# The Reciprocal Relationship Between Perceptions of Moral Goodness and Knowledge of Others' True Selves

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Andrew G. Christy<sup>1</sup>, Jinhyung Kim<sup>1</sup>, Matthew Vess<sup>2</sup>, Rebecca J. Schlegel<sup>1</sup>, and Joshua A. Hicks<sup>1</sup>

#### Abstract

The idea of *true selves* is widespread in folk psychology. Most research on this topic has focused on the precursors to and consequences of feeling that one knows or is expressing one's own true self. As such, little is known about the conditions under which people feel like they know the true selves of others. In five studies (total N = 815), we tested and found support for the hypothesis that moral information is inherently tied to perceived knowledge of others' true selves. Across all studies, using both descriptive texts (Studies I-3) and computer-generated faces as stimuli (Studies 4 and 5), participants felt that they knew more about the true selves of highly moral targets relative to other targets and, conversely, believed the targets possessed more moral traits when they felt that they knew the individual's true self.

#### Keywords

person perception, impression formation, morality, social cognition, self/identity

When thinking about someone, we commonly question whether we *really* know that person. Answers to this question have consequences for developing social bonds, but how do people answer them? Some research suggests that people consider others' inner feelings, rather than their behaviors, as most critical (Andersen & Ross, 1984; Johnson, Robinson, & Mitchell, 2004). However, what if this information is unavailable? Are people's judgments influenced by information about others' traits or mere facial characteristics? In the current research, we examined how morality- and competencerelated information affects judgments of knowing who people truly are (i.e., knowing their "true selves"). We predicted that morality-related information, especially positive moral information, would result in greater perceived knowledge of others' true selves, relative to competence-related information.

Our predictions are guided by theory and research supporting the *essential-moral-self hypothesis* (Strohminger & Nichols, 2014), which states that morality is central to the folk psychology of personal identity. Strohminger and Nichols (2014) found that, relative to other types of characteristics, people judged moral characteristics as most likely to survive a migration of the soul from one body to another and that changes in moral character were most likely to result in judgments that a target was no longer the same person. Similarly, friends and relatives of individuals with neurodegenerative conditions (e.g., Alzheimer's) who perceived changes in their loved ones' moral character were most likely to report that the target's overall identity had changed (Strohminger & Nichols, 2015). People also selectively attribute actions they regard as morally good to others' true selves but are reluctant to attribute immoral actions to others' true selves (Newman, Bloom, & Knobe, 2014; Newman, De Freitas, & Knobe, 2014). Taken together, these findings suggest that *positive* moral information plays a central role in folk reasoning about others' true selves.

Similar points have been made in the person-perception literature, which has identified competence (sometimes labeled as *agency* or *dominance*) and morality (sometimes labeled as *communion* or *warmth*) as the primary kinds of trait content that people care about (e.g., Abele & Wojciszke, 2007; Bakan, 1966; Fiske, Cuddy, & Glick, 2007; Saucier et al., 2014). Competence refers to the degree of ability a person has, or how effectively they pursue goals, while morality refers to the quality of a person's intentions, or whether they can be trusted to behave prosocially (Fiske et al., 2007). Wojciszke and colleagues have shown that competence and morality relate differently to self-perceptions compared to perceptions of others, with competence being more relevant to self-perception and

#### **Corresponding Authors:**

Joshua A. Hicks or Andrew G. Christy, Texas A&M University, 4235 TAMU, College Station, TX 77843, USA.

Emails: joshua.hicks@tamu.edu; andrew.christy4@gmail.com

<sup>&</sup>lt;sup>1</sup>Texas A&M University, College Station, TX, USA

<sup>&</sup>lt;sup>2</sup> Montana State University, Bozeman, MT, USA

morality being more relevant to other perception (for reviews, see Abele & Wojciszke, 2014; Wojciszke, 2005).

