

# Moral Character Predominates in Person Perception and Evaluation

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What sorts of trait information do people most care about when forming impressions of others? Recent research in social cognition suggests that “warmth,” broadly construed, should be of prime importance in impression formation. Yet, some prior research suggests that information about others’ specifically moral traits—their moral “character”—may be a primary dimension. Although warmth and character have sometimes been conceived of as interchangeable, we argue that they are separable, and that across a wide variety of contexts, character is usually more important than warmth in impression formation. We first showed that moral character and social warmth traits are indeed separable (Studies 1 and 2). Further studies that used correlational and experimental methods showed that, as predicted, in most contexts, moral character information is more important in impression formation than is warmth information (Studies 2–6). Character information was also more important than warmth information with respect to judgments of traits’ perceived fundamentalness to identity, their uniquely human quality, their context-independence, and their controllability (Study 2). Finally, Study 7 used an archival method to show that moral character information appears more prominently than warmth information in obituaries, and more strongly determines the impressions people form of the individuals described in those obituaries. We discuss implications for current theories of person perception and social cognition.

*Keywords:* moral character, warmth, sociability, person perception, global impressions

When you choose your friends, don’t be short-changed by choosing personality over character.

—W. Somerset Maugham

What do people most care about in others? Despite decades of research on person perception, it is not obvious what the answer to this question is. Indeed, from a social psychological standpoint, the question itself may seem ill-conceived, since it seemingly pays no heed to the role of situations, context, or various other potential moderators of what people care about and use to form impressions of others. Yet, as the quote above attests, one candidate dimension that matters principally in person perception and evaluation is moral character. A person’s moral character arguably consists of their “normal pattern of thought and action, especially in matters relating to the happiness of others and of . . . [themselves], most

especially in relation to moral choice” (Kupperman, 1991, p. 13). In a nutshell, moral character comprises the moral dimensions of a person’s personality.

In general, people should be concerned about others’ moral character, because the goodness of another person’s character determines whether they are likely to be harmful or helpful to the self (see, e.g., Abele & Wojciszke, 2007; Wojciszke, Bazinska, & Jaworski, 1998; Wojciszke, Dowhyluk, & Jaworski, 1998; see also Cottrell, Neuberg, & Li, 2007; Leach, Ellemers, & Barreto, 2007). A person of good moral character is likely at the very least to not be harmful, and in some circumstances, to be actively helpful. By contrast, a person of dubious moral character is likely to be less helpful, and may instead be actively harmful to the self. Even in the service of a common goal, a person of poor character will often turn out to be a fickle ally, since the strength of a person’s character determines how well they will follow through on their plans, goals, commitments, and values (see, e.g., Blasi, 2005; Kupperman, 1991; Piazza, Goodwin, Rozin, & Royzman, 2013).

More generally, moral character may also be important because of what it signals about a person’s identity. It is known, for instance, that people care deeply about their own moral self-concept (see, e.g., Allison, Messick, & Goethals, 1989; Aquino & Reed, 2002; Monin & Jordan, 2009), which may in part be driven by the social benefits that result from being moral (i.e., the social benefits conferred by developing a reputation as a reliable, courageous, or generous person; see, e.g., Sperber & Baumard, 2012). But, it is unlikely that social benefits of this sort exhaust the reasons why being a moral person is important to self-identity. The fully moral life is a demanding one, and in many cases being moral may in fact impose substantial costs on the self that outweigh any social benefit (see, e.g., Singer, 1979, 1995). However, being of good moral character may be viewed as a fundamental part of what

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it means to be human, and therefore, as highly fundamental to one's sense of identity and self-worth. That is, moral character might be seen as what Haslam and colleagues refer to as a *uniquely human* characteristic—one that sets us apart from other species (Haslam, 2006; Haslam, Bain, Douge, Lee, & Bastian, 2005). Therefore, while identity considerations perhaps most clearly pertain to the self, they might also influence concern for moral character in others as well (see also Strohinger & Nichols, 2013). For instance, one reason we might care whether our children have good moral character is that their character (or lack thereof) is seen as a reflection of our own (see May, 2000). In sum, the importance of moral character in person perception may reflect both social functionalist considerations and more symbolic, identity-based considerations.

The present inquiry focuses on the importance of moral character in person perception and evaluation. Although some existing evidence already points to the importance of moral character in these areas (e.g., Wojciszke, Bazinska, & Jaworski, 1998), we believe that the existing evidence falls short of documenting its true importance. One reason for this is that the role of moral character has been obscured in past research through its agglomeration with other dimensions of personality. For instance, some currently influential models of person perception claim that two, roughly orthogonal dimensions of personality—warmth and competence—underlie person perception (see, e.g., Fiske, Cuddy, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002). Moral character information is conceived of as falling within the warmth axis, that is, as a sub-component of warmth (Cuddy, Fiske, & Glick, 2008).<sup>1</sup>

Such two-dimensional models are, in principle, capable of taking account of moral character information in person perception. However, as we will argue, such models obscure the distinction between traits that are highly relevant to moral character and those that are not so relevant. Thus, if it is indeed true that moral character is of particular importance in person perception, two-dimensional models that agglomerate moral and non-moral traits within a single dimension may not adequately reflect this. To illustrate this, consider a major precursor of such two-dimensional models, namely a study conducted by Rosenberg, Nelson, and Vivekananthan (1968). Participants were presented with 64 different personality traits (four traits were later discarded), and sorted these traits either in terms of whether they were likely to be associated in the same person, or alternatively, in terms of whether they were good-bad, hard-soft, or active-passive. Multi-dimensional scaling methods revealed that a two-dimensional solution produced an adequate fit to the data, and subsequent regressions showed that “good-bad social” and “good-bad intellectual” were reasonable approximations of the meaning of these two dimensions. This conceptualization laid the groundwork for later two-dimensional models, which conceived these dimensions in terms of warmth and competence. Figure 1 illustrates the assortment of traits studied by Rosenberg et al. organized by these two dimensions. As Figure 1 shows, the good-social traits encompass not only traits that seem highly relevant to morality (e.g., sincere, honest, modest), but also traits that seem less relevant to morality (e.g., happy, sociable, humorous). Similarly the bad-social pole includes several traits that are highly relevant to morality (e.g., vain, dishonest), but also several that seem substantially less relevant to morality (e.g., unhappy, boring, unsociable).

A similar agglomeration persists throughout many later studies. For instance, traits that have been argued to exemplify the warmth dimension include: tolerance, warmth, good-naturedness, and sincerity (Fiske et al., 2002), good-naturedness, sincerity, and friendliness (Clausell & Fiske, 2005), warmth, friendliness, niceness, and sociability, (Kervyn, Bergsieker, & Fiske, 2012), sociability (Lin, Kwan, Cheung, & Fiske, 2005), and morality, trustworthiness, sincerity, kindness, and friendliness (Cuddy et al., 2008). In essence, the warmth dimension seems to capture a variety of traits that vary in the extent to which they signal information about a person's moral character. While there are some warmth traits that seem very high in moral relevance, such as kindness, generosity, charitableness, lovingness, and so on, other warmth traits (which we refer to as “pure” warmth traits) seem substantially less relevant to morality, for instance, being easy-going, sociable, extroverted, playful, agreeable, funny, gregarious, and so on.

The inverse of this point is also true. That is, there are also several traits that seem highly relevant to morality, yet much less relevant to warmth.<sup>2</sup> Trustworthiness is one such example because it need not be infused with warm, affectionate, or generous feeling, notwithstanding its inclusion in the warmth category in some of the articles referenced above. Other examples include courage, justness, fairness, modesty, loyalty, honesty, and being principled. Because of their moral relevance, these traits should matter greatly to person perception and impression formation, yet they seemingly need not be infused with warmth.

Yet, importantly, because two-dimensional theories agglomerate moral and non-moral traits within a single dimension, they therefore do not predict that the moral relevance of traits (as opposed to their warmth relevance) should have any special importance for person perception. However, for the reasons given at the outset, the moral relevance of traits may in fact be very important to person perception, and the omission of this information from two-dimensional models may therefore lead to a loss of predictive power.

Our claim here is not that there is a clear, categorical line, cleaving those traits that have moral relevance from those that do not. Rather, we claim that there is likely a continuum in terms of how morally relevant different traits are, which should distinguish the extent to which such traits drive person perception processes, particularly those related to impression formation. Nor do we contest the idea that warmth or sociability is related to morality in some ways. Indeed, some traits are highly relevant to both moral

<sup>1</sup> Alternative formulations of this idea refer to these dimensions as “communion” (corresponding to warmth) and “agency” (corresponding to competence; see, e.g., Abele, Uchrowski, Suitner, & Wojciszke, 2008; Abele & Wojciszke, 2007; Wojciszke & Abele, 2008; Wojciszke, Abele, & Baryla, 2009). Models that stress communion and agency are arguably somewhat distinct from warmth–competence models. However, writing together, authors from the warmth–competence and communion–agency approaches have stated that while each approach uses different names to denote the two underlying dimensions, these two dimensions are conceptualized and operationalized very similarly, particularly in the case of warmth/communion (see, e.g., Abele, Cuddy, Judd, & Yzerbyt, 2008).

<sup>2</sup> Throughout the article, we are conceiving of warmth in terms of its standard dictionary definition (see “Warm,” n.d.), which accords well with its lay meaning, that is, as involving a readiness to demonstrate affection or kindness (see, e.g., a “warm personality” at <http://www.thefreedictionary.com/warm>), or, relatedly, cordiality and enthusiasm (see, e.g., “warm support” at <http://www.thefreedictionary.com/warm>).

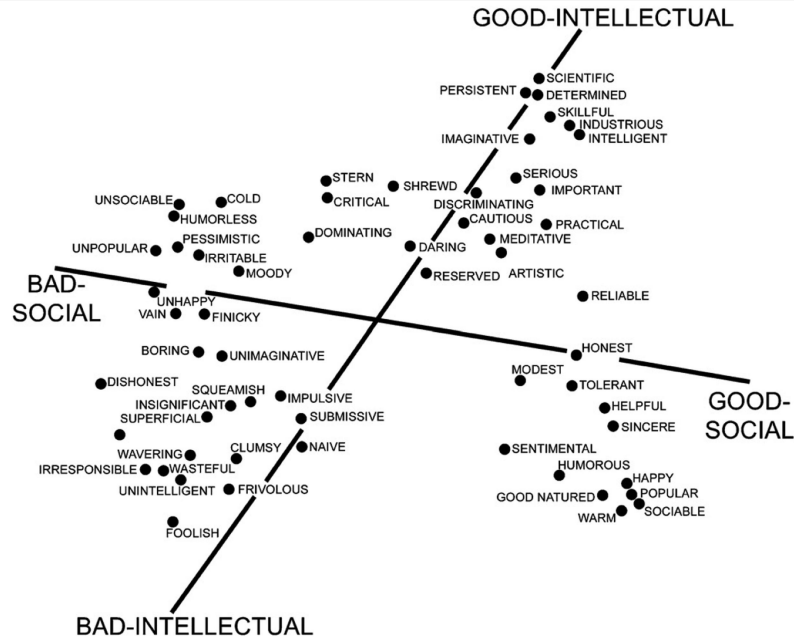


Figure 1. The two-dimensional organization of the 60 traits studied by Rosenberg et al. (1968), arrayed along the social (i.e., warmth), and intellectual (i.e., competence) dimensions. Reprinted from “Universal Dimensions of Social Cognition: Warmth and Competence,” by S. T. Fiske, A. J. C. Cuddy, and P. Glick, 2007, *Trends in Cognitive Sciences*, 11, p. 78. Copyright 2007 by ScienceDirect.

character and warmth. Such traits include kindness, generosity, lovingness, benevolence, charitableness, and so on. And indeed, some prior evidence shows strong links between warmth and morality (e.g., Hardy, Walker, Olsen, Skalski, & Basinger, 2011; Smith, Türk Smith, & Chambers, 2007; Walker & Hennig, 2004; Walker & Pitts, 1998). Moreover, even “pure” warmth traits, such as sociability, friendliness, or playfulness are not completely irrelevant to morality. Nonetheless, our core argument is that morality and warmth are separable dimensions of person perception, and that because such “pure” warmth traits are less relevant to morality than are many more clear-cut character traits, they should be less important in impression formation. It is the moral relevance of traits, rather than the warmth relevance, that should be primary in person perception and evaluation.

Accordingly, in the studies that follow, we investigate the role of moral character in person perception and evaluation, paying particular attention to the comparison between moral character and warmth. We aimed to discover whether it is indeed the case that moral character information is especially important in person perception, or whether instead, considering traits in terms of their relevance to morality adds little over and above considering them in terms of warmth. Our broad theoretical claim is that moral information should generally be of greater importance to person evaluation and impression formation than warmth information, across a range of different social contexts and evaluation targets. We also investigated several auxiliary hypotheses, pertaining to the link between character and identity, namely that character traits are seen as more fundamental to identity than are warmth traits, as well as less dependent on social context, more controllable and more desirable.

