

# The Psychology of Morality: A Review and Analysis of Empirical Studies Published From 1940 Through 2017

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## Abstract

We review empirical research on (social) psychology of morality to identify which issues and relations are well documented by existing data and which areas of inquiry are in need of further empirical evidence. An electronic literature search yielded a total of 1,278 relevant research articles published from 1940 through 2017. These were subjected to expert content analysis and standardized bibliometric analysis to classify research questions and relate these to (trends in) empirical approaches that characterize research on morality. We categorize the research questions addressed in this literature into five different themes and consider how empirical approaches within each of these themes have addressed psychological antecedents and implications of moral behavior. We conclude that some key features of theoretical questions relating to human morality are not systematically captured in empirical research and are in need of further investigation.

## Keywords

moral reasoning, moral behavior, moral judgment, moral self-views, moral emotions

This review aims to examine the “psychology of morality” by considering the research questions and empirical approaches of 1,278 empirical studies published from 1940 through 2017. We subjected these studies to expert content analysis and standardized bibliometric analysis to characterize relevant trends in this body of research. We first identify key features that characterize *theoretical* approaches to human morality, extract five distinct classes of research questions from the studies conducted, and visualize how these aim to address the psychological antecedents and implications of moral behavior. We then compare this theoretical analysis with the *empirical* approaches and research paradigms that are typically used to address questions within each of these themes. We identify emerging trends and seminal publications, specify conclusions that can be drawn from studies conducted within each research theme, and outline areas in need of further investigation.

Morality indicates what is the “right” and “wrong” way to behave, for instance, that one should be fair and not unfair to others (Haidt & Kesebir, 2010). This is considered of interest to explain the *social behavior of individuals living together in groups* (Gert, 1988). Results from animal studies (e.g., de Waal, 1996) or insights into universal justice principles (e.g., Greenberg & Cropanzano, 2001) do not necessarily help us to address moral behavior in modern societies. This also requires the reconciliation of people who endorse different political orientations (Haidt & Graham, 2007) or adhere to different religions (Harvey & Callan, 2014). The observation that

“good people can do bad things” further suggests that we should look beyond the causes of individual deviance or delinquency to understand moral behavior. In our analysis, we consider key explanatory principles emerging from prominent theoretical approaches to capture important features characterizing human morality (Tomasello & Vaish, 2013). These relate to (a) the social anchoring of right and wrong, (b) conceptions of the moral self, and (c) the interplay between thoughts and experiences. We argue that these three key principles explain the interest of so many researchers in the topic of morality and examine whether and how these are addressed in empirical research available to date.

Through an electronic literature search (using Web of Science [WoS]) and manual selection of relevant entries, we collected empirical publications that contained an empirical measure and/or manipulation that was characterized by the authors as relevant to “morality.” With this procedure, we found 1,278 papers published from 1940 through 2017 that report research addressing morality. Notwithstanding the enormous research interest visible in empirical publications

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on morality, a comprehensive overview of this literature is lacking. In fact, the review paper on morality that was most frequently cited in our set was published more than 35 years ago (Blasi, 1980). As it stands, separate strands of research seem to be driven by different questions and empirical approaches that do not connect to a common approach or research agenda. This makes it difficult to draw summary conclusions, to integrate different sets of findings, or to chart important avenues for future research.

To organize and understand how results from empirical studies relate to each other, we identify the relations that are implicitly seen to connect different research questions. The rationales provided to study specific issues commonly refer to the psychological antecedents and implications of moral behavior and thus are seen to capture “the psychology of morality.” By content-analyzing the study reports provided, we classify the studies included in this review into five groups of thematic *research questions* and characterize the *empirical approaches* typically used in studies addressing each of these themes. With the help of bibliometric techniques, we then quantify emerging trends and consider how different clusters of study approaches relate to questions in each of the research themes examined. This allows us to clarify the theoretical conclusions that can be drawn from empirical work so far and to identify less examined issues in need of further study.

## Morality and Social Order

Moral principles indicate what is a “good,” “virtuous,” “just,” “right,” or “ethical” way for humans to behave (Haidt, 2012; Haidt & Kesebir, 2010; Turiel, 2006). Moral guidelines (“do no harm”) can induce individuals to display behavior that has no obvious instrumental use or no direct value for them, for instance, when they show empathy, fairness, or altruism toward others. Moral rules—and sanctions for those who transgress them—are used by individuals living together in social communities, for instance, to make them refrain from selfish behavior and to prevent them from lying, cheating, or stealing from others (Ellemers, 2017; Ellemers & Van den Bos, 2012; Ellemers & Van der Toorn, 2015).