Given evidence that positive moral information is fundamental to reasoning about others' true selves, we predicted that positive moral information would enhance feelings of knowing another's true self relative to either negative moral information or competence information. While the person-perception literature has documented the relative impact of morality- and competence-related information on *evaluations* of others, only recently has research examined how this information bears on *perceived knowledge* of others (Hartley et al., 2016). In this study, participants were asked to rate acquaintances on dimensions including morality, competence, sociability, liking, respect, and how well they knew the individual. Morality was the strongest predictor of liking, respecting, and, most relevant to the current studies, perceived knowledge.

The current set of studies provides the first experimental test of the link between morality and perceived knowledge of others' true selves. Studies 1 and 2 presented participants with either morality- or competence-related information about hypothetical targets. Participants then reported how well they knew the targets' true selves. Study 3 tested reverse causation of this relationship by portraying a target's true self as either knowable or unknowable. Participants then evaluated the target's morality and competence. Finally, Studies 4 and 5 tested whether these effects would generalize to subtle, nonverbal cues by having participants report how well they knew the true selves of morality-relevant (vs. competence-relevant) computer-generated human faces. Based on recent findings (e.g., Newman, De Freitas, & Knobe, 2014; Strohminger & Nichols, 2015), we predicted that positive moral information would enhance the feeling that one knows others' true selves.

## Study I

# Method

One hundred and sixteen undergraduate students (78 females, 38 males;  $M_{age} = 18.57$ ,  $SD_{age} = .87$ ) from Texas A&M University participated in the study for course credit. Participants were primarily White (75%) and non-Hispanic (74%). Sample size for this study was determined based on target minimum N of 50 per cell. Provided this minimum was met, data collection was terminated after 1 week. If this minimum was not met after 1 week, data collection was extended in increments of 1 week at a time until the minimum was met.

Participants first read a short paragraph purportedly written by someone who was "asked to write a short description of their most important personality characteristics." This paragraph contained the manipulation and read as follows (wording for competence condition in brackets):

Who am I? Well, for as long as I can remember people have described me as someone who is honest, caring, and trustworthy *[skilled, competent, and capable]*. I often try to do the 'right thing' in any given situation, even when the situation makes it difficult.

Overall, I think I am someone who is an extremely good [*competent*] person.

After reading the essay, participants answered several questions about the target. All responses were made on a 1 (*not at all*) to 7 (*extremely*) scale. First, participants completed 2 face-valid manipulation check items asking "How moral [*competent*] is this person?" Participants next completed three questions assessing how much well thought they knew the target's true self (e.g., "How much do you feel like you know this person's true self?"; M = 3.35, SD = 1.38,  $\alpha = .91$ ).<sup>1</sup>

## Results

Analysis of the manipulation checks confirmed that participants perceived the moral target as more moral than the competent target (for detailed results, see Online Supplement).<sup>2</sup>

Consistent with predictions, participants reported that they knew more about the true self of the moral target (M = 3.74, SD = 1.41) than the competent target (M = 2.95, SD = 1.23), t(114) = 3.23, p = .002, d = .60, 95% CI [.23, .97].

Study 1 provides initial evidence that when people perceive someone as highly moral, they believe that they know that person's true self better than that of someone who is highly competent. Notably, both targets in this study were described in positive terms.

# Study 2

We made three modifications to Study 2. First, we used a 2 (positive vs. negative)  $\times$  2 (morality vs. competence) design to more fully explore the nature of the proposed effects (i.e., would any moral information elicit the effect, regardless of valence?). Second, we changed the prompt from a self-description to a description of a roommate. The Study 1 targets (particularly the competence target) may have sounded boastful, which could have influenced participants' liking of the targets. Rewriting the prompt in the third person removed this possibility. Finally, we replaced one of the descriptor from the moral condition (*trustworthy*) with a descriptor (*generous*) that was less relevant to authenticity. We surmised that a target described as trustworthy may be perceived as more authentic, driving the perception that participants knew more about this target's true self.