The dominance of character traits over warmth traits in person evaluation is likely to be especially pronounced for social roles or contexts of greater importance or intimacy, where much is at stake, and where another person has the opportunity to hurt or help one in significant ways (see, e.g., Wojciszke, Bazinska, & Jaworski, 1998; see also Cottrell et al., 2007; Fiske et al., 2007, 2002; Leach et al., 2007). However, while moral character information may be of greater importance in general, it is likely that there are some contexts where social warmth comes to the fore, and may even trump character information. We therefore paid particular attention to assess a broad range of such targets and contexts in the studies that follow, in order to explore these possible boundary conditions. We next review existing research that is relevant to our theory in order to set the stage for our own investigations.

### Existing Evidence That Moral Character Is Important in Person Perception

Just as there are good theoretical grounds for positing the importance of moral character in person perception, some existing evidence supports this notion as well. However, while suggestive, this evidence does not provide the sort of comprehensive assessment of the relevance of moral character to person perception that is needed to support our main contention, that is, that in most contexts, moral character traits in particular, and not social warmth traits, are most relevant to global impression formation. Past evidence is limited in assessing this claim because it does not focus on the contrast between moral character and warmth, because it involves limited sampling of moral traits, because it uses tasks that are not specifically designed to assess the importance of moral

information in impression formation, or because it does not adequately distinguish between traits' relevance to morality as opposed to their relevance to warmth.

For instance, [Wojciszke, Bazinska, and Jaworski \(1998\)](#) convincingly demonstrated that morality information about others is more important to impression formation than is competence-related information. Their main evidence consisted of showing that moral character information predicted global evaluations of people better than did competence-related information, both for real and hypothetical others. Though providing clear evidence of this contention, this article did not focus on the distinction between morality and warmth, and so cannot speak to our hypothesis on this matter.

[Cottrell et al. \(2007\)](#) demonstrated that information about others' trustworthiness—clearly a moral trait—was particularly relevant to person perception and evaluation. Compared to 13 other personality trait dimensions, including cooperativeness, agreeableness, intelligence, and extraversion, trustworthiness was rated as most important to creating an “ideal” person, and as most important across a variety of interaction contexts. However, while these results speak clearly to the importance of trustworthiness in person perception, they pertain only to the relative importance of this one moral trait in comparison with 12 other trait dimensions.<sup>3</sup> It is therefore not possible to discern from this investigation whether moral traits, in general, contribute more to person impressions than do warmth traits.

[Leach et al. \(2007\)](#) showed that three closely related moral traits, honesty, sincerity, and trustworthiness, are seen as particularly relevant to the evaluation of in-groups, and more so than are competence or sociability traits. Again, however, while this evidence is consistent with our theory about the general importance of moral character information, it cannot be counted as definitive evidence in favor of it, because the sampling of moral traits in these studies was limited. A similar point applies to a related study by [Brambilla, Rusconi, Sacchi, Cherubini, and Yzerbyt \(2012\)](#), which investigated group impression formation, finding such impressions to be more strongly determined by honesty-related traits in comparison with sociability traits.

Finally, in an investigation most closely related to the present one, [Brambilla, Rusconi, Sacchi, and Cherubini \(2011\)](#) showed that moral information (defined in terms of five traits: sincere, honest, righteous, trustworthy, respectful) is distinguishable from “sociability” information (defined in terms of five traits: kind, friendly, warm, likeable, helpful), and that moral character information is preferentially selected as being more relevant to forming an evaluative impression of another person. [Brambilla et al.'s](#) result squares directly with our own theorizing, and is the most direct existing evidence in support of it (see also [Bauman & Skitka, 2012](#), for a statement of the distinction between morality and sociability). However, this evidence pertains only to judgments of the *relevance* of particular traits in forming global evaluations, and results only from a single study. Our interest, however, was in assessing the general importance of moral character information in person perception, particularly impression formation. We therefore needed to investigate more directly whether the importance of morality information drives the actual formation of impressions, as opposed simply to the selection of traits as relevant for impression formation.

Finally, since past evidence is also not adequate in assessing some of our auxiliary hypotheses, including whether moral character traits are seen as more fundamental to identity, more context-independent, more desirable, and more controllable than are social warmth traits, we investigated each of these issues in the studies that follow as well.

## Overview of the Current Studies

The studies that follow build on the insights and methods developed in prior work, but extend them in order to answer our primary research question: whether moral character predominates in global impression formation. Study 1 surveyed a wide range of 170 different personality and character traits in order to assess their perceived relevance for gauging another person's moral character, personality, warmth, competence, agency, and communion (“communion” or “communality” being a recent reformulation of the warmth dimension; see Footnote 1). The main goal of this study was to provide norming data across a wide range of traits. It also showed that moral character is perceived to be distinct from warmth. Study 2 assessed the extent to which the character-relatedness of traits, in comparison with their warmth- and communion-relatedness predicts a range of important properties of those traits, such as their relevance to identity, their controllability, and their desirability. It aimed to further investigate the separation between moral character and warmth traits, as well as to show that moral character-relatedness predicts fundamental trait properties more strongly than do related constructs such as warmth or communion. The main aim of the remaining studies was to examine the evidence for our main hypothesis, namely that moral character information more strongly determines global impressions than does warmth information. Study 3 investigated the comparative role of moral character and warmth information in forming global impressions of others. Participants' judgments of real social targets on a wide variety of traits (that were selected to be differentially relevant to moral character and to social warmth, respectively) were used to predict their global impressions of those targets. Studies 4–6 used experimental methods, by manipulating both the moral character and the warmth traits of hypothetical social targets, in order to establish the causal role of both moral character and warmth information in global impression formation. Finally, Study 7 examined actual obituaries in order to gauge the support for the importance of moral character information in person perception using a more ecologically valid methodology. Here, we expected to find that moral character information is of primary importance in summary accounts of people's lives, and in the impressions formed from those accounts.

## Study 1: Norming Data

The main purpose of Study 1 was to provide norming data across a broad sampling of traits in terms of their perceived usefulness for judging a person's character, as well as related constructs such as their goodness, morality, warmth, communion, ability (or competence), and agency. In so doing, we also aimed to demonstrate that the concept of character (i.e., someone's having

<sup>3</sup> The authors did also investigate compassion/ benevolence, but much less comprehensively.

commendable or admirable character) is distinguishable from both communion and warmth.

## Method

**Participants.** Participants were 1,048 adults (457 men, 589 women, 2 did not report;  $M_{\text{age}} = 33.14$  years,  $SD = 11.60$ ) living in the United States (97% reported having an American national identity), recruited online via Amazon's Mechanical Turk ([www.mturk.com](http://www.mturk.com)), in exchange for monetary payment.

**Design.** The study had two phases: a trait selection phase and a measurement phase. In the trait selection phase we generated a list of 170 traits to be used in the measurement phase. In the measurement phase, participants were randomly assigned to one of 10 between-subjects groups of traits (17 in each group), and answered 11 questions (10 questions about the usefulness of each trait for judging a particular higher level construct, and one valence question) for each trait.

**Trait selection.** In the trait selection phase, we sought to generate a list of traits that would be representative of eight broad trait categories: Goodness/Badness, Strength/Weakness of Will, Ability/Lack of Ability, and Positive/Negative (Non-Moral) Personality. We sampled from these categories in order to provide broad coverage of traits relevant to person perception. We particularly wanted to ensure that traits were selected from each of the warmth, morality, and competence categories, reflecting previous taxonomies in the literature, as well as our current focus on morality. We divided the moral (or virtue) traits into goodness and strength categories reflecting a conceptual distinction that has been made by philosophers (e.g., Kupperman, 1991; Slote, 1983), and which has some empirical support (e.g., Piazza et al., 2013). We expected some warmth traits to be included within the goodness/badness category, since warmth and morality partially overlap. However, we also expected many warmth traits to be included within the non-moral personality category (i.e., those traits that are not highly relevant to morality). In addition, we also anticipated that the non-moral personality category would include traits that are not especially relevant either to morality or to warmth but which have nonetheless been part of past analyses of personality (e.g., *adventurous*, *neurotic*, etc.). The ability traits were designed to capture the dimension of competence. Finally, to further the goal of providing broad coverage of traits, we included both positive and negative traits within each set.

Trait selection was accomplished through two stages. First, we generated a list of 385 English-language trait words using the following principles:

1. We included only adjectives; nouns (e.g., good-listener, liar) were excluded.
2. We included only single words (e.g., genuine) or hyphenated words (e.g., law-abiding); phrases (e.g., faithful to spouse) were omitted.
3. We excluded traits that reflect a global moral evaluation without connoting a particular behavior or process (e.g., moral, virtuous, admirable, upright, honorable). Apart from the vagueness of these traits, we also felt that it was a foregone conclusion that they would be rated as highly relevant to moral character owing to the somewhat tau-

tological nature of the question in such instances. Some exceptions to this rule were "good"/"bad" and "positive"/"negative," which served as anchors for the Goodness and Valence categories, respectively.

4. When a positive trait word was selected, an analogous negative trait word (i.e., antonym) was sought. This was accomplished by consulting on-line thesauruses (e.g., Merriam-Webster Online, WordHipster).

In generating our list of traits, we consulted Lapsley and Lasky's (2001) list of prototypical moral character traits, Walker and Hennig's (2004) list of moral exemplarity traits, Rosenberg et al.'s (1968) list of 60 socially and intellectually desirable traits, and John and Srivastava's (1999) Big Five Inventory of 112 personality traits, in order to make sure that we had adequate coverage of each of the traits in these four lists. (Note, however, that only John and Srivastava's list contains negative traits; thus, we relied heavily on thesauruses for generating antonymous traits.)

Once we had generated our initial list of 385 traits, the next stage was to reduce the list to a manageable number of items. In particular, we sought to eliminate items that were highly synonymous with other items in the list. To this end, we first organized the items into our eight broad categories described above. Next, we arranged items within a category into sub-categories, grouping highly synonymous items together within the same sub-category, while separating non-synonymous items; for example, in the Goodness category, we grouped together all items pertaining to kindness/compassion/warmth, and separated these items from those pertaining to honesty/truthfulness, and those from items pertaining to loyalty, and so forth. Next, we eliminated or retained traits using the following principles:

1. We eliminated only those traits that were represented within a sub-category by other, more-representative traits.<sup>4</sup>
2. We retained at least one trait from each sub-category.
3. In general, more traits were retained from sub-categories with a large number of synonymous traits.

Following these principles, we retained 170 traits (the full list of traits is available upon request). Once we had our final list of traits, we divided our list into 10 sub-lists of 17 traits each. This was done so that the length of the study would be more manageable for participants, who made 11 judgments for each trait. We organized the 10 sub-lists of traits so that each sub-list contained an even distribution of traits from our eight categories. The sub-list to which each trait was assigned was determined quasi-randomly (i.e., each trait within a category was assigned a random number and then assigned in numerical sequence to one of the 10 sub-lists).

**Measurement phase.** In the measurement phase of the study, participants were randomly assigned to one of the 10 trait sub-lists, and responded to 11 questions for each of the 17 traits they were presented. Ten of the 11 questions were designed to assess the usefulness of each trait for assessing a person on a variety of

<sup>4</sup>The list of sub-categories that was used is available upon request.

higher-level person constructs. These included character, goodness/badness, morality/immorality, personality, ability, strength/weakness of will, grittiness/non-grittiness, agency, communion/non-communion, and warmth/coldness. These 10 measures were phrased in terms of how useful each trait was for determining whether or not a person had the defined dimension, or in some cases, what sort of profile they had on the defined dimension. The eleventh measure assessed the perceived valence (positive/negative) of the trait. The 11 measures were worded as shown in the Appendix. The main point of assessing each of these measures was to provide norming data for use in our later studies. A secondary aim was to examine whether traits' usefulness for judging moral character was distinguishable from their usefulness for judging warmth and communion.

Except for the valence measure, all measures were assessed in terms of the trait's usefulness for identifying someone with the defined dimension on a 9-point scale (1 = *Not at all useful*, 5 = *Moderately useful*, 9 = *Extremely useful*). Trait valence was assessed on a separate 9-point scale (1 = *Extremely negative*, 5 = *Neutral*, 9 = *Extremely positive*). At the end of the study, all participants responded to some demographic items, and were debriefed and compensated for their time. No other measures were collected.

## Results

We structured the data set so as to treat each individual trait as a case ( $N = 170$  cases), with the trait means on each of the 11 dependent measures as the primary data for analysis. We then conducted partial correlations and regression analyses to examine some of the more pertinent relations between the measures. Overall, the correlation between usefulness for judging character and valence was moderate and positive,  $r(170) = .35, p < .001$ . Accordingly, in order to provide the clearest picture of the relation between character and our other dependent measures, we controlled for valence in the analyses that follow. Similarly, given the overlap between usefulness for judging character and usefulness for judging personality,  $r(168) = .76, p < .001$ , we controlled for (usefulness for judging) personality as well.

Of particular interest were the relations between (usefulness for judging) character and both warmth and competence. Because usefulness for judging character, goodness, and morality, correlated very highly with each other, we aggregated them to form a single, composite character index ( $\alpha = .98$ ). Raw correlations showed a strong relation between this character index and both warmth,  $r(168) = .72, p < .001$ , and communion,  $r(168) = .77, p < .001$ . However, these correlations dropped substantially once both personality and valence were controlled for: Character  $\times$  Warmth,  $r(166) = .38, p < .001$ ; difference between correlations,  $z = 7.87, p < .001$ ;<sup>5</sup> Character  $\times$  Communion,  $r(166) = .49, p < .001$ ; difference between correlations,  $z = 7.23, p < .001$ . Thus, while the relation between traits' usefulness for judging character and their usefulness for judging warmth (and communion) is high in raw terms, this is largely because traits' usefulness for judging both of these constructs strongly covaries with their usefulness for judging personality, and with valence. Once this covariance is partialled out, a clearer and more moderate relation between character and warmth (communion) emerges, showing clearly that character is seen as distinct from both warmth and communion.