The role of morality in the maintenance of social order is recognized by scholars from different disciplines. Biologists and evolutionary scientists have documented examples of selfless and empathic behaviors observed in communities of animals living together, considering these as relevant origins of human morality (e.g., de Waal, 1996). The main focus of this work is on displays of fairness, empathy, or altruism in face-to-face groups, where individuals all know and depend on each other. In the analysis provided by Tomasello and Vaish (2013), this would be considered the “first tier” of morality, where individuals can observe and reciprocate the treatment they receive from others to elicit and reward cooperative and empathic behaviors that help to protect individual and group survival.

Philosophers, legal scholars, and political scientists have addressed more abstract moral principles that can be used to regulate and govern the interactions of individuals in larger and more complex societies (e.g., Haidt, 2012; Mill 1861/1962). Here, the nature of cooperative or empathic behavior is much more symbolic as it depends less on direct exchanges between specific individuals, but taps into more abstract and ambiguous concepts such as “the greater good.” Scholarly efforts in this area have considered how specific behaviors might (not) be in line with different moral principles and which guidelines and procedures might institutionalize social order according to such principles (e.g., Churchland, 2011; Morris, 1997). These approaches tap into what Tomasello and Vaish (2013) consider the “second tier” of morality, which emphasizes the social signaling functions of moral behavior and distinguishes human from animal morality (see also Ellemers, 2018). At this level, behavioral guidelines that have lost their immediate survival value in modern societies (such as specific dress codes or dietary restrictions) may nevertheless come to be seen as prescribing essential behavior that is morally “right.” Specific behaviors can acquire this symbolic moral value to the extent that they define how individuals typically mark their religious identity, communicate respect for authority, or secure group belonging for those adhering to them (Tomasello & Vaish, 2013). Moral judgments that function to maintain social order in this way rely on complex explanations and require verbal exchanges to communicate the moral overtones of behavioral guidelines. Language-driven interpretations and attributions are needed to capture symbolic meanings and inferred intentions that are not self-evident in behavioral displays or outwardly visible indicators of emotions (Ellemers, 2018; Kagan, 2018).

The interest of psychologists in moral behavior as a factor in maintaining social order has long been driven by developmental questions (how do children acquire the ability to do this, for example, Kohlberg, 1969) and clinical implications (what are origins of social deviance and delinquency, for example, Rest, 1986). Jonathan Haidt’s (2001) publication, on the role of quick intuition versus deliberate reflection in distinguishing between right and wrong, marked a turning point in the interest of psychologists in these issues. The consideration of specific psychological mechanisms involved in moral reasoning prompted many psychological researchers to engage with this area of inquiry. This development also facilitated the connection of psychological theory to neurobiological mechanisms and inspired attempts to empirically examine underlying processes at this level—for instance, by using functional magnetic resonance imaging (fMRI) measures to monitor the brain activity of individuals confronted with moral dilemmas (Greene, 2013; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001).

Below, we will consider influential approaches that have advanced the understanding of human morality in social psychology, organizing them according to their main explanatory focus. These characterize the “second tier” (Tomasello &

Vaish, 2013) implications of morality that go beyond more basic displays of empathy and altruism observed in animal studies that form the root of biological and evolutionary explanations. From the theoretical perspectives currently available, we extract three key principles that capture the essence of human morality.

### Social Anchoring of Right and Wrong

The first principle refers to the *social implications* of judgments about right and wrong. This has been emphasized as a defining characteristic of morality in different theoretical perspectives. For instance, Skitka (2010) and colleagues have convincingly argued that beliefs about what is morally right or wrong are unlike other attitudes or convictions (Mullen & Skitka, 2006; Skitka, Bauman, & Sargis, 2005; Skitka & Mullen, 2002). Instead, moral convictions are seen as compelling mandates, indicating what *everyone* “ought” to or “should” do. This has important social implications, as people also expect others to follow these behavioral guidelines. They are emotionally affected and distressed when this turns out not to be the case, find it difficult to tolerate or resolve such differences, and may even resort to violence against those who challenge their views (Skitka & Mullen, 2002).