### Method

Two hundred and forty-eight undergraduates (157 females, 91 males;  $M_{age} = 18.53$ , SD = .77) from Texas A&M University participated in the study for course credit. Participants were primarily White (80%) and non-Hispanic (73%). Sample size was determined using the same rule described for Study 1.

Participants first read a short paragraph purportedly written by a person who "was asked to write a short description of their roommate's personality."



**Figure 1.** Perceived knowledge of target's true self as a function of content (morality vs. competence) and valence (positive vs. negative) in Study 2.

Participants in the moral conditions read (wording for negative condition in brackets):

How would I describe my roommate? Well, honestly everyone I know would describe him as someone who is warm, helpful, and generous [*cold*, *unhelpful*, *and selfish*]. He always [*never*] tries to do the 'right thing' in any given situation. Overall, everyone I know would simply describe him as an extremely warm [*cold*] person, and, to be honest, I would have to agree with them.

Participants in the competence conditions read (wording for negative condition in brackets):

How would I describe my roommate? Well, honestly everyone I know would describe him as someone who is competent, creative, and intelligent [*incompetent*, *uncreative*, *and not very smart*]. He always [*never*] tries to be the 'best' in any given situation. Overall, everyone I know would simply describe him as an extremely competent [*incompetent*] person, and, to be honest, I would have to agree with them.

After reading the essay, participants completed the same true-self knowledge measure used in Study 1 (M = 2.88, SD = 1.51,  $\alpha = .93$ ).

# Results

Analysis of the manipulation check revealed that the manipulation was successful (see Online Supplement). Critically, in the positive morality condition, the target was perceived as more moral than the other three conditions (ps < .001; for simple effects and post hoc comparisons, see Online Supplement).

A 2 (morality vs. competence) × 2 (positive vs. negative) between-subject analysis of variance (ANOVA) of perceived knowledge of the target revealed two significant main effects (see Figure 1). Specifically, participants reported knowing more about the target in the moral conditions relative to the competence conditions, F(1, 244) = 9.18, p = .003, partial  $\eta^2 = .04$ , 90% CI [.008, .08], and in the positive relative to the negative conditions, F(1, 244) = 12.78, p < .001, partial  $\eta^2 = .05$ , 90% CI [.015, .10]. These main effects are consistent with the idea that true selves are morally relevant (Strohminger & Nichols, 2014, 2015) and that true selves are good (Newman, De Freitas, & Knobe, 2014). The interaction effect was not significant, F(1,244) = .34, p = .56 (for detailed results, see Online Supplement).

Consistent with Study 1, Study 2 provides evidence that when people perceive someone as highly moral, they believe they know that person better than someone who is highly competent. Notably, Study 2 suggests that it is not simply receiving any type of moral information that drives this effect, as participants felt they knew the most about a highly moral target.

# Study 3

In Studies 1 and 2, manipulating a target's moral character affected subjective perceptions of knowing that target's true self. In Study 3, we tested for bidirectionality in the relationship between perceptions of morality and other knowledge. To this end, we manipulated perceived knowledge of a target person and subsequently assessed perceptions of the target's moral character. If morality and subjective feelings of knowledge or familiarity are intimately connected in observers' minds, a target described as readily knowable should be perceived as more moral than an unknowable target.

# Method

One hundred and fifty participants (52 females, 97 males, 1 transgender man;  $M_{age} = 32.83$ ,  $SD_{age} = 9.63$ ) were recruited from Amazon's Mechanical Turk platform (MTurk; see Buhrmester, Kwang, & Gosling, 2011) and paid US\$0.75 for participating. Participants were primarily White (83.3%) and non-Hispanic (88.7%). This sample size was preselected and data collection was terminated once it was reached.

Participants completed a task similar to that used in Study 2, in which they read a brief passage ostensibly written by a college student describing their roommate. Participants were randomly assigned to read one of the two versions of this passage. In the *high true-self knowledge* condition, the author described their roommate as readily knowable, saying, "... even when we first met I felt like I knew him pretty well" and "... it is difficult to imagine that there was a time in my life when I didn't know him." In the *low true-self knowledge* condition, the author described their roommate as unknowable, saying, "... I came away from our very first conversation with no clear idea of who this guy is..." and "it is difficult to imagine that there will ever be a time in my life when I do know him."