Usefulness for judging character was also seen as negatively related to usefulness for judging abilities, though the correlation was reasonably small,  $r(168) = -.24, p < .001$ , thus showing that character and competence were seen as distinct.

## Discussion

Study 1's main purpose was to assess the character-relatedness of a wide variety of traits, as well as their relatedness to other constructs of importance in the person perception literature, such as warmth and communion. These norming data played a major role in our ensuing studies. Beyond this primary purpose, Study 1 also revealed that character is seen as highly overlapping with the notions of goodness/badness and morality/immorality, and related to, though distinct from both warmth and communion.

### Study 2: Trait Properties

In Study 2, we more thoroughly investigated the separation between morality and warmth, while also turning to the importance of moral character in person perception. We investigated how traits' relatedness to moral character (as assessed in Study 1), as opposed to their relatedness to warmth, predicted numerous different properties of those traits. The properties of interest accorded with several key themes. The first theme concerns identity. We predicted that traits' relatedness to moral character would positively predict how fundamental they are seen as being to a person's identity—moral character traits being seen as more defining of a person's identity than are warmth traits. Relatedly, we predicted that moral character traits would be seen as less dependent on social context than are warmth traits. If moral traits are seen as fundamental to identity, they will also likely be seen as indelible and deeply rooted, and therefore relatively stable across contexts. We also expected that character traits would be seen as more uniquely human than warmth traits. Also pertaining to identity, we investigated the perceived developmental trajectory of traits, predicting that moral character traits would be seen as fully developing later in life than warmth traits, consistent with the notion that moral character is something a person perennially cultivates throughout their life span. The second theme concerns control and responsibility. Although Fiske et al. (2007, p. 79) have argued that warmth traits are especially controllable, we predicted instead that moral character traits would be seen as more changeable and more controllable than warmth traits, and thus more within the scope of a person's responsibility. The third theme concerns desirability. We predicted that moral character traits would be seen as more desirable than warmth traits, in both a friend and a co-worker. We also predicted that moral character traits would be seen as more reflective of the way a person treats others, although warmth should also predict this as well. Relatedly, we also investigated desirability for the self, predicting that moral character traits would be seen as more important for living a fulfilling life than are warmth traits. In each case, beyond investigating different traits' relatedness to character and warmth, as predictors of these properties of interest, we also examined how relatedness to communion

<sup>5</sup> To compute this test, we relied on Raghunathan, Rosenthal, and Rubin's (1996) method of computing the difference between correlated but non-overlapping correlations.

predicted these properties. Because communion is arguably a more characterological notion than is warmth (it is somewhat more group-oriented than is warmth), we expected that communion would predict the key properties of interest better than warmth, though not as well as character.

## Method

**Participants.** Participants were 425 adults from the United States recruited via Amazon's Mechanical Turk in exchange for monetary payment. Three participants failed to complete the study, leaving a total of 422 (246 women, 176 men,  $M_{\text{age}} = 34.22$  years,  $SD = 11.66$ ).

**Design, materials, and procedure.** There were two parts to the study. In the first part, participants rated 20 individual traits on 11 dimensions. In the second part, participants were provided definitions of "moral character" and "non-moral personality" and then rated each of these constructs globally on the same 11 dimensions from the first part. The results of the second part showed convincingly that "moral character" is seen as clearly distinct from "non-moral personality" in all of the predicted ways except one (final point of maturation), but because these results do not pertain directly to the comparison between character and warmth, we do not report on them further (the data are available upon request).

In the first part, 80 traits from Study 1 were used as stimuli, almost all of which were positively valenced.<sup>6</sup> The 80 traits were divided into four groups of 20 traits each. The traits were assigned to these groups at random, with one condition: each group contained a similar distribution of traits relevant to character, ability, and personality. Participants were assigned to one of these four groups of traits at random, and rated the 20 traits on the 11 different properties outlined earlier. The specific wording of each question and its corresponding scale are available upon request. The questions were presented in a randomized order, and all were answered on 9-point scales with the exception of *Point of maturation*, for which participants provided an exact age. At the end of the study, participants reported demographic information. No other measures were collected.

## Results and Discussion

We conducted a series of regressions to contrast the role of moral character and warmth/communion in accounting for variance in the 11 properties of interest. Means for the 80 positive traits served as cases for our 11 property measures, which were treated as the outcome variables in these regressions. We used usefulness for judging moral character and warmth, as assessed by subjects in Study 1 as our primary independent variables. Specifically, we relied on the aggregated character, goodness, and morality index from Study 1, and compared this with the warmth variable from Study 1 (see Regression 1, Table 1). We also ran corresponding regressions, using the communion variable from Study 1 in place of warmth (see Regression 2, Table 1). The results of each of these analyses are presented in Table 1.<sup>7</sup>

As Table 1 shows, these data indicate that traits' moral character relatedness was a more powerful predictor of their perceived relevance to identity, controllability, and desirability than was either their warmth or communion relatedness. The regression analyses are most

diagnostic, because they control for shared variance between the predictors, thus revealing the unique variance contributed by each predictor. They show that the greater predictive strength of character was particularly clear with respect to whether traits were seen as fundamental to identity, uniquely human, expressed independently of social context, changeable, part of a person's own domain of responsibility, desirable in a friend, desirable in a coworker, and important for living a fulfilling life.

For three of the identity relevant variables (independence of social context, uniquely human, point of maturity), the raw correlation coefficients with usefulness for judging character were not significant, yet character became a significant predictor once usefulness for judging warmth was controlled in the regression. This indicates that only the non-warmth part of moral character relates to these identity variables in the predicted way. For these same three variables, the regression weights for warmth and communion were negative (and significantly so), thus showing that once usefulness for judging character was controlled, warmth and communion predicted dependence on social context, lack of a uniquely human aspect, and an earlier point of full maturation, respectively. The same was true, at least for warmth, for desirability in a coworker.

Importantly, there was no variable for which warmth or communion positively predicted independent variance in identity centrality, desirability, or controllability, while character did not. The one case where the predictive strength of warmth and/or communion was stronger than that of character was with respect to the treatment of others. This is contrary to our prediction, although it is worth noting that the difference between the correlations was only directional, and was not significant. All three variables—character, warmth, and communion—predicted treatment of others very strongly (all  $r_s > .80$ ). In retrospect, this finding makes sense; at least some character traits—for example, *honest*, *just*, *responsible*, *dedicated*—seem more reflective of a person's commitment to moral standards and principles, rather than how they treat others, whereas warmth and communion traits seem more exclusively related to the interpersonal treatment of others. Finally, perhaps reflecting its somewhat more characterological flavor, communion was generally a stronger predictor of each of the properties of interest than was warmth, although, overall, it was not as strong a predictor as was character.

The strong relation between character and desirability ratings in Study 2 provides some initial, suggestive evidence that moral character traits are of considerable importance in determining global impressions. For the remainder of the article, our focus narrows to considering impression formation and person evaluation more directly, in order to investigate which traits most strongly determine those impressions, and which traits people care most about others' possessing. In Studies 3–7 we assessed traits' desirability and overall importance via examining global impres-

<sup>6</sup> Of the 80 traits, 77 were rated above the mid-point (5) of the valence scale in Study 1, and most were well above that mid-point. The three exceptions were *skeptical* (4.59), *uncompromising* (3.97) and *hard* (3.76), which we included because we thought they might be seen as positive by some people in some circumstances because of their relation to intellectual virtue (*skeptical*) or strength of character (*uncompromising*, *hard*).

<sup>7</sup> Multicollinearity was not a problem for these analyses. The variance inflation factor (VIF) scores for the predictor variables were all well below 5, and the tolerance levels were all above 0.4.

Table 1

The Results of Correlational and Regression Analyses in Which a Combined Moral Character Index Was Pitted Against Warmth (Regression 1) and Communion (Regression 2) in Predicting 10 Properties of Interest in Study 2

| Property                                     | Regression 1: Moral character versus warmth |   | Regression 2: Moral character versus communion |   |
|--|---|---|--|---|
|  | Moral character                             | Warmth                                      | Moral character                                | Communion                                 |
| <b>Identity</b>                              |   |   |  |   |
| Fundamentalness to identity                  | $r = .64^{***a}$<br>$\beta = .57^{***}$     | $r = .46^{***b}$<br>$\beta = .10$           | $r = .64^{***a}$<br>$\beta = .44^{**}$         | $r = .59^{***a}$<br>$\beta = .27^*$       |
| Independence of social context               | $r = -.16^a$<br>$\beta = .27^*$             | $r = -.51^{***b}$<br>$\beta = -.68^{***}$   | $r = -.16^a$<br>$\beta = .39^\dagger$          | $r = -.48^{***b}$<br>$\beta = -.76^{***}$ |
| Uniquely human (inability of dog to possess) | $r = .09^a$<br>$\beta = .29^*$              | $r = -.13^{*b}$<br>$\beta = -.31^*$         | $r = -.09^a$<br>$\beta = .42^{**}$             | $r = -.15^b$<br>$\beta = -.46^{**}$       |
| Point of maturation                          | $r = .07^a$<br>$\beta = .27^\dagger$        | $r = -.15^b$<br>$\beta = -.32^*$            | $r = -.07^a$<br>$\beta = .30^\dagger$          | $r = -.10^b$<br>$\beta = -.32^*$          |
| <b>Control and responsibility</b>            |   |   |  |   |
| Controllability                              | $r = .66^{***a,b}$<br>$\beta = .54^{***}$   | $r = .53^{***a,c}$<br>$\beta = .19^\dagger$ | $r = .66^{***a,b}$<br>$\beta = .41^{***}$      | $r = .65^{***b}$<br>$\beta = .35^{**}$    |
| Changeability                                | $r = .49^{***a}$<br>$\beta = .54^{***}$     | $r = .25^{*b}$<br>$\beta = -.09$            | $r = .49^{***a}$<br>$\beta = .38^{***}$        | $r = .42^{***a}$<br>$\beta = .14$         |
| Responsibility for                           | $r = .68^{***a}$<br>$\beta = .82^{***}$     | $r = .29^{**c}$<br>$\beta = -.23^*$         | $r = .68^{***a}$<br>$\beta = .67^{***}$        | $r = .50^{***b}$<br>$\beta = .01$         |
| <b>Desirability</b>                          |   |   |  |   |
| Desirability in friend                       | $r = .60^{***a}$<br>$\beta = .56^{***}$     | $r = .42^{***b}$<br>$\beta = .07$           | $r = .60^{***a}$<br>$\beta = .32^*$            | $r = .63^{***a}$<br>$\beta = .40^{**}$    |
| Desirability in co-worker                    | $r = .42^{***a}$<br>$\beta = .64^{***}$     | $r = .06^b$<br>$\beta = -.34^*$             | $r = .42^{***a}$<br>$\beta = .37^*$            | $r = .34^{**a}$<br>$\beta = .07$          |
| Reflective of treatment of others            | $r = .81^{***a}$<br>$\beta = .44^{***}$     | $r = .86^{***a}$<br>$\beta = .59^{***}$     | $r = .81^{***a}$<br>$\beta = .37^{***}$        | $r = .87^{***a}$<br>$\beta = .60^{***}$   |
| Predictive of life fulfillment               | $r = .55^{***a}$<br>$\beta = .63^{***}$     | $r = .27^{*b}$<br>$\beta = -.13$            | $r = .55^{***a}$<br>$\beta = .39^{**}$         | $r = .50^{***a}$<br>$\beta = .22$         |

Note. The top row in each cell presents the raw correlations, and the bottom row presents the regression coefficients. Within each row, correlation coefficients that do not share superscript letters are significantly different at the  $p < .05$  level, as indicated by Steiger's  $z$  test.

$^\dagger p < .10$ .  $^* p < .05$ .  $^{**} p < .01$ .  $^{***} p < .001$ .

sion judgments, and by examining archival evidence (obituaries). Our general prediction was that moral character information should be most important, and more important than warmth information, in determining global impressions. We further expected that this would especially be the case for important or intimate social relationships and roles where much is at stake. However, because there may well be less important, or less intimate contexts in which warmth information is more important than character information, we also aimed to probe for such boundary conditions. In each of these studies, we also investigated the potential moderating role of subjects' gender when it was feasible to do so. The upshot from these analyses was that gender played only a very minor, and somewhat inconsistent moderating role. In general, men and women responded very similarly. We therefore do not report further on the details of these analyses below.

### Study 3: Global Impressions of Real Targets

Study 3 was designed to investigate how the moral character relatedness of a variety of different traits predict the global im-

pressions that people form of real social targets whom they have encountered in their lives. We adapted a methodology used by Wojciszke, Bazinska, and Jaworski (1998), in which participants are asked to rate a number of different social targets on various traits, as well as to register their overall impressions of these targets. This enables an examination of how ratings of individual traits predict global impression judgments. Our main theoretical prediction was that character-related traits would predict global impressions better than would warmth-related traits.

