your response to one statement influence your response to other statements. There are no correct or incorrect answers. Answer according to your own feelings, rather than how you think "most people" would answer.

Number 1:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 2:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 3:

How much do you identify with each person above?

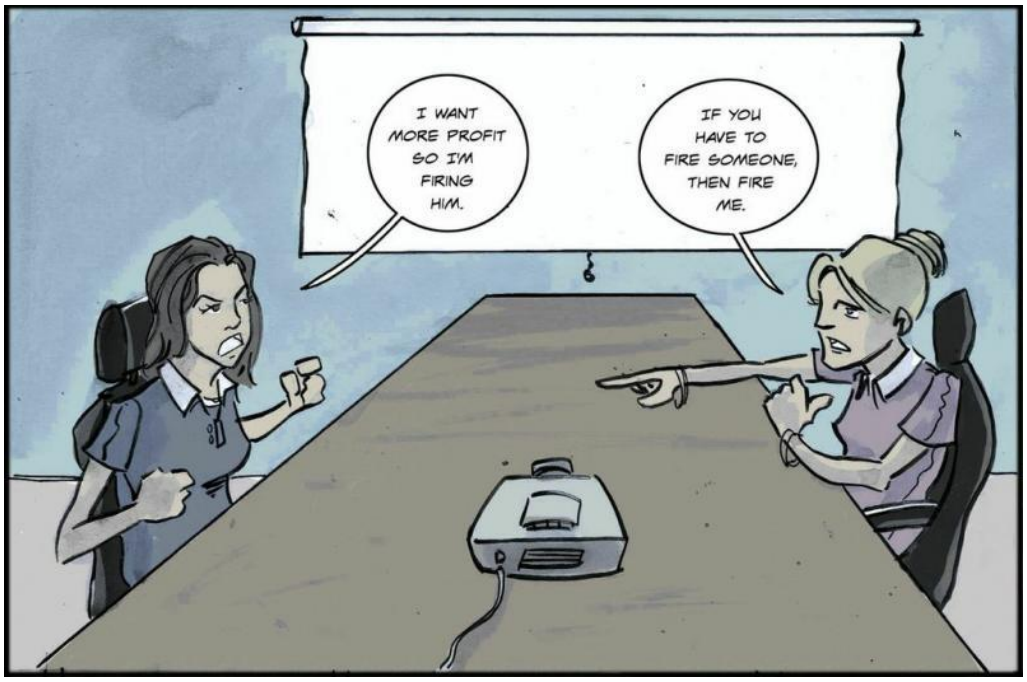
	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 4:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 5:



How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 6:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 7:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 8:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 9:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 10:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 11:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 12:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 13:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 14:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 15:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Number 16:

How much do you identify with each person above?

	Not at all (1)	Slightly (2)	Moderately (3)	Extremely (4)
Person on left	❍	❍	❍	❍
Person on right	❍	❍	❍	❍

Appendix B: Scoring the MIPS

Hero: Average of (1/Left, 2/Right, 5/Right, 6/Left, 9/Right, 10/Right, 13/Left, 16/Right)

Villain: Average of (1/Right, 3/Left, 5/Left, 7/Left, 9/Left, 11/Left, 13/Right, 14/Left)

Victim: Average of (3/Right, 4/Left, 7/Right, 8/Right, 11/Right, 12/Right, 14/Right, 15/Right)

Beneficiary: Average of (2/Left, 4/Right, 6/Right, 8/Left, 10/Left, 12/Left, 15/Left, 16/Left)