This socially defined nature of moral guidelines is explicitly acknowledged in several theoretical perspectives on moral behavior. The Theory of Planned Behavior (e.g., Ajzen, 1991) offers a framework that clearly specifies how behavioral intentions are determined in an interplay of individual dispositions and social norms held by self-relevant others (Ajzen & Fishbein, 1974; Fishbein & Ajzen, 1974). For instance, research based on this perspective has been used to demonstrate that the adoption of moral behaviors, such as expressing care for the environment, can be enhanced when relevant others think this is important (Kaiser & Scheuthle, 2003).

In a similar vein, Haidt (2001) argued that judgments of what are morally good versus bad behaviors or character traits are specified in relation to *culturally defined virtues*. This allows shared ideas about right and wrong to vary, depending on the cultural, religious, or political context in which this is defined (Giner-Sorolla, 2012; Haidt & Graham, 2007; Haidt & Kesebir, 2010; Rai & Fiske, 2011). Haidt (2001) accordingly specifies that moral intuitions are developed through implicit learning of peer group norms and cultural socialization. This position is supported by empirical evidence showing how moral behavior plays out in groups (Graham, 2013; Graham & Haidt, 2010; Janoff-Bulman & Carnes, 2013). This work documents the different principles that (groups of) people use in their moral reasoning (Haidt, 2012). By connecting judgments about right and wrong to people’s group affiliations and social identities, this perspective clarifies why different religious, political, or social groups sometimes disagree on what is moral and find it difficult to understand the other position (Greene, 2013; Haidt & Graham, 2007).

We argue that all these notions point to the socially defined and identity-affirming properties of moral guidelines and moral behaviors. Conceptions of right and wrong reflect the values that people share with important others and are anchored in the social groups to which they (hope to) belong (Ellemers, 2017; Ellemers & Van den Bos, 2012; Ellemers & Van der Toorn, 2015; Leach, Bilali, & Pagliaro, 2015). This also implies that there is no inherent moral value in specific actions or overt displays, for instance, of empathy or helping. Instead, the same behaviors can acquire different moral meanings, depending on the social context in which they are displayed and the relations between actors and targets involved in this context (Blasi, 1980; Gray, Young, & Waytz, 2012; Kagan, 2018; Reeder & Spores, 1983).

Thus, a first question to be answered when reviewing the empirical literature, therefore, is whether and how the *socially shared* and identity relevant nature of moral guidelines—central to key theoretical approaches—is addressed in the studies conducted to examine human morality.

### Conceptions of the Moral Self

A second principle that is needed to understand human morality—and expands evolutionary and biological approaches—is rooted in the explicit self-awareness and autobiographical narratives that characterize human self-consciousness, and moral self-views in particular (Hofmann, Wisneski, Brandt, & Skitka, 2014).

Because of the far-reaching implications of moral failures, people are highly motivated to protect their self-views of being a moral person (Pagliaro, Ellemers, Barreto, & Di Cesare, 2016; Van Nunspeet, Derks, Ellemers, & Nieuwenhuis, 2015). They try to escape self-condemnation, even when they fail to live up to their own moral standards. Different strategies have been identified that allow individuals to disengage their self-views from morally questionable actions (Bandura, 1999; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Mazar, Amir, & Ariely, 2008). The impact of moral lapses or moral transgressions on one’s self-image can be averted by redefining one’s behavior, averting responsibility for what happened, disregarding the impact on others, or excluding others from the right to moral treatment, to name just a few possibilities.

A key point to note here is that such attempts to protect moral self-views are not only driven by the external image people wish to portray toward others. Importantly, the conviction that one qualifies as a moral person also matters for *internalized* conceptions of the moral self (Aquino & Reed, 2002; Reed & Aquino, 2003). This can prompt people, for instance, to forget moral rules they did not adhere to (Shu & Gino, 2012), to fail to recall their moral transgressions (Mulder & Aquino, 2013; Tenbrunsel, Diekmann, Wade-Benzoni, & Bazerman, 2010), or to disregard others whose behavior seems morally superior (Jordan & Monin, 2008).

As a result, the strong desire to think of oneself as a moral person not only enhances people's efforts to display moral behavior (Ellemers, 2018; Van Nunspeet, Ellemers, & Derks, 2015). Instead, sadly, it can also prompt individuals to engage in symbolic acts to distance themselves from moral transgressions (Zhong & Liljenquist, 2006) or even makes them relax their behavioral standards once they have demonstrated their moral intentions (Monin & Miller, 2001). Thus, tendencies for self-reflection, self-consistency, and self-justification are both affected by and guide moral behavior, prompting people to adjust their moral reasoning as well as their judgments of others and to endorse moral arguments and explanations that help justify their own past behavior and affirm their worldviews (Haidt