### Method

**Participants.** One hundred and sixteen undergraduate students from the United States logged on to complete a web-based survey in exchange for course credit. Seven participants failed to complete the study, leaving a total of 109 (79 women, 30 men,  $M_{\text{age}} = 19.67$  years,  $SD = 1.42$ ).

**Materials, design, and procedure.** Participants were asked to rate seven different social targets in a random order. The targets varied in both valence and closeness, and were as follows: "some-



Table 2

*The Set of Traits Used in Study 3, Organized by Category, With the Category Means in Terms of Morality (Composite) and Warmth (as Revealed by Study 1) Listed Below Each Set of Traits*

| Category                    | Traits   | Morality usefulness | Warmth usefulness |
|-----------------------------|--|---------------------|-------------------|
| High morality, high warmth  | humble, kind, forgiving, giving, helpful, grateful, empathetic, cooperative      | 7.30 <sup>a</sup>   | 7.47 <sup>a</sup> |
| High morality, lower warmth | courageous, fair, principled, responsible, just, honest, trustworthy, loyal      | 7.64 <sup>a</sup>   | 5.50 <sup>b</sup> |
| High warmth, lower morality | warm, sociable, happy, agreeable, enthusiastic, easy-going, funny, playful       | 5.15 <sup>b</sup>   | 7.32 <sup>a</sup> |
| Ability                     | athletic, musical, creative, innovative, intelligent, organized, logical, clever | 3.94 <sup>c</sup>   | 3.84 <sup>c</sup> |

*Note.* We ran *t*-tests comparing the aggregated Study 1 ratings of morality (composite) and warmth across the four trait categories (i.e., comparing the categories in terms of morality and, separately, warmth). Same superscript letters above each mean indicate no significant differences between the means ( $ps > .10$ ), whereas different superscript letters indicate significant differences ( $ps < .005$ ).

one you admire a great deal"; a "close friend of yours whom you like very much"; "your mother or father, or someone who is a parental figure in your life"; "Barack Obama, current president of the United States"; "George W. Bush Jr., president of the United States between 2000 and 2008"; "an acquaintance of yours whom you dislike, or who irritates you"; and "someone you despise or have no respect for." With the exception of Presidents Obama and Bush, participants provided the initials of each target person to confirm that they had a specific target in mind. Participants then rated these seven targets with respect to how much they possessed each of 32 different traits on a 9-point scale (1 = *Not at all*, 5 = *Moderately*, 9 = *Extremely*). These traits were carefully pre-selected from four different categories, so that the dimensions of morality and warmth (as rated by participants in Study 1) would be fully crossed. Table 2 lays out the 32 traits used, along with their morality (composite of morality, character, and goodness ratings) and warmth ratings from Study 1. As the table illustrates, the respective trait categories are clearly separated on the two dimensions of interest, morality and warmth, allowing for a test of the importance of each of these dimensions on global impression formation.

Our primary interest was in the comparison between the high morality, lower warmth traits and the high warmth, lower morality traits, which allows a direct test of the respective contributions of morality and warmth information in impression formation. But we also felt that it was important to investigate traits that were seen as high in both morality and warmth. It may be that such traits are especially important for impression formation, reflecting the independent contributions of both morality and warmth. We also investigated the role of a range of ability traits, that were all rated highly relevant on relevance to judging ability ( $M = 7.37$ ), and which were all rated lower on relevance for character and warmth.<sup>8</sup>

Following the trait ratings, for each target, participants then responded to the primary dependent measure, which asked them to indicate on a 9-point scale how positive or negative their overall impression of the person was (1 = *Very negative*, 5 = *Neutral*, 9 = *Very positive*). We next asked participants to indicate, in the following order, how much they liked, despised, respected, and admired each person, and then, their judgments about how morally virtuous the person is, how good or bad their character is, how warm or cold they are, and finally, how impressive or unimpressive their abilities are. We asked these questions primarily to check

that participants had appropriately complied with the instructions. Each of these ratings was also made on a 9-point scale.

At the end of the study, participants were asked whether they were able to think of people who fit six different summary descriptions that varied whether the person had good or bad character, whether they were warm or cold, and whether the participant had a negative or positive overall impression of the person. The results from these questions were not particularly informative, so we do not report on them further. Participants also indicated what "the most important thing to know about a person is," selecting from the following attributes: their competence or effectiveness, their moral character, their interpersonal warmth, and their motivation to get along with others (as a proxy for communion). With respect to the same attributes, they also indicated which attribute is "the most important thing about a person." Finally, participants responded to demographic questions, and were thanked and debriefed. No other measures were collected.

## Results

In order to first check that participants had selected targets that corresponded with our instructions, we examined the global impression judgments across all seven targets. There were large differences in global impressions across the seven targets, in a manner that accorded with the instructions. For instance, participants gave much more positive global impressions of the three positive targets (admire, friend, parent;  $M = 8.34$ ) than of the two negative targets (dislike, do not respect;  $M = 2.67$ ),  $t(109) = 44.87$ ,  $p < .001$ . Similar results held when examining the other valenced questions (e.g., liking, admiring, etc.). We thus have confidence that these instructions were followed.

We were primarily interested in how well each of the four different trait categories predicted the single item global impression measure. For each target, we first checked the Cronbach's alpha values for the eight traits within each of the four categories in order to see how well the traits hung together. These values were generally very high (mean  $\alpha = .87$ ), with very few exceptions (only the ability traits for the

<sup>8</sup> Our goal with these traits was to ensure that they were high in relevance to ability, not to equate them in terms of relevance to character and warmth. Indeed, as Table 2 shows, they were rated considerably lower in relevance to both warmth and character than the other groups of traits.

Table 3  
Regression Analyses Predicting Global Impression Judgments From the Four Trait Indices in Study 3

| Trait index       | Admire       | Friend       | Parent        | Obama         | Bush          | Dislike     | Don't respect |
|-------------------|--------------|--------------|---------------|---------------|---------------|-------------|---------------|
| Morality–warmth   | .08          | .34**        | <b>.45***</b> | .04           | .13           | .19         | .04           |
| Morality          | <b>.45**</b> | <b>.35**</b> | .33*          | <b>.47***</b> | .36**         | <b>.23†</b> | <b>.38**</b>  |
| Warmth            | .10          | .01          | .06           | .10           | –.13          | .16         | .28*          |
| Neither (Ability) | –.04         | –.02         | –.11          | .28**         | <b>.46***</b> | .18†        | .00           |

Note.  $N = 109$ . Values are standardized beta weights. The highest coefficients for each target indicated are in bold.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

admired target fell below .70), justifying averaging across the traits within each category.

We next related the trait indices to global impressions, both through correlational and regression analyses (see Table 3). In general, all four of the trait indices correlated strongly with global impressions, with the morality–warmth, and morality trait indices having the strongest relation with global impressions. Comparing the raw correlations for all seven targets, global impressions were more strongly related to the pure morality traits than to the pure warmth traits for all seven targets ( $M_{\text{morality}} = .64$ ,  $M_{\text{warmth}} = .51$ ),  $t(6) = 3.17$ ,  $p = .02$ . Regression analyses are more diagnostic, however, because they control for shared variance between the trait indices. The regression analyses predicting global impressions from the trait indices confirmed the general picture provided by the raw correlations.<sup>9</sup> As Table 3 shows, once again, it was the morality traits, along with the morality–warmth traits, that best predicted variance in global impressions. Either one of these trait categories best predicted variance in global impressions for six of the seven social targets, the one exception being President Bush, for whom ability impressions were particularly important, although morality traits were also important in this case as well. In contrast, the warmth traits did not best predict overall impressions for any of the social targets. Moreover, the morality traits independently predicted variance in global impressions for all seven targets, whereas the warmth traits only contributed unique predictive variance for one target (the disrespected person).

Finally, we examined what participants regarded as “the most important attribute to know about a person,” and “the most important attribute about a person.” Corroborating our prediction, 65% of participants regarded “moral character” as the most important thing to know about a person, in comparison with 19% indicating “interpersonal warmth,” 9% indicating “motivation to get along with others” (i.e., communion), and 6% indicating “competence or effectiveness,”  $\chi^2(3) = 97.64$ ,  $w = .95$ ,  $p < .001$ . Similarly, 59% of participants regarded “moral character” as the most important thing about a person, in comparison with 25% indicating “interpersonal warmth,” 10% indicating “motivation to get along with others,” and 6% indicating “competence or effectiveness,”  $\chi^2(3) = 74.30$ ,  $w = .83$ ,  $p < .001$ .

## Discussion

Study 3 investigated how global impressions of others are predicted by trait ratings. We compared traits known to be diagnostic of warmth only, of moral character only, of both warmth and character, or of ability only, as predictors of global impressions. Across social targets that were known personally to participants, as well as public figures (recent Presidents of the United

States), we found that traits that were diagnostic of moral character only, such as courage, fairness, trustworthiness, and honesty, were the strongest predictor of global impressions, closely followed by traits that were diagnostic of both moral character and warmth (morality–warmth traits), for example, kindness, empathy, cooperativeness, and gratitude. Traits that were diagnostic of warmth only, such as, warmth, sociability, sense of humor, enthusiasm, and agreeableness, were almost entirely non-predictive of global impressions once the contribution of the moral traits had been controlled for. Ability was also largely non-predictive, except for Presidents of the United States. Thus, these results show quite clearly that moral character traits contribute most significantly to global impressions, and that the role of warmth is relatively minimal once morality is controlled for. These results are consistent with those of past investigations that have emphasized the importance of moral information about others in contrast to competence or ability information (e.g., Wojciszke, Bazinska, & Jaworski, 1998). But they go beyond those prior results by specifically contrasting morality and warmth information, and by showing that moral information appears to be more important in determining global impressions.

## Study 4: Experimental Manipulation of Moral Character and Warmth Information

A key limitation of Study 3 is that the data are correlational only. It therefore remains uncertain from this study whether moral character information exerts a greater causal impact on overall impressions than does warmth information. No prior studies have investigated this question directly, so we next carried out three studies to answer it.

Study 4 approached this question in a straightforward way. Participants were explicitly provided with information regarding the “interpersonal warmth” and the “moral character” of four different target individuals, and were asked to indicate their global impressions of each person.

## Method

**Participants.** Participants were 370 adults (235 men;  $M_{\text{age}} = 28.27$  years,  $SD = 10.43$ ) from the U.S., who participated through

<sup>9</sup> Multicollinearity was not an issue for these regression analyses. For the analyses reported in Tables 3 and 4 that do not include Presidents Obama and Bush, the VIF scores for the predictors were all under 5, and the tolerance values were above 0.2. For the analyses involving Presidents Obama and Bush, the VIF scores were all under 10, and the tolerance values were above 0.1.

Amazon's Mechanical Turk in exchange for monetary compensation.

**Design, materials, and procedure.** All participants indicated their global impressions of four targets. Moral character (good character vs. bad character) and warmth (warm vs. cold) were crossed in a  $2 \times 2$  within-subjects design. Participants were asked to indicate their "overall impression" of each target on a 9-point scale ranging from 1 (*very negative*) to 9 (*very positive*). An example description of a target was: "The person has good moral character but is interpersonally cold." The order of the moral character and warmth information in each description was randomized at the level of descriptions, such that each participant may have seen this information in different orders across the four targets. When the character and warmth information was congruent in valence (good character, warm; bad character, cold), the connective "and" was used; when the information was incongruent, the connective "but" was used. Demographics were collected at the end of the study. No other measures were collected.

## Results and Discussion

The order in which moral or warmth was presented in the descriptions had no effect on global impressions (all  $ps > .30$ ), so we collapsed across order in the analyses that follow. Within-subjects analyses revealed large main effects of both moral character ( $M_{\text{good character}} = 6.83$  vs.  $M_{\text{bad character}} = 2.80$ ),  $F(1, 369) = 1,479.23$ ,  $p < .001$ ,  $\eta_p^2 = .80$ , and warmth information ( $M_{\text{warm}} = 5.83$  vs.  $M_{\text{cold}} = 3.79$ ),  $F(1, 369) = 725.67$ ,  $p < .001$ ,  $\eta_p^2 = .66$ , on overall impressions in the predicted direction (see Figure 2). However, the overall main effect of moral character information was larger than the overall main effect of warmth information. And, of critical interest, the target who was of good character but cold was rated significantly more positively than was the target who was of bad character but warm ( $M_{\text{good character, cold}} = 5.59$ ,  $M_{\text{bad character, warm}} = 3.60$ ),  $t(369) = 15.03$ ,  $p < .001$ . There was also an interaction between moral character and warmth,  $F(1, 369) = 57.39$ ,  $p < .001$ ,  $\eta_p^2 = .14$ , reflecting the fact that the effect of warmth information was larger for good than for bad targets. These results were essentially identical in between-subjects analyses that examined just the first block that participants received.

Overall, these results demonstrate the greater causal impact of moral character information than warmth information on global impressions formed from summary descriptions of individuals.

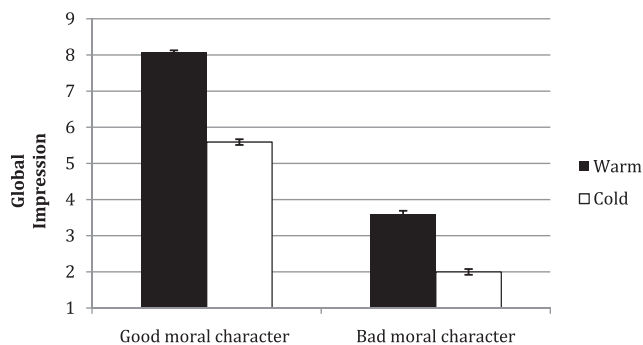


Figure 2. Mean ratings of the four different targets in Study 4. Error bars represent  $\pm 1 SE$ .