Appendix C: Summary Table of the MIPS

Picture File Name	Brief Scene Description	Identity of Left	Identity of right
MIPS_1_Hero_Vill	Two women discuss intentions to save or leave people in a fire.	Hero	Villain
MIPS_2_Bene_Hero	Two women lost in the wilderness. One helps the other find a way out.	Beneficiary	Hero
MIPS_3_Vill_Vict	One woman indicating taking revenge on another woman.	Villain	Victim
MIPS_4_Vict_Bene	One woman is trapped under a rock while the other woman is being rescued from a cave.	Victim	Beneficiary
MIPS_5_Vill_Hero	One woman wants more profits, so she wants to fire someone. The other woman says to fire her if anyone.	Villain	Hero
MIPS_6_Hero_Bene	One woman listens and comforts another woman.	Hero	Beneficiary
MIPS_7_Vill_Vict	A boss tells another woman that her idea is terrible.	Villain	Victim
MIPS_8_Bene_Vict	Two young girls discuss whether or not they've been adopted.	Beneficiary	Victim
MIPS_9_Vill_Hero	One man is about to press a button to kill other people. Another man states he's going to save them.	Villain	Hero
MIPS_10_Bene_Hero	One soldier is pulling another soldier to safety.	Beneficiary	Hero
MIPS_11_Vill_Vict	One man seems like he's going to hurt another man.	Villain	Victim
MIPS_12_Bene_Vict	One man is rescued from the top of a burning building while the other one is left there.	Beneficiary	Victim

MIPS_13_Hero_Vill	Two men on a park bench. One wants the other to be kinder, the other man says a different man deserves to suffer.	Hero	Villain
MIPS_14_Vill_Vict	One athlete taunts another athlete after beating him in a competition.	Villain	Victim
MIPS_15_Bene_Vill	One man tells another that his wife has taken him back. The other man says that his wife just left him.	Beneficiary	Victim
MIPS_16_Bene_Hero	One man listens to another man’s problems.	Beneficiary	Hero

Appendix D: supplemental analyses for Study 4

Repeated Measures ANOVAs and Contrasts for Each Source Type in Study 4

UNC MSW ANOVA

Sum Sq	Mean Sq	NumDF	DenDF	F value	Pr(>F)
125.40	41.80	3	279.00	354.72	0.00

UNC MSW Contrasts

profile	Mean	SE	df	lower.CL	upper.CL	Group
hero	2.99	0.05	236.15	2.89	3.08	A
villain	1.43	0.05	236.15	1.33	1.52	B
victim	2.01	0.05	236.15	1.92	2.10	C
beneficiary	2.49	0.05	236.15	2.40	2.58	D

Duke MBA ANOVA

Sum Sq	Mean Sq	NumDF	DenDF	F value	Pr(>F)
27.50	9.17	3	111.00	56.42	0.00

Duke MBA Contrasts

profile	Mean	SE	df	lower.CL	upper.CL	Group
hero	2.92	0.08	101.81	2.75	3.08	A
villain	1.95	0.08	101.81	1.78	2.11	B
victim	1.84	0.08	101.81	1.68	2.01	B
beneficiary	2.41	0.08	101.81	2.25	2.58	C

Workplace Bullied ANOVA

Sum Sq	Mean Sq	NumDF	DenDF	F value	Pr(>F)
26.20	8.73	3	147.00	30.57	0.00

Workplace Bullied Contrasts

profile	Mean	SE	df	lower.CL	upper.CL	Group
hero	2.54	0.08	179.65	2.37	2.70	A
villain	1.54	0.08	179.65	1.37	1.70	B
victim	2.23	0.08	179.65	2.07	2.40	C
beneficiary	2.14	0.08	179.65	1.97	2.30	C

MTurk ANOVA

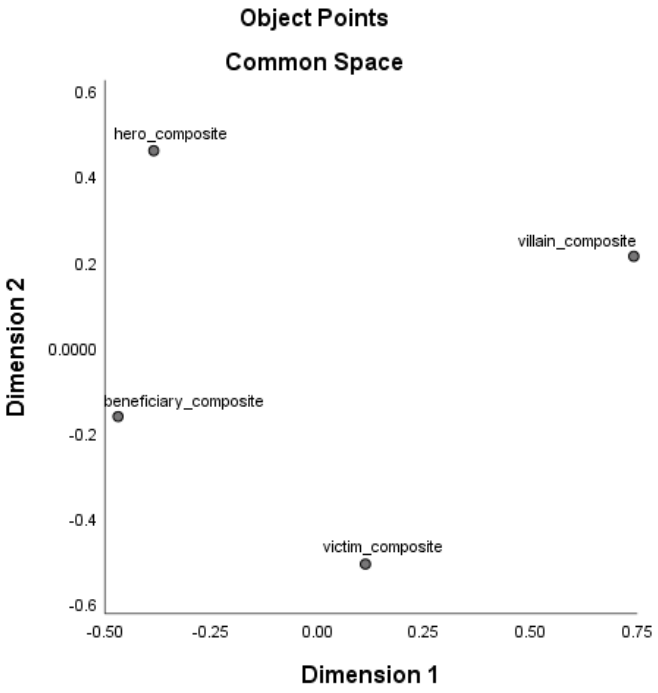
Sum Sq	Mean Sq	NumDF	DenDF	F value	Pr(>F)
66.34	22.11	3	300.00	73.45	0.00