After reading the passage, participants completed adjective ratings indicating their perceptions of the roommate's moral character and competence. Five items each assessed positive moral character traits (*fair, courageous, honest, helpful,* and *trustworthy*; M = 4.01, SD = 1.64,  $\alpha = .94$ ), negative moral character traits (*cruel, malicious, uncooperative, untrustworthy*, and *selfish*; M = 2.44, SD = 1.36,  $\alpha = .88$ ), positive

Variable of Interest	Levels of Other Variables	F for Simple Effect	Þ	Partial $\eta^2$ [90% CI]	Estimated Marginal Means [95% CI]	
Condition					High TSK	Low TSK
	Type: moral Valence: positive	145.33	< .001	.495 [.40, .57]	5.15 [4.88, 5.41]	2.85 [2.68, 3.11]
	Type: moral Valence: negative	79.83	< .00 I	.350 [.25, .44]	1.69 [1.43, 1.94]	3.21 [2.94, 3.47]
	Type: competence Valence: positive	66.97	< .00 I	.312 [.21, .40]	4.79 [4.53, 5.05]	3.08 [2.82, 3.35]
	Type: competence Valence: negative	41.91	< .001	.221 [.13, .31]	1.72 [1.46, 1.98]	2.94 [2.68, 3.21]
Trait type					Moral	Competence
	Condition: high TSK Valence: positive	25.86	< .001	.149 [.07, .24]	5.15 [4.88, 5.41]	4.79 [4.53, 5.05]
	Condition: high TSK Valence: negative	.14	.705	.001 [.00, .02]	1.69 [1.43, 1.94]	1.72 [1.46, 1.98]
	Condition: low TSK Valence: positive	11.28	.001	.071 [.02, .14]	2.85 [2.68, 3.11]	3.08 [2.82, 3.35]
	Condition: low TSK Valence: negative	9.86	.002	.062 [.01, .13]	3.21 [2.94, 3.47]	2.94 [2.68, 3.21]
Valence					Positive	Negative
	Condition: high TSK Type: moral	355.44	< .001	.706 [.64, .75]	5.15 [4.88, 5.41]	1.69 [1.43, 1.94]
	Condition: high TSK Type: competence	295.19	< .00 I	.666 [.59, .72]	4.79 [4.53, 5.05]	1.72 [1.46, 1.98]
	Condition: low TSK Type: moral	3.74	.055	.025 [.00, .08]	2.85 [2.68, 3.11]	3.21 [2.94, 3.47]
	Condition: low TSK Type: competence	.63	.430	.004 [.00, .04]	3.08 [2.82, 3.35]	2.94 [2.68, 3.21]

Table I. Simple Effects of Condition, Trait Type, and Valence (Study 3).

Note. High TSK = high true-self knowledge condition; low TSK = low true-self knowledge condition.

competence-related traits (*competent, skillful, efficient, qualified*, and *masterful*; M = 3.95, SD = 1.45,  $\alpha = .92$ ), and negative competence-related traits (*incompetent, inadequate, unqualified, unable,* and *inept*; M = 2.32, SD = 1.31,  $\alpha = .91$ ). These four composites served as our primary dependent measures.

# Results

We performed a 2 (condition: high vs. low true-self knowledge) × 2 (trait type: morality vs. competence) × 2 (valence: positive vs. negative) mixed-design ANOVA with condition being a between-subject factor and with trait type and valence being within-subject factors (for full results, see Online Supplement). Most relevant to the current manuscript, the analysis revealed a significant three-way interaction effect, F(1, 148) = 31.88, p < .001, partial  $\eta^2 = .18, 90\%$  CI [.09, .27]. To better understand this interaction, we decomposed it by valence and found that both two-way simple interaction effects at each level of valence were significant: F(1, 148) = 35.55, p < .001, partial  $\eta^2 = .19$ , 90% CI [.11, .28], for positive traits and F(1, 148) = 6.26, p = .013, partial  $\eta^2 = .04, 95\%$  CI [.005, .10], for negative traits.