While both sorts of information exerted a large impact on global impressions, the effect of moral character information was considerably stronger, consistent with the results of our prior studies.

## Study 5: Experimental Manipulation of Character and Warmth at the Level of Traits

Study 5 extended Study 4 by providing participants with trait-level information about a variety of social targets, rather than summary-level descriptions. Within-subjects, participants indicated their overall impressions of a social target who was described in the context of 12 different social roles. We predicted that moral character information would generally exert more influence on overall impressions than would warmth information. However, we were also interested in exploring potential boundary conditions on this effect—it may be that warmth comes to the fore for some social roles. Accordingly, we sampled a variety of social roles that we expected to vary in their importance to the participants. Some prior evidence suggests that moral traits are important in others because they are generally more indicative of whether another person is likely to help or harm the self than are traits related to competence (e.g., Abele & Wojciszke, 2007; Brambilla et al., 2012; Wojciszke, Bazinska, & Jaworski, 1998; Wojciszke, Dowhlyuk, & Jaworski, 1998; see also Cottrell et al., 2007; Fiske et al., 2007, 2002; Leach et al., 2007). Thus, if social roles are judged as important to the extent that individuals in those roles control outcomes that are relevant to the self, then moral information should determine global impressions more strongly as the judged importance of those roles increases.

The target was described to participants as having the same set of traits within-subjects. However, between-subjects, the targets differed in terms of the traits they possessed, such that character and warmth traits were fully crossed—the targets either had good character traits, warmth traits, traits that reflected both good character and warmth, or traits that reflected neither good character nor warmth. To avoid ceiling effects in overall impression judgments, all targets were described as also lacking various competencies.

## Method

**Participants.** Participants were 404 (214 men, 190 women,  $M_{\text{age}} = 32.43$  years,  $SD = 11.29$ ) American adults who participated in the study on Amazon's Mechanical Turk in exchange for payment.

**Design, materials, and procedure.** Participants read descriptions of a target person and rated their overall impressions of how they felt about having this person fulfill each of 12 different social roles on a sliding scale (0: *extremely negative*; 50: *neutral*; 100: *extremely positive*), as well as how pleased they were to have the person fulfill the role (0: *not at all pleased*; 50: *neutral*; 100: *extremely pleased*). The 12 roles were: boss/supervisor; family relative (cousin, aunt, or uncle); close friend; social acquaintance (at work, school, or place of worship); surgeon (who will be operating on you); co-worker (who you have been assigned to work closely with); your daughter's fiancé; long-term romantic partner; cashier at grocery check-out counter; parent (father, mother, or parental guardian); your child's primary school teacher; and judge (presiding over legal proceedings you are involved in). Participants were instructed to disregard information about people

that presently fulfill these roles in their life, and to instead judge the hypothetical target person in each case. The order of presentation of these roles was randomly determined for each participant.

Between-subjects, participants were assigned to one of four different conditions, which varied in the traits that the target person possessed. These traits were carefully pre-selected so that the targets would systematically differ on the two dimensions of interest, morality and warmth (as rated by participants in Study 1), thus allowing for a test of the role that these dimensions play in determining global impressions. All four targets were described as lacking in competence in order to avoid ceiling effects. They were described as “not very athletic, not very musical, not very intelligent, and not very organized” (i.e., as lacking various abilities). The “moral” target possessed five additional traits rated high on the composite measure of morality (*character, morality, goodness*) but lower on warmth (*courageous, fair, principled, responsible, and honest*;  $M_{\text{morality}} = 7.58$ ,  $SD = 0.48$ ;  $M_{\text{warmth}} = 5.06$ ,  $SD = 0.72$ ), the “warm” target possessed five additional traits rated high on warmth but lower on morality (*sociable, happy, agreeable, funny, and playful*;  $M_{\text{morality}} = 4.87$ ,  $SD = 0.58$ ;  $M_{\text{warmth}} = 7.19$ ,  $SD = 0.21$ ), and the “moral–warm” target possessed five additional traits rated high on both morality and warmth (*humble, grateful, empathetic, cooperative, and kind*;  $M_{\text{morality}} = 7.14$ ,  $SD = 0.34$ ;  $M_{\text{warmth}} = 7.35$ ,  $SD = 0.31$ ). The fourth target, “neither,” possessed no additional traits relating to morality or warmth.<sup>10</sup>

At the end of the survey, people were presented each of the 12 roles for a second time, and were asked to indicate for each one “how important it is that this person is a good [role] (e.g., “friend,” “judge,” “surgeon,” “family member,” and so forth, using 1–9 scales; we refer to these as the “importance of role effectiveness” ratings). We intentionally used the word “good” here because we thought it was the most natural and flexible way to describe a person’s performing their described role well (i.e., it can flexibly adapt to the different roles in question, e.g., “a good surgeon” may connote competence more so than does “a good friend,” but in both cases, the description is natural and captures the notion of the person discharging their role well). Just prior to this importance question, we also asked participants to indicate how important it is that each target person “is warm, agreeable, and sociable” (we refer to these as the “importance of warmth” ratings), and, separately, “is moral, good, and does the right thing” (we refer to these as the “importance of morality” ratings). These ratings were made on 9-point scales, with the order of these two questions fixed within-subjects and counter-balanced between-subjects.

At the end of the survey, participants completed standard demographic items. No other measures were collected.

## Results and Discussion

The “overall feeling” and “how pleased” measures correlated highly across the 12 roles, so we aggregated them to form a single global impression measure (average  $\alpha = .96$  across all 12 roles). To analyze the global impression data, we first ran a 12 (role)  $\times$  4 (trait set) mixed-measures ANOVA, which revealed large main effects of both role,  $F(11, 4400) = 340.51$ ,  $p < .001$ ,  $\eta_p^2 = .46$ ; trait set,  $F(3, 400) = 6,345.54$ ,  $p < .001$ ,  $\eta_p^2 = .94$ ; and a significant interaction between the two variables,  $F(33, 4400) = 5.18$ ,  $p < .001$ ,  $\eta_p^2 = .04$ . Table 4 displays these results.

Corroborating the main prediction, the “moral” target was rated significantly more positively than the “warm” target for 9 out of the 12 roles, the exceptions being the social acquaintance, store clerk, and family relative roles, for which the “moral” and “warm” targets were rated no differently (thus giving rise to the interaction). As Table 4 shows, these three roles were rated as the three least important of the 12 (importance of role effectiveness ratings), reflecting the fact that as the importance of the role increases, so too does the relative causal power of moral character on global impressions. Reflecting this, the correlation between importance of role effectiveness ratings and the difference in overall impressions of the good and warm targets was significant,  $r(10) = .58$ ,  $p = .04$ .

Moreover, the more important the role (importance of role effectiveness ratings), the more participants explicitly rated morality as being more important than warmth. The correlation between the importance of role effectiveness and the explicit rated importance of morality was significant,  $r(10) = .93$ ,  $p < .001$ , whereas the correlation between overall role importance and the explicit rated importance of warmth was non-significant,  $r(10) = .21$ ,  $p = .52$  (difference between correlations: Steiger’s test,  $z = 3.34$ ,  $p < .001$ ). Morality was explicitly rated as significantly more important than warmth for all except two roles (social acquaintance and cashier).

Somewhat to our surprise, but further corroborating the dominant role of morality, the moral target was usually rated as equivalent to the moral/warm target, indicating that at least with these traits, the addition of warmth information did not boost overall impressions over and above the presence of moral information. As Table 4 shows, across all 12 roles, there were no significant differences between these two conditions, except for the judge role, for which the moral target was in fact rated as preferable to the moral–warm target.

These results thus provide a striking illustration of the role of moral character traits in driving overall impressions, further corroborating the picture that emerged from our earlier studies. In general, across a wide variety of roles from daily life, moral character traits played a larger role in driving overall impressions than did social warmth traits. Moreover, moral character traits appear to become more potent in driving impressions as the importance of the social role in question increases. Warmth traits are sometimes on a par with character traits for less important roles, although at least in these data, warmth traits were never more important than character traits for any of the 12 roles.

<sup>10</sup> As a check on these manipulations, we ran independent *t*-tests that compared the composite morality (morality, goodness, character) and warmth usefulness (or relevance) ratings from Study 1 for the traits used for each of the four targets. As desired, the morality relevance ratings of the traits used for the moral target were higher than the morality relevance ratings of the traits used for the warm target,  $t(8) = 8.00$ ,  $p < .001$ . Similarly, the warmth relevance ratings of the traits used for the warm target were higher than the warmth relevance ratings of the traits used for the moral target,  $t(8) = 6.36$ ,  $p < .001$ . Additionally, the morality relevance ratings of the traits used for the moral–warm target were equivalent to morality relevance ratings of the traits used for the moral target, whereas the warmth relevance ratings of traits used for the moral–warm target were equivalent to the warmth relevance ratings of the traits used for the warm target ( $ps > .13$ ). These analyses thus confirm that morality and warmth had been manipulated in the desired way.

Table 4

Mean Ratings (and Standard Deviations) of Overall Impression of Each Target by Role and Trait Condition in Study 5, Displayed in Descending Order of Rated Importance of Role Effectiveness

| Role                           | Trait condition                  |                                  |                                  |                            | Importance rating |
|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------|-------------------|
|                                | Moral–warm                       | Moral                            | Warm                             | Neither                    |                   |
| Surgeon                        | <b>20.56<sub>a</sub></b> (22.71) | <b>23.53<sub>a</sub></b> (21.51) | 12.40 <sub>b</sub> (18.18)       | 9.71 <sub>b</sub> (15.07)  | 8.77 (0.68)       |
| Long-term romantic partner     | <b>61.30<sub>a</sub></b> (24.62) | <b>58.56<sub>a</sub></b> (25.93) | 48.80 <sub>b</sub> (24.96)       | 34.22 <sub>c</sub> (28.34) | 8.66 (0.77)       |
| Daughter's fiancé              | <b>60.03<sub>a</sub></b> (21.78) | <b>59.02<sub>a</sub></b> (20.43) | 47.98 <sub>b</sub> (21.92)       | 26.23 <sub>c</sub> (22.58) | 8.62 (0.84)       |
| Judge                          | 48.27 <sub>b</sub> (28.13)       | <b>57.64<sub>a</sub></b> (25.63) | 29.98 <sub>c</sub> (25.14)       | 18.62 <sub>d</sub> (19.53) | 8.56 (0.96)       |
| Child's primary school teacher | <b>46.44<sub>a</sub></b> (26.16) | <b>44.18<sub>a</sub></b> (23.09) | 31.74 <sub>b</sub> (21.85)       | 18.85 <sub>c</sub> (17.03) | 8.47 (0.93)       |
| Parent                         | <b>78.33<sub>a</sub></b> (19.49) | <b>75.53<sub>a</sub></b> (17.18) | 67.12 <sub>b</sub> (21.96)       | 57.14 <sub>c</sub> (28.38) | 8.40 (0.98)       |
| Close friend                   | <b>76.94<sub>a</sub></b> (16.20) | <b>74.42<sub>a</sub></b> (17.92) | 67.20 <sub>b</sub> (20.35)       | 53.59 <sub>c</sub> (22.39) | 8.04 (1.15)       |
| Boss/supervisor                | <b>60.99<sub>a</sub></b> (21.64) | <b>61.12<sub>a</sub></b> (22.63) | 46.19 <sub>b</sub> (24.60)       | 25.78 <sub>c</sub> (20.49) | 7.81 (1.26)       |
| Coworker                       | <b>57.13<sub>a</sub></b> (20.74) | <b>53.28<sub>a</sub></b> (20.58) | 41.68 <sub>b</sub> (21.62)       | 27.66 <sub>c</sub> (19.43) | 7.52 (1.34)       |
| Family relative                | <b>78.05<sub>a</sub></b> (19.00) | <b>76.45<sub>a</sub></b> (16.67) | <b>72.49<sub>a</sub></b> (18.55) | 55.37 <sub>b</sub> (21.84) | 6.74 (1.62)       |
| Cashier at store               | <b>71.53<sub>a</sub></b> (16.20) | <b>68.02<sub>a</sub></b> (20.12) | <b>65.15<sub>a</sub></b> (20.38) | 47.60 <sub>b</sub> (16.94) | 6.37 (1.97)       |
| Social acquaintance            | <b>72.47<sub>a</sub></b> (17.32) | <b>70.58<sub>a</sub></b> (17.79) | <b>66.14<sub>a</sub></b> (20.84) | 46.20 <sub>b</sub> (20.31) | 6.04 (1.74)       |

Note. Within rows, values with non-equivalent subscripts are significantly different at  $p < .05$ , according to Tukey's honestly significant difference tests. Highest mean value(s) for each target are bolded. The simple effect of trait condition was significant for all 12 targets ( $F_s > 11.33$ ,  $p_s < .001$ ).  $N = 404$ .

### Study 6: Pitting Moral Character Against Warmth at the Trait Level

Study 6 was similar to Study 5 except that, as in Study 4, we explicitly pitted character against warmth, this time at the trait level.