MTurk Contrasts

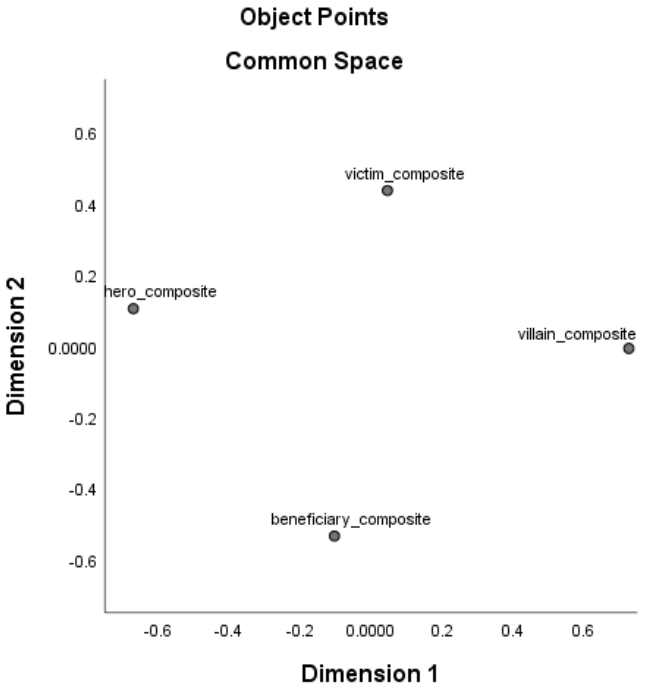
profile	Mean	SE	df	lower.CL	upper.CL	Group
hero	2.70	0.06	339.80	2.58	2.83	A
villain	1.58	0.06	339.80	1.45	1.70	B
victim	2.11	0.06	339.80	1.99	2.23	C
beneficiary	2.30	0.06	339.80	2.18	2.42	C

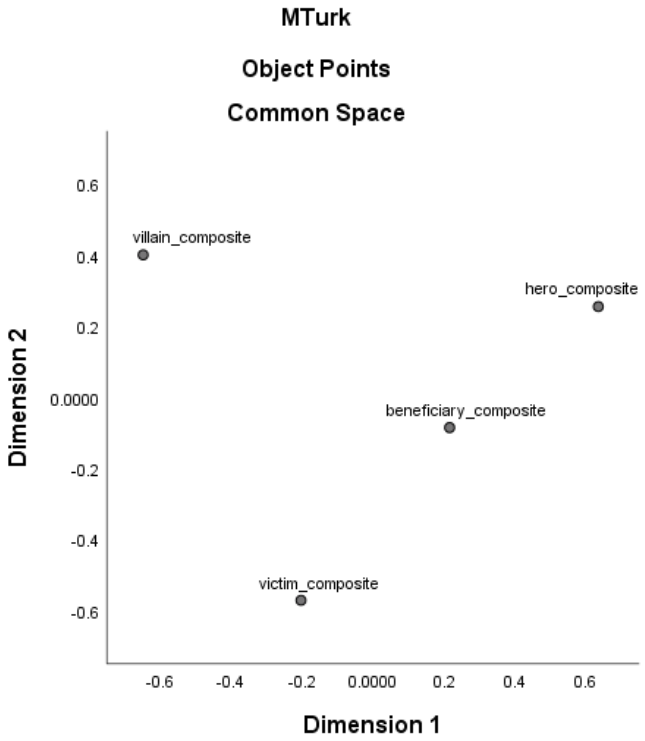
Appendix E: MDS results for Study 4

UNC MSW



Duke MBA





Workplace Bullied