We further probed this interaction by computing the simple effects of each variable at each level of each other variable in the analysis. Detailed results are presented in Table 1. The knowable target was perceived as more moral and competent and less immoral and incompetent. Critical to our hypotheses, the difference between the two conditions was largest for the positive moral traits. These effects support our proposal that true-self knowledge is more strongly related to perceptions of morality than perceptions of competence. Building upon Studies 1 and 2, Study 3 provides evidence that perceiving others as knowable affects evaluations of their moral character. The manipulation also affected evaluations of the target's competence, but these effects were smaller than those on morality. Within each trait type (morality and competence), effects were stronger for positive information than for negative information, consistent with the findings of Study 2. In sum, Study 3 provides converging evidence for a bidirectional relationship between perceptions of other knowledge and morality.

# Study 4

The final two studies used pictorial stimuli with no descriptive text. This allowed us to assess whether inferences about how much a person knows about a target are so automatic that they occur when simply presented with faces previously normed as high/low in morality and competence, absent any explicit description of the targets' morality or competence. The facial stimuli were selected on the basis of previous norming work establishing that they are perceived as high or low in morality (specifically, trustworthiness) and competence (Todorov, Dotsch, Porter, Oosterhof, & Falvello, 2013; Todorov & Oosterhof, 2011).

Given the novelty and minimalism of the stimuli, Studies 4 and 5 represent conservative tests of our predictions. In Studies 1 and 2, the narratives provided a fairly rich and direct source of information; the targets were described in unambiguous terms as either (im)moral or (in)competent individuals. In contrast, the facial stimuli used in Studies 4 and 5 provided much less detail and direct information about the targets' characteristics; morality and competence must instead be inferred from facial features. Thus, Studies 4 and 5 are informative about whether the apparent morality of completely novel others predicts perceptions of knowing these others' true selves. If participants report knowing the true selves of targets that simply appear highly moral better than the true selves of other targets, this indicates the robustness and automaticity of the moralityidentity connection.

# Method

One hundred and eighty-one participants (107 females, 73 males, 1 not reporting;  $M_{age} = 18.62$ , SD = 1.63) from a large public university participated in the study for course credit. Participants were primarily White (82%) and non-Hispanic (69%). The sample size for this study was determined based on a target minimum N of 120, using the termination rule described previously.

This study used a within-subjects design. Participants were presented with four sets of faces (high/low competence and high/low morality), each containing four different faces (16 faces total). Participants rated each face's morality and competence with items similar to those used in the previous studies. They also completed 2 items assessing perceived knowledge of each target. Perceived knowledge ratings were highly similar across the four faces in each condition ( $\alpha$ s > .95) and were thus averaged across faces and items within each condition. The faces were originally created using FaceGen Modeller 3.2 (Singular Inversions, http://www.face gen.com) and have been used in prior research (Todorov et al., 2013; Todorov & Oosterhof, 2011).

# Results

A 2 (morality vs. competence)  $\times$  2 (positive vs. negative) repeated-measures ANOVA was conducted to examine whether faces were perceived as intended. In general, results suggested that they were (for detailed results, see Online Supplement).

A similar repeated-measures ANOVA examined differences in perceived knowledge of the targets. This analysis revealed a significant main effect of valence, F(1, 180) = 51.15, p < .001, partial  $\eta^2 = .22$ , 90% CI [.14, .30], and a nonsignificant main effect of content, F(1, 180) = 1.95, p = .17, partial  $\eta^2 = .01$ , 90% CI [.00, .05]. Importantly, a significant interaction effect was observed, F(1, 180) = 10.55, p = .001, partial  $\eta^2 = .06$ , 90% CI [.01, .12] (see Figure 2, Panel A). Consistent with the previous studies and with our predictions, participants reported knowing more about the true selves of high-morality faces compared to the other three conditions (for simple effects and post hoc comparisons, see Online Supplement).