#### Method

**Participants.** Participants were 405 (229 men, 176 women,  $M_{\text{age}} = 32.66$  years,  $SD = 11.39$ ) American adults who participated in the study on Amazon's Mechanical Turk in exchange for payment. Because Studies 5 and 6 were run close together in time, individuals who had participated in Study 5 were excluded from participating in Study 6.

**Design, materials, and procedure.** We used the same 12 roles used in Study 5, which were again presented within-subjects. Between-subjects, participants were assigned to read about one of four different social targets, who each varied in the traits they possessed. Once again, we crossed moral and warmth traits, but this time we described the presence of both positive and negative traits. The "moral–warm" target possessed five positive moral character traits that differed slightly from those used in Study 5 (*courageous, principled, dedicated, reliable, and honest*),  $M_{\text{morality}} = 7.37$ ,  $SD = 0.60$ ;  $M_{\text{warmth}} = 4.89$ ,  $SD = 0.48$ , as well as five positive warmth traits, which were the same as those used in Study 5 (*sociable, happy, agreeable, funny, and playful*),  $M_{\text{morality}} = 4.87$ ,  $SD = 0.58$ ;  $M_{\text{warmth}} = 7.19$ ,  $SD = 0.21$ . The "immoral–cold" target possessed five negative character traits, that were the antonyms of the good traits (*cowardly, undedicated, unprincipled, irresponsible, and dishonest*),  $M_{\text{morality}} = 6.43$ ,  $SD = 1.19$ ;  $M_{\text{warmth}} = 4.78$ ,  $SD = 1.15$ , as well as five traits that indicated coldness, again the antonyms of the warmth traits (*unsociable, sad, disagreeable, humorless, and serious*),  $M_{\text{morality}} = 4.77$ ,  $SD = 1.15$ ;  $M_{\text{warmth}} = 6.19$ ,  $SD = 0.56$ . The "moral–cold" target possessed the five positive moral character traits and the five cold traits, while the "immoral–warm" target possessed the five negative character traits and the five warm traits.<sup>11</sup>

Participants responded to the same dependent variables as were used in Study 5.

#### Results

As in Study 5 we collapsed the "overall feeling" and "how pleased" items to form a single global impression measure (average  $\alpha = .97$  across all 12 roles). To analyze the global impression data, we first ran a 12 (role)  $\times$  2 (morality)  $\times$  2 (warmth) mixed-measures ANOVA, which revealed effects of role,  $F(11, 4411) = 39.38$ ,  $p < .001$ ,  $\eta_p^2 = .09$ ; morality,  $F(1, 401) = 1,464.82$ ,  $p < .001$ ,  $\eta_p^2 = .79$ ; and warmth,  $F(1, 401) = 478.54$ ,  $p < .001$ ,  $\eta_p^2 = .54$ . The three two-way interactions were all significant, as was the three-way interaction. Theoretically, the most important of these interactions were the two-way interactions between role and morality,  $F(11, 4411) = 74.92$ ,  $p < .001$ ,  $\eta_p^2 = .16$ , and between role and warmth,  $F(11, 4411) = 51.43$ ,  $p < .001$ ,  $\eta_p^2 = .13$ , both of which indicate the shifting impact of both morality and warmth across different social roles. Table 5 displays these results.

Consistent with the results of Study 4, the "moral–cold" target was rated significantly more positively than the "immoral–warm" target for 9 out of the 12 roles, the exceptions being the social acquaintance, store clerk, and close friend roles, for which these two targets were rated equally. Moreover, two of these three roles were once again rated as the least important of the 12 roles

<sup>11</sup> As in Study 5, we ran independent  $t$ -tests that compared the aggregated morality and warmth usefulness (or relevance) ratings from Study 1 for the traits used for each of the four targets. As desired, the morality relevance ratings of the moral traits were higher than the morality relevance ratings of the warm traits,  $t(8) = 6.67$ ,  $p < .001$ , whereas the warmth relevance ratings of the moral traits were lower than those of the warm traits,  $t(8) = 9.72$ ,  $p < .001$ . Similarly, the morality relevance ratings of the immoral traits were higher than those of the cold traits,  $t(8) = 3.22$ ,  $p = .012$ , whereas the warmth relevance ratings of the cold traits were higher than those of the immoral traits,  $t(8) = 2.45$ ,  $p = .040$ . These analyses thus confirm that morality and warmth had been manipulated in the desired way.

Table 5

Mean Ratings (and Standard Deviations) of Overall Impression of Each Target by Role and Trait Condition in Study 6, Displayed in Descending Order of Rated Importance of Role Effectiveness

| Role                           | Trait condition            |                            |                            |                            | Importance rating |
|--------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-------------------|
|                                | Moral–warm                 | Moral–cold                 | Immoral–warm               | Immoral–cold               |                   |
| Surgeon                        | 82.07 <sub>a</sub> (16.90) | 74.01 <sub>b</sub> (20.56) | 10.11 <sub>c</sub> (16.63) | 10.81 <sub>c</sub> (18.68) | 8.75 (0.81)       |
| Long-term romantic partner     | 94.99 <sub>a</sub> (8.45)  | 32.09 <sub>b</sub> (22.12) | 23.79 <sub>c</sub> (22.13) | 8.68 <sub>d</sub> (13.85)  | 8.67 (0.82)       |
| Daughter's fiancé              | 92.08 <sub>a</sub> (11.57) | 38.47 <sub>b</sub> (20.82) | 14.79 <sub>c</sub> (18.37) | 5.49 <sub>d</sub> (8.92)   | 8.59 (0.97)       |
| Judge                          | 80.30 <sub>a</sub> (19.88) | 69.92 <sub>b</sub> (22.12) | 12.99 <sub>c</sub> (19.30) | 9.10 <sub>c</sub> (12.85)  | 8.59 (0.95)       |
| Parent                         | 92.61 <sub>a</sub> (10.01) | 47.23 <sub>b</sub> (21.31) | 34.39 <sub>c</sub> (22.71) | 20.41 <sub>d</sub> (20.35) | 8.52 (0.89)       |
| Child's primary school teacher | 91.38 <sub>a</sub> (10.44) | 44.72 <sub>b</sub> (22.49) | 20.14 <sub>c</sub> (22.83) | 9.02 <sub>d</sub> (12.10)  | 8.50 (0.88)       |
| Close friend                   | 94.00 <sub>a</sub> (9.04)  | 40.39 <sub>b</sub> (21.60) | 38.46 <sub>b</sub> (24.27) | 17.05 <sub>c</sub> (15.82) | 8.08 (1.16)       |
| Boss/supervisor                | 87.61 <sub>a</sub> (13.61) | 44.91 <sub>b</sub> (19.16) | 25.08 <sub>c</sub> (23.46) | 11.47 <sub>d</sub> (12.33) | 7.90 (1.17)       |
| Coworker                       | 88.98 <sub>a</sub> (11.20) | 46.68 <sub>b</sub> (19.11) | 27.52 <sub>c</sub> (21.92) | 14.89 <sub>d</sub> (14.10) | 7.37 (1.49)       |
| Family relative                | 90.55 <sub>a</sub> (11.77) | 46.69 <sub>b</sub> (18.08) | 40.10 <sub>c</sub> (20.85) | 24.09 <sub>d</sub> (18.46) | 6.51 (1.85)       |
| Cashier at store               | 82.23 <sub>a</sub> (15.98) | 47.63 <sub>b</sub> (21.68) | 46.86 <sub>b</sub> (24.53) | 28.48 <sub>c</sub> (18.50) | 6.35 (2.12)       |
| Social acquaintance            | 88.43 <sub>a</sub> (12.09) | 42.91 <sub>b</sub> (17.58) | 40.70 <sub>b</sub> (22.43) | 22.78 <sub>c</sub> (18.36) | 5.91 (1.93)       |

Note. Within rows, values with non-equivalent subscripts are significantly different at  $p < .05$ , according to Tukey's honestly significant difference tests. The simple main effect of trait condition was significant for all 12 targets ( $F_s > 122.02$ ,  $p_s < .001$ ).  $N = 405$ .

(importance of role effectiveness ratings), thus suggesting that morality was valued to a greater extent as role importance increased. Indeed, corroborating this notion, the correlation between the importance of role effectiveness ratings and the difference in impressions of the moral-cold and immoral-warm targets was significant,  $r(10) = .58$ ,  $p = .05$ . The correlation between the importance of role effectiveness and participants' explicit ratings of the importance of morality was also significant,  $r(10) = .98$ ,  $p < .001$ , whereas the correlation between the importance of role effectiveness and the explicit importance of warmth was non-significant,  $r(10) = .28$ ,  $p = .38$  (difference between correlations: Steiger's test,  $z = 4.13$ ,  $p < .001$ ). Morality was rated as significantly more important than warmth for all roles except one (close friend). Not surprisingly given the nature of this study (involving explicit mention of the presence of negative traits in some conditions), the target that possessed both goodness and warmth traits was rated most positively across all 12 roles.

These results thus further demonstrate the potency of moral character traits in driving global impressions. For three quarters of the social roles we investigated, having positive moral character traits but being cold led to a more favorable overall impression than did being warm but having negative character traits. While character thus appears dominant in the formation of impressions of the targets we investigated, warmth plays an increasing role as the importance of the role in question declines. But even for these less important roles, warmth does not trump character.

In sum, the experimental data provided by Studies 4–6 provide clear-cut causal evidence that moral character traits have a greater impact on global impression formation than do warmth traits.

### Study 7: Character Conveyed Through Obituaries

In order to extend these results further, in our next and final study, we aimed to explore these ideas in a more naturalistic context, by examining obituaries. Examining obituaries allowed us to investigate two main hypotheses. First, we hypothesized that moral character information should be more prominent in obituaries than is social warmth information—that is, stronger impressions will be conveyed about moral character than about warmth.

Second, we hypothesized that the moral character information contained in obituaries should play a stronger role in predicting the overall impressions that people form of deceased individuals than does the social warmth information.

### Method

**Participants.** The participants were 1,289 (630 men, 659 women) individuals residing in the United States ( $M_{\text{age}} = 32.77$  years,  $SD = 11.14$ ) recruited through Amazon's Mechanical Turk system in exchange for monetary compensation.

#### Materials and procedure.

**Selection of the obituaries.** Two hundred and fifty “notable deaths” obituaries published and archived online in the *New York Times* ([www.nytimes.com/pages/obituaries/index.html](http://www.nytimes.com/pages/obituaries/index.html)) between June 30, 2009, and June 6, 2012, were selected for analysis. The archive dates as far back as 2007. Starting with the most recent entry at the time of data collection (June 6, 2012), we sampled every entry in reverse chronological order until 250 obituaries (a number we had preset) were selected from the archive. The set included adult decedents of both genders (193 men, 57 women), and a wide range of nationalities and ethnicities (only individuals who have achieved a minimum level of national or international renown are included in the archive). We selected the notable death obituary archive, as opposed to other, publicly accessible archives (e.g., paid death notices in the local newspaper), primarily because of its content-rich, narrative descriptions of the deceased individuals, which usually include quotes from the deceased person's family and friends, and discussion of the deceased person's personality, social life, accomplishments, hobbies, career, etc. Detailed impressions of this sort are not typically conveyed in other obituary notices, which are much more concise. The length of each obituary ranged from 2 to 9 single-spaced Word document pages ( $M = 3.78$  pages, mean words per obituary = 1,449).

By selecting an archive that offered a content-rich description of the deceased individuals, we were able to ensure that extensive impressions were conveyed of each person. One limitation of our approach, however, was that the archive contained only those individuals who had achieved a notable level of renown or success

during their lifetime. This may result in our results somewhat over-estimating the role of ability/ competence information in impression formation, particularly given the larger role that such information played in impressions of US presidents in Study 3. We judged this an acceptable limitation, however, given that we did not expect that this would change the relative importance of character and warmth information, which was our primary interest.

**Coding of the obituaries.** Two research assistants who were blind to the purpose of the study, and its hypotheses, read each of the 250 obituaries (it took approximately 15–20 min to read each one), and rated each one on four measures. The first three measures assessed the degree to which the rater gained an impression of the deceased person's (1) abilities or lack of abilities, (2) moral character or immoral character, and (3) social warmth or coldness. Specifically, each coder rated the extent to which the obituary gave her an impression of the deceased person's (a) "achievements, abilities, or talents, or lack of achievements, abilities, or talents"; (b) "moral or immoral character (i.e., gave the impression that the person was, for instance: *kind-unkind, honest-dishonest, loyal-disloyal, just-unjust, generous-greedy, respectful-disrespectful, etc.*);" and (c) "friendliness, sociability, or warmth, or unfriendliness, unsociability, or coldness (i.e., gave the impression the person was, for instance: *friendly-unfriendly, warm-cold, sociable-unsociable, gregarious-shy, happy-sad, extroverted-introverted, etc.*)." Example trait-pairs were included in the latter two cases to help the rater differentiate these categories. All three measures were rated on scales ranging from 1 (*Not at all*) to 9 (*To a great extent*). The obituaries did not always portray the deceased individuals' abilities, personality, or character in a positive light. Thus, for each of the three measures, the coder also indicated whether the impression that they gained of the person's abilities, moral character, or friendliness/warmth was mostly positive, negative, or neutral (i.e., "neutral" indicated no distinct impression about this dimension of the person, either because no information was given, or because the positive and negative information exactly balanced out). The final measure in the coding procedure assessed the coder's overall impression of the deceased person, on a scale ranging from  $-5$  (*Extremely negative*), 0 (*Neutral*), to  $+5$  (*Extremely positive*). The coder also noted whether or not they had any knowledge of the deceased individual prior to reading their obituary.