#### Study 5

Study 5 was a direct replication of Study 4 with one exception: We did not assess morality or competence (i.e., the manipulation checks). This ensured that participants were not cued to



**Figure 2.** Perceived knowledge of target's true self as a function of content (morality vs. competence) and valence (positive vs. negative) in Study 4 (Panel A) and Study 5 (Panel B).

focus on targets' morality and competence when completing the perceived knowledge items. Eliminating these items and asking participants to immediately complete the knowledge items after seeing each face provided a particularly strict test of our hypotheses. If participants report knowing the true selves of high-morality targets better than other targets absent any explicit description or evaluation of the targets' morality, this would suggest that the morality–identity association is highly robust and exists at the level of automatic, intuitive cognitive processes.

#### Method

One hundred and twenty students (70 females, 50 males;  $M_{age} = 18.62$ , SD = .80) at a large public university participated in the study for course credit. Participants were primarily White (74%) and non-Hispanic (70%). The sample size for this study was determined based on a target minimum N of 120, using the termination rule described previously.

Study 5 was identical to Study 4 excepting the omission of the morality and competence items. Perceived knowledge ratings were again highly similar within each face set (all  $\alpha s > .95$ ) and were thus averaged across faces and items within each set.

# Results

We conducted a 2 (morality vs. competence) × 2 (positive vs. negative) repeated-measures ANOVA to examine differences in perceived knowledge of the targets between conditions. This analysis revealed a significant main effect of valence, F(1, 119) = 60.59, p < .001, partial  $\eta^2 = .34$ , 90% CI [.23, .43], and a marginally significant main effect of content, F(1, 119) = 3.65, p = .059, partial  $\eta^2 = .03$ , 90% CI [.00, .10]. Importantly, there was a significant interaction effect, F(1, 119) = 9.53, p = .003, partial  $\eta^2 = .07$ , 90% CI [.02, .16] (see Figure 2, Panel B). Consistent with previous studies and with our predictions, participants reported knowing more about the true selves of high-morality faces relative to the other three conditions (for simple effects and post hoc comparisons, see Online Supplement).

# Discussion

Five studies consistently revealed a strong relationship between perceptions of others' moral character and perceived knowledge of their true selves. In four of these studies, when positive moral information about targets was available, participants reported that they knew the targets' true selves better than when other types of information were available (i.e., negative moral or competence information). Similar results were obtained using textual and pictorial stimuli, suggesting these effects are not limited to a particular stimulus modality. Study 3 found that a target described as readily knowable was perceived as more moral than an unknowable target, demonstrating that the relationship between these perceptions is bidirectional.

These findings extend recent research on the central role of morality in reasoning about true selves (e.g., Newman, De Freitas, & Knobe, 2014; Strohminger & Nichols, 2014; see also Hartley et al., 2016). This prior work has established the basic premise that moral information is heavily weighted in reasoning about identity. The current findings reinforce this premise and extend this foundational idea in three primary ways.

First, the outcome we examined (perceived knowledge of another's true self) has not been studied in prior investigations. Previous studies have focused on perceptions of identity continuity (e.g., Strohminger & Nichols, 2014), on whether targets' behaviors are attributed to their true selves (e.g., Newman, De Freitas, & Knobe, 2014), and on global evaluations of targets (Hartley et al., 2016). Although these outcomes are likely related to perceived knowledge of others' true selves, they are not identical. Thus, the present findings extend the established morality-identity association to encompass a distinct identity-related judgment. These findings also converge with evidence that moral information has a pronounced impact on how well people report knowing their own true selves (Christy, Seto, Schlegel, Vess, & Hicks, 2016). The similar impact of moral information on perceived knowledge of both self and others suggests a common process underlying representations of one's own and others' identity.