**Global impressions.** The Mechanical Turk participants were each randomly assigned three obituaries to read carefully, from among 235 of the 250 obituaries. Fifteen of the obituaries were omitted from this phase of assessment prior to the launch of the study; these omitted obituaries were substantially longer than the others, owing to the fact that the targets were highly celebrated or despised, for example, Steve Jobs, Osama bin Laden, Col. Muammar el-Qaddafi. We did not want to include the obituaries of such highly renowned individuals simply because people likely had strong, preconceived impressions of such individuals which were unlikely to be affected by the information conveyed in the obituary, and because the obituaries themselves were very long.

Participants gave their overall impression of the deceased person, based on their reading of the obituary, on a scale ranging from  $-7$  (*Extremely negative*), 0 (*Neutral*), to  $+7$  (*Extremely positive*). This resulted in each obituary being rated by between 12 and 21 raters ( $M = 16.43$ ). Participants were (mechanically) required to spend a minimum of 2.5 min reading each obituary. Afterwards,

they made their overall impression rating, along with three other measures designed to spur thoughtful reading of the obituary ("Did you have a prior impression of this person before you read the obituary just now?"; "What was the most noteworthy aspect of this person's life?"; "In one sentence, how would you describe this person?"). Participants were informed beforehand that they would be asked to answer questions of this sort. We also included a quality control measure at the end of the survey, embedded within other demographic questions, designed to assess how carefully participants paid attention to the survey materials—participants were instructed to respond "Not at all carefully" to a question asking about how carefully they had been paying attention, as means of indicating that they had in fact been paying attention (we did not employ attention checks in any of the prior studies). Thus, we report below our analysis both with the entire sample and with the adjusted sample ( $N = 1,160$ ), after elimination of individuals who responded incorrectly to this measure.

## Results

Our first hypothesis pertained to the extent to which ability, moral character, and warmth impressions were conveyed by the obituaries. To examine this, we compared the coders' mean ratings of the extent to which each obituary conveyed an impression about each of these dimensions (1 = *Not at all*, 9 = *To a great extent*). On each of these dimensions, the coders showed acceptable inter-rater reliabilities: moral character,  $ICC$  (average measures) = .71; warmth,  $ICC$  (average measures) = .53; and ability,  $ICC$  (average measures) = .62, and so we thus collapsed their ratings together to form three separate composite indices.<sup>12</sup> Overall, the obituaries conveyed impressions about ability ( $M = 7.28$ ), to a greater extent than they conveyed impressions about either moral character,  $M = 4.93$ ,  $t(249) = 14.69$ ,  $p < .001$ , or warmth,  $M = 2.93$ ,  $t(249) = 37.59$ ,  $p < .001$ . As noted previously, this is perhaps not surprising, given that the obituaries were of notable individuals, which likely inflates the relative prominence of ability information within them. Nonetheless, supporting the first main prediction, the obituaries conveyed impressions about moral character to a greater extent than they conveyed impressions about warmth,  $t(249) = 12.08$ ,  $p < .001$ . Thus, the importance of moral as opposed to warmth information in person perception is reflected once again in these results. Moral character impressions are conveyed more prominently in summary accounts of people's lives than are impressions of social warmth.

We next examined the second hypothesis, concerning the extent to which the overall impressions of each person formed by the Mechanical Turk raters were predicted by the impressions conveyed about the deceased individuals' morality, warmth, and ability, as scored by our independent coders. To create a valenced indicator of the extent to which each obituary conveyed an impression of these dimensions, for each obituary, we multiplied the coders' two ratings together for each dimension (strength of impression conveyed on the dimension  $\times$  whether the impression was positive:  $+1$ , negative:  $-1$ , or indeterminate: 0). As before,

<sup>12</sup> Although these ICC values were somewhat lower than the standardly accepted benchmark (0.70), values between 0.40 and 0.75 have been described as falling within the "fair to good" range of measurement reliability (Fleiss, 1986, p. 7).

the coders showed acceptable inter-rater reliabilities for these measures: moral character,  $ICC$  (average measures) = .74; warmth,  $ICC$  (average measures) = .51; and ability,  $ICC$  (average measures) = .69, and so we thus collapsed their ratings together to form three separate composite indices. We then entered these scores as predictors in a regression analysis predicting the MTurker's overall impression scores. The overall  $R^2$  resulting from this analysis was moderate (.51), and each predictor contributed unique variance. Corroborating earlier results, the overall effect of morality impressions,  $\beta = .39$ ,  $t(231) = 8.21$ ,  $p < .001$ , was larger than that of warmth impressions,  $\beta = .15$ ,  $t(231) = 3.04$ ,  $p = .003$ , though, perhaps not surprisingly, similar to the effect of ability impressions,  $\beta = .44$ ,  $t(231) = 9.15$ ,  $p < .001$ .<sup>13</sup> When comparing the first-order correlations directly, the correlation between morality impressions and global impressions,  $r(233) = .53$ , was reliably larger than the correlation between warmth impressions and overall impressions,  $r(233) = .33$  (Steiger's test,  $z = 2.91$ ,  $p = .003$ ), though no different from the correlation between ability impressions and overall impressions ( $z = 0.72$ ,  $p = .47$ ).

Two possible mechanisms might explain the greater predictive power of moral character information compared with social warmth information. Consistent with our earlier results, it could be that morality impressions are more potent than warmth impressions in driving global impressions. Another possibility is that because the obituaries contained more information about morality than warmth, this greater information partly accounted for the superior predictive power of moral information.

To examine this issue, we ran follow-up regression and correlational analyses which examined just the coders' categorical valence scores for each of the three dimensions, while excluding their explicit ratings of the strength of the impressions the obituaries conveyed (as these strength of impression ratings constitute a reasonable proxy for amount of information). In this analysis, all three dimensions once again predicted global impressions: moral character,  $\beta = .46$ ,  $t(231) = 8.84$ ,  $p < .001$ ; ability,  $\beta = .31$ ,  $t(231) = 6.09$ ,  $p < .001$ ; and warmth,  $\beta = .12$ ,  $t(231) = 2.31$ ,  $p = .02$ . And, as before, the correlation between moral character valence and global impressions,  $r(233) = .55$ , was reliably larger than the correlation between warmth valence and overall impressions,  $r(233) = .33$  (Steiger's test,  $z = 3.37$ ,  $p < .001$ ). Because this analysis excludes explicit information about the strength of the coders' impressions, it suggests that the predictive power of moral information does not result solely from differences in the amount of information present.

This analysis cannot entirely preclude the possibility that systematic differences in the information contained in the obituaries affected the predictive power of the coders' assessments of valence. To control for this possibility, we ran additional partial correlations between the valence scores and global impressions, controlling for the strength of our coders' impressions about each of the relevant dimensions. These analyses once again revealed a significantly stronger relation between morality and global impressions,  $r(232) = .58$ ,  $p < .001$ , than between warmth and global impressions,  $r(232) = .33$ ,  $p < .001$  (difference between correlations: Steiger's test,  $z = 3.86$ ,  $p < .001$ ). These analyses therefore suggest that a qualitative difference between morality and warmth information, and not just a quantitative difference in the amount of this information conveyed by the obituaries, at least partly accounts for the superior predictive power of moral information.

In sum, these obituary data provide further support for the important role that moral character information plays in person perception. Whereas existing two-dimensional models of person perception do not posit that moral information should have any special status over and above social warmth information, the present results indicate that it clearly does. Morality information was more strongly conveyed than warmth/sociability information in the present set of obituaries. Moreover, morality information played a more important role in predicting overall impressions of the individuals described in these obituaries than did social warmth information. These results thus extend and confirm the experimental results reported earlier.

## General Discussion

Moral character information powerfully determines the overall impression we form of another person with whom we have or expect to have an important or meaningful relationship. This idea has been suggested by prior research, but it has not been comprehensively investigated prior to our studies. One correlational study (Study 3), three experimental studies (Studies 4–6), and one study using a naturalistic setting (Study 7), all clearly showed the importance of moral character information in global impression formation, which is arguably the most important dependent variable of interest in person perception research. Moreover, additional correlational evidence in Study 2 further demonstrated the importance of moral character information to several other aspects of person perception. In addition to being highly desirable (in both others and in the self), moral character information is also seen as important for identity (e.g., moral character information is seen as particularly fundamental to identity, and especially independent of contextual influence), as well as to perceptions of trait controllability and responsibility (e.g., people are perceived to have greater control over their moral character traits, and greater responsibility for them). Study 7 provided an ecologically valid assessment of the relevance of moral character information to person perception by showing that moral character information frequently appears in obituaries, and that this information is a primary predictor of the resulting impressions that people form from those obituaries. Thus, overall, this evidence provides a comprehensive indication of the importance of moral character information to person perception and evaluation.

Throughout this investigation, we paid particular attention to contrasting moral character information with social warmth information, owing to the fact that social warmth has been strongly emphasized in recent theorizing as one of the two fundamental dimensions of person perception (see, e.g., Fiske et al., 2007). The warmth dimension in such two-dimensional models is typically considered as primary and more fundamental than the competence dimension (Fiske et al., 2007), that is, warmth judgments are thought to carry more weight in other-person evaluations.

However, current two-dimensional models do not make a distinction between warmth traits that are highly relevant to moral

<sup>13</sup> This same pattern also held when excluding the 15 obituaries describing individuals that either one or both of the two coders knew of before rating the obituaries, when excluding global impression ratings from the 129 Mechanical Turk participants (10%) who failed the attention check, and when performing both of these exclusions simultaneously.



character and those that are not, and instead, simply agglomerate moral character traits within the warmth dimension. Prototypically moral character traits, such as kindness, honesty, and trustworthiness, are thus treated merely as examples of social warmth traits, as if they were on a par in importance with traits that convey social warmth information in a “purer” form, that is, without also strongly conveying information about moral character, that is, traits such as friendliness, agreeableness, good-naturedness, and good humor. In this respect, the following remarks by Cuddy et al. (2008) are telling: “Many different labels describe what boil down to virtually the same two dimensions. Our warmth scales have included good-natured, trustworthy, tolerant, sincere, and friendly” (p. 67). Here, it is clear that trustworthy, tolerant, and sincere (highly morally relevant traits) are being treated as part of the same cluster of traits that includes friendliness and good-naturedness (less morally relevant traits). Because our theorizing stresses the central role of moral character, it therefore seemed imperative to contrast the importance of moral character information with that of social warmth.

And, as our studies consistently showed, moral character is separate from warmth, it more strongly determines global impressions than does warmth, and it more strongly relates to a variety of fundamental trait properties (e.g., fundamentalness to identity, desirability, controllability) than does warmth. Of course, this does not mean that warmth and character are entirely orthogonal. Indeed, our data show that they are related, which is consistent with past theorizing that warmth is at least somewhat character relevant (e.g., Hardy et al., 2011; Smith et al., 2007; Walker & Hennig, 2004; Walker & Pitts, 1998). Nonetheless, it remains clear from our data that character and warmth are separable constructs, and that character plays a substantially greater role in impression formation.

Thus, from our perspective, while two-dimensional models have had great influence, and have undoubtedly yielded important insights about human social cognition, their under-emphasis of moral character means that they have not provided a fully accurate picture of human social cognition. In making this point, our work thus builds on the insights of previous theorists, particularly Cottrell et al. (2007), Leach et al. (2007), and Brambilla et al. (2011, 2012), who have all previously alluded to the idea that moral character might be more important than social warmth information in person perception. However, our work makes this point more comprehensively and definitively than have these prior investigations, in the following ways: Our studies were not limited to only a few aspects of character but instead included a much wider array of moral character traits than have been included in prior studies. Our studies also focused principally on global impression formation, which we regard as the key dependent variable of interest in person perception research. At the same time, our studies also investigated a wider range of dependent variables than have prior studies (particularly Study 2 which investigated many diverse properties of traits). And, unlike much prior research (with some exceptions, including Abele & Wojciszke, 2007; Wojciszke, Dowhyluk, & Jaworski, 1998), we asked participants for direct assessments of how useful traits would be to judging both moral character and social warmth, and then used these ratings in both data analysis and study design. Thus, rather than imposing any particular conception of moral character on our participants' judgments, we allowed their ratings (from Study 1) to dictate this for

us, in an entirely bottom-up way. The picture that emerges from this empirically driven procedure shows not just that morality and warmth are distinct, but that morality is clearly more important to impression formation and person evaluation than is warmth.

### Limitations, Caveats, and Future Directions

One potential concern with the present work pertains to our focus on contrasting moral character and warmth as opposed to the related notion of communion. Communion has been emphasized in some recent work on two-dimensional models, most notably by Abele, Wojciszke, and their colleagues (see, e.g., Abele, Uchronski, et al., 2008; Abele & Wojciszke, 2007; Wojciszke & Abele, 2008; Wojciszke, Abele, & Baryla, 2009). And the notion of communion emphasized in these models is arguably closer to the notion of moral character than is the notion of social warmth. For instance, communion has been defined by these theorists in the following terms: “Communion means an orientation to people, a focus on interpersonal contacts and relationships, striving for being included in a community, and for remaining a member of this community” (Abele & Wojciszke, 2007, p. 754).<sup>14</sup>

Thus, one might reasonably wonder whether the same sharp differentiation in importance for person evaluation (moral character > warmth) would have been observed had we focused primarily on “communion” rather than “warmth.” We think it would have been, for the following reasons. First, although the notion of communion does seem closer to the notion of moral character than does social warmth, there is still some divergence at the conceptual level. An orientation to being a communal person, as defined above, could conceivably promote popularity- or inclusion- seeking behaviors, which conflict with the dictates of morality (for instance, *honesty*, *trustworthiness*, *fairness*, *loyalty*, *promise-keeping*, or even *kindness* in some cases). As a concrete illustration of the divergence between moral character and communion, in Study 1, several traits were rated high on relevance to character, yet relatively lower on relevance to communion (and also warmth). These traits tended to reflect some of the more austere, principle-focused aspects of morality—traits such as *just*, *fair*, *principled*, *responsible*, *humble*, *wise*, *rational*, *brave*, *courageous*, *committed*, *hard-working*, *determined*, and *disciplined*, for example ( $M_{\text{character}} = 7.55$  vs.  $M_{\text{communion}} = 5.77$ ),  $t(12) = 12.79$ ,  $p < .001$ .<sup>15</sup> More importantly, like warmth, communion did not predict the various trait properties we assessed in Study 2 as well as did moral character. As the regressions displayed in Table 1 indicate, while communion generally did have greater predictive power than did warmth, there was no property for which communion predicted unique variance over and above moral character. In contrast, moral character predicted unique variance in several trait properties over and above

<sup>14</sup> However, as we noted earlier, authors from the warmth–competence and communion–agency have tended to conceptualize their approaches as being very similar, particularly in the case of warmth/communion (see, e.g., Abele, Cuddy, et al., 2008). We chose to focus on distinguishing moral character from warmth rather than communion primarily because of the greater focus on warmth in recent literature.

<sup>15</sup> This difference is also reflected in the correlation between usefulness for judging character and usefulness for judging communion, in Study 1, which though high,  $r(168) = .75$ , was not perfect, and dropped significantly once both valence and usefulness for judging personality were controlled for,  $r(166) = .35$  (difference in correlations,  $z = 9.25$ ,  $p < .001$ ).

communion, namely whether traits were seen as changeable, within the domain of an individual's own responsibility, desirable in a coworker, predictive of life fulfillment, independent of social context (marginal), and as having a later final point of development (marginal). In sum, even models that stress communion over and above warmth likely under-emphasize the predominance of moral character information in person perception, since not all highly morally relevant traits are also especially relevant to communion (and vice versa).

While we have been critical of two-dimensional models, we also wish to emphasize an important area of overlap between those models and our own. The reason why warmth is so important according to two-dimensional models is that warmth information is seen as conveying information about others' intentions toward oneself (e.g., Cuddy et al., 2008; Fiske et al., 2007). In large part, we agree with this fundamental orientation regarding the importance of determining another person's intentions, particularly insofar as those intentions are relevant to whether that other person is likely to hurt or help oneself or someone one cares about (see also Wojciszke, Bazinska, & Jaworski, 1998).

However, we are less convinced that another person's social warmth or communion best encapsulates their intentions toward the self, their likelihood of helping or hurting, and more broadly, their likelihood of doing the right or admirable thing. As we have stressed, many traits that are highly relevant to social warmth and/or communion, are judged only moderately relevant to moral character (*sociability, extroversion, friendliness, optimism*, etc.—the “pure” warmth traits). As a consequence, we suspect that they are also moderately relevant to judging another person's helpful or harmful intentions toward the self. However, as far as we are aware, no prior studies have asked participants for direct assessments of traits' relevance for judging others' intentions (although see Abele & Wojciszke, 2007, for related measures regarding traits' profitability for the self and for others); this could therefore be a useful task for future research.

Moreover, we also suspect that a trait's relevance as an indicator of others' intentions toward the self, and whether those others are likely to be helpful or harmful, may not tell the whole story of why moral character traits are relevant in person perception. Another person's good moral character may sometimes imply negative consequences for the self. For instance, another person's honesty might redound to our misfortune if that other person is uniquely knowledgeable about the fact that we have acted poorly or immorally, and is able to communicate this information to others. Similarly, a friend's impartiality (and refusal to act nepotistically) might also have negative consequences for us if they control an important outcome that is pertinent to us, such as a job offer or some other beneficial allocation (see, e.g., Batson, Klein, Highberger, & Shaw, 1995). A singular focus on whether this other person is likely to benefit oneself should mean that this person would invariably be judged very negatively in cases in which they act morally, but to our detriment. Yet, we suspect that this might not be the case, and that this other person might even be judged positively in some such cases. This is also an interesting task for future research to explore.

Beyond the reasons why moral character may be important for person perception, several other important questions remain. One important open question concerns how the importance of moral character information should be integrated within existing two-

dimensional models. One alternative would be to treat moral character information as a particularly important sub-component of the warmth dimension, as has been proposed previously (see, e.g., Brambilla et al., 2011). This position is most consistent with the current perspective of two-dimensional theorists, who treat morality as a sub-component of warmth (though it is still somewhat divergent in that current two-dimensional models do not stress morality as an especially important sub-dimension). A more radical alternative would be to treat moral character as the true dimension of interest, and not warmth—in other words, inverting the previous idea, and treating warmth as a sub-component of character (cf. Frimer, Walker, Dunlop, Lee, & Riches, 2011). It would be possible to assimilate existing research within this approach. According to this line of thought, the reason why the warmth dimension has appeared to be so relevant to person perception in past investigations is that it imperfectly indexes the more fundamental dimension of moral character. A still more radical alternative would be to propose that moral character is in fact a third dimension of person perception, separate from both competence and warmth (though of course not totally separate from warmth, as the data from Study 1 indicate).

The present data cannot decisively resolve this issue, yet they do pose some challenges for two-dimensional solutions, because of the divergences these data reveal between character and warmth. Just as there are pure warmth traits that are not judged as being especially relevant to character (e.g., *warm, sociable, extroverted, funny, agreeable, optimistic, happy, enthusiastic*, etc.), there are also moral character traits that are not judged as being highly relevant to warmth (e.g., *honest, trustworthy, principled, just, brave, courageous, loyal, fair, committed, dedicated, reliable, responsible, hard-working*). A proponent of the view that morality and warmth are not separate must therefore explain how such seemingly distinct traits fit together under the same umbrella dimension, despite their being judged quite differently in terms of what they are diagnostic of, and despite their functioning differently as predictors of global impressions.

Given that the present studies show that moral character information is predominant in determining global impressions, a key unresolved question is whether, over and above this, pure warmth information (or perhaps sociability information, see, e.g., Brambilla et al., 2011, 2012) substantially contributes to person perception processes. If so, then it would seem that a three-dimensional model is called for. But if not, a two-dimensional model, with morality as the master dimension, and warmth subsumed within it, would seem more accurate. The present evidence is somewhat inconsistent with respect to this issue. Study 3 showed relatively little role for warmth in predicting global impressions, once morality was controlled. Yet, Study 7 showed that global impressions of obituaries were significantly predicted by warmth information once morality had been controlled. And both Studies 5 and 6, which used experimental methods, revealed an effect of warmth separate from that of morality. On balance, we think this suggests that there is some important contribution made by pure warmth information. However, further research is needed to better address this issue, which will most likely require tasks that go beyond global impression formation. For instance, it would be useful to gauge whether morality and warmth information pre-

dict different social appraisals and different emotional responses. It would also be useful to explore the degree of orthogonality between morality and warmth more thoroughly. We are therefore currently trying to better resolve this issue (Landy, Piazza, & Goodwin, 2013).

Finally, while our studies showed that participants' own gender did not greatly influence the relative causal role of moral information on global impressions (moral information determined global impressions more strongly than warmth for both men and women), we did not investigate whether moral information might be seen as relatively more important as a function of a social target's gender. Past research on gender stereotypes suggests that warmth traits, such as being sociable, may be particularly desirable in female targets, whereas agentic traits, such as being dominant, may be more desirable in men than women (Rudman & Glick, 1999). Past research has also indicated that being modest, a trait that is relevant to both morality and warmth, contributes more to positive outcomes for women than for men (see Moss-Racusin, Phelan, & Rudman, 2010). Nonetheless, no study that we know of has exhaustively investigated the relative importance of moral and warmth information as a function of target gender. Thus, it remains an open question whether moral information, in general, is valued equally in men and women, relative to warmth information.

## Conclusion

The present studies indicate that character is a fundamental, if not the fundamental feature of actual or potentially significant others in our lives. Moral character plays a key role in impression formation, and in person perception more generally. The role of character in person perception, and more broadly, has been of considerable recent interest to both psychologists (see, e.g., Lapsley & Laskey, 2001; Peterson & Seligman, 2004; Walker & Hennig, 2004; Walker & Pitts, 1998) and philosophers (see, e.g., Doris, 2002; Harman, 1999; Kupperman, 1991; Miller, 2003, 2009, 2010, 2013a, 2013b). Thus, while two-dimensional models of person perception may be touted for their parsimony, we fear that they may marginalize this extremely important aspect of human beings. It is in that spirit that we call further attention to both the importance and uniqueness of character. Important tasks for future research are to give character its appropriate central role in social cognition, and to better understand the statistical and/or trait-selection practices that have in the past played down the role of character.

Moreover, many other interesting questions remain regarding the perception of moral character. How is moral character perceived in naturalistic social contexts? What social cues do people rely on to infer character in others? How do people conceive of moral character, in terms of its relation to the brain, the mind, or even the soul? How do people think moral character develops, improves, and deteriorates? What is the perceived structure of moral character? While some insight has already been gained about naturalistic inferences of moral character (e.g., van 't Wout & Sanfey, 2008; Willis & Todorov, 2006), about the way beliefs about moral character affect behavior (Haselhuhn, Schweitzer, & Wood, 2010), and about the perceived structure of moral character (see, e.g., Lapsley & Laskey, 2001; Piazza et al., 2013; Walker & Hennig, 2004; Walker & Pitts, 1998), much more remains to be done with respect to each of these questions. The documented

importance of moral character for person perception, as revealed here, may provide an impetus for further exploring these questions.

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(Appendix follows)

## Appendix

### The Exact Wording of the 11 Questions Asked of Each Trait in Study 1 (Bold Text Was Used for Emphasis)

#### Character

In everyday life, we often describe people as “having character,” or to a particular individual as being a person “of character.” By this we mean that they have a commendable or admirable character. Alternatively, we sometimes refer to people as “lacking character,” in which case we mean that their character is not commendable, and not admirable. Imagine that you are trying to figure out whether a person has an admirable character or not. For each of the traits below, please indicate how useful having information about the trait would be in telling you whether the person has an **admirable character or not**.

#### Personality

People have many different sorts of personalities. Imagine that you are trying to figure out what sort of personality a person has. For each of the traits below, please indicate how useful having information about the trait would be in telling you what sort of **personality** the person has.

#### Ability

People have many different abilities and capacities. Imagine that you are trying to figure out what sorts of abilities and capacities a person has. For each of the traits below, please indicate how useful having information about this trait would be in telling you what sort of **abilities and capacities** the person has.

#### Goodness/Badness

In everyday life, we often refer to people as being a “good person” or a “bad person.” Imagine you are trying to figure out how good or bad a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you how **good or bad** the person is.

#### Morality/Immorality

People may differ in how moral or immoral they are. Imagine you are trying to figure out how moral or immoral a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you how **moral or immoral** the person is.

#### Strength/Weakness of Will

People may differ in how strong-willed or weak-willed they are. Imagine you are trying to figure out how strong-willed or weak-willed a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you how **strong-willed or weak-willed** the person is.

#### Grittiness/Non-Grittiness

People may differ in how “gritty” they are, that is, in terms of how much they are able to persevere in the face of obstacles, frustrations, fears, or temptations. Imagine you are trying to figure out how gritty or non-gritty a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you how **gritty or non-gritty** the person is.

#### Agency

People may differ in how much “agency” they possess, that is, in terms of how much influence they can exert over events and conditions in their life, and how effectively they can attain their goals. Imagine you are trying to figure out how much agency a person possesses. For each of the traits below, please indicate how useful having information about this trait would be in telling you how much **agency** the person possesses.

#### Communion/Non-Communion

People may differ in how communal or non-communal they are. A communal person is someone who is oriented to people, who is focused on interpersonal contacts and relationships, who strives to be included in a community and to remain a member of this community. Imagine you are trying to figure out how communal or non-communal a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you how **communal or non-communal** the person is.<sup>A1</sup>

#### Warmth/Coldness

People may differ in how warm or cold they are. Imagine you are trying to figure out how warm or cold a person is. For each of the traits below, please indicate how useful having information about this trait would be in telling you about how **warm or cold** the person is.

#### Valence

For the traits below, please indicate how **positive or negative** each trait is.

<sup>A1</sup> We adapted the wording of the communion and agency measures from Abele, Uchrowski, et al.’s (2008) prior phrasing, streamlining it to some degree in the interests of clarity.

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