Second, by subjecting the morality-identity association to a series of highly conservative tests, the present studies

demonstrate the robustness of the effect and provide suggestive evidence as to the nature of the underlying processes. Even when dealing with completely novel targets with minimal information provided, people feel they know targets' true selves better when targets are portrayed as moral. Studies 4 and 5 are particularly notable in that all of the information about targets' morality and competence was conveyed via the targets' faces rather than explicit descriptions. This demonstrates that even extremely subtle cues signaling moral character are sufficient to enhance perceived knowledge of others' true selves, implying that the morality-identity association is automatic and intuitive in nature. Study 5 represents the most conservative test, as participants were neither given descriptions of the targets' moral character nor asked to evaluate the targets' morality prior to reporting how well they knew the targets' true selves. This strongly implies that the morality-identity association exists at an intuitive level; moral information can impact identity-related judgments absent any explicit consideration of morality.

Finally, in Study 3, participants' evaluations of a novel target's moral character were strongly influenced by minimal descriptions of the target as knowable versus unknowable, showing that the morality-identity association is robust in the opposite direction as well. This finding converges with evidence that self-perceptions of inauthenticity (of which a lack of self-knowledge is a component; Wood, Linley, Maltby, Baliousis, & Joseph, 2008) engender self-perceptions of immorality (Gino, Kouchaki, & Galinsky, 2015), providing further evidence that the morality-identity association characterizes reasoning about the identity of persons in general, whether self or other.

While the present studies demonstrate a bidirectional relationship between perceptions of morality and knowledge of others' true selves, questions remain about why this is the case. One possibility is that morality is prioritized in representations of identity because of its interpersonal relevance. As social beings, it is important to anticipate how others will interact with us, particularly in high-stakes situations (e.g., resourcesharing, interpersonal or intergroup conflicts). Knowing whether a given individual will help us or harm us than is more important than knowing where their particular talents, knowledge, and skills lie. This may be why morality is more central to representations of personal identity than competence. This is consistent with evidence that relational traits are central to the folk concept of humanness (Park, Haslam, & Kashima, 2012). If being a person consists in relating to others, it follows that the most interpersonally consequential traits (i.e., moral traits) will be regarded as central to the identity of persons.

Another possible explanation can be derived from evidence that suggests a wide range of entities (e.g., countries, bands, universities) are assumed to be fundamentally good relative to the normative standards governing the kind of entity in question (De Freitas, Tobia, Newman, & Knobe, 2016). When entities uphold the relevant normative standards, they are perceived as authentic and their identity is preserved. When they deviate from these standards, they are perceived as inauthentic and their identity is disrupted. To the extent that the normative standards for evaluating persons are moral in nature, morality is prioritized in reasoning about personal identity. This normativity-based account can be integrated with a relationality-based account. It is owing to the relational nature of persons that the normative standards for personal goodness hinge on interpersonally relevant traits. For nonrelational entities (e.g., academic journal articles), the relevant normative standards of goodness, and hence the identity of individual entities, will center on other qualities (e.g., the clarity and logic of the article).

The current findings also raise questions about the potential (in)accuracy of inferences about others' morality. The selfother knowledge asymmetry (SOKA) model (Vazire, 2010) provides a useful framework for considering such questions. According to SOKA, traits' degree of observability and evaluativeness determine the accuracy with which they are perceived by self and others, with the self having more accurate insight into low-observability traits (e.g., neuroticism) and others having more accurate insight into highly evaluative traits (e.g., intelligence). Morality is certainly highly evaluative but has both observable (i.e., behavioral) and unobservable (i.e. characterological) components. Given its high evaluativeness and partial observability, SOKA suggests that observers can have accurate insight into a target's moral character. This is consistent with the thin-slicing literature, which suggests that people can make highly accurate inferences about morally relevant traits like trustworthiness on the basis of minimal information (e.g., Kaul & Schmidt, 1971; see also Ambady & Rosenthal, 1992). Still, there remains the potential for impressions of morality to be inaccurate, given that it partially consists in unobservable characteristics such as values and motivations that are only accessible to the self. Further complicating the question, the idea of a "good person" is a dual-character concept (Knobe, Prasada, & Newman, 2013), meaning that its application is contingent on both descriptive facts and abstract values. Thus, even if someone initially seems like a good person on the basis of their behavior or appearance, they may be perceived to not *really* be a good person if they fail to live up to the values defining a good person in perceivers' minds (e.g., if it turns out the target had selfish motivations for their apparently good behavior).

Questions about the accuracy of the true-self knowledge judgments are even more difficult to answer. One could argue that in Studies 4 and 5, the participants objectively knew nothing about the targets' true selves, so they should have chosen the lowest point on each scale and any other responses are inaccurate. However, we believe that such questions about the accuracy of true-self knowledge judgments are misplaced in the context of these studies. These judgments reflect participants' subjective experience of familiarity with the targets, rather than beliefs about the targets that can be directly checked for accuracy. In order to test the accuracy of true-self knowledge judgments, it would be necessary to compare these judgments against a more objective indicator of other knowledge, such as the correspondence between self-reports and informant reports of the target's personality (e.g., Vazire & Carlson, 2010). If individuals who reported knowing the target's true self to a high degree also showed greater concordance between their informant reports and the target's self-reports of personality, this would suggest that subjective true-self knowledge judgments are accurate (i.e., that people know when they know another person). Since the targets in the present studies are not capable of furnishing self-reports, it is impossible to assess the accuracy of participants' true-self knowledge judgments in this context. Regardless of their accuracy, we believe these judgments are nonetheless an interesting psychological variable worthy of study.

The idea that the true self is uniquely associated with moral goodness is not new to the psychological sciences (e.g., Rogers, 1961). Empirical support for this idea, however, is only recently emerging (e.g., Newman, De Freitas, & Knobe, 2014; Strohminger & Nichols, 2014). These studies extend this research to demonstrate that even subtle cues of morality increases perceptions of "really" knowing other people, and further reveal that manipulating the perception of knowing others' true selves leads people to view them as virtuous. Future studies should focus on the intra- and interpersonal implications associated with these fundamental beliefs about who people are "at their core."

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#### Supplemental Material

The supplemental material is available in the online version of the article.

#### Notes

- Across all studies, participants also completed a number of either exploratory measures (e.g., liking of target) or personality measures not related to the current report (e.g., authenticity, selfesteem). All materials and data sets can be found on the Open Science Framework (OSF) at https://osf.io/8ahxy/
- 2. All analyses reported in this article were conducted on the full sample of study participants; no participants were excluded from any of these analyses.

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#### **Author Biographies**

Andrew G. Christy is a PhD student in social and personality psychology at Texas A&M University. His research interests include the causes and consequences of holding various lay beliefs, particularly in how these beliefs relate to well-being.

**Jinhyung Kim** is a PhD student in social and personality psychology at Texas A&M University. His research focuses broadly on wellbeing, including the interplay between individual differences, situational, and cultural factors influences on well-being; the relations between pleasure, meaning, and temporal perspective; and the effects of hedonic and utilitarian goals on consumer satisfaction.

**Matthew Vess** is an assistant professor in the Department of Psychology at Montana State University. His research interests include the cognitive and motivational processes underlying perceptions of meaning in life, authentic and inauthentic aspects of the self, and reactions to existential concerns about mortality.

**Rebecca J. Schlegel** is an associate professor in the Department of Psychology at Texas A&M University. The primary goal of her research is to examine the pervasive influence of self and identity on psychological functioning.

**Joshua A. Hicks** is an associate professor in the Department of Psychology at Texas A&M University. His research explores individual differences and situational factors predicting outcomes such as meaning in life, substance use and abuse, judgment and decisionmaking, and personality development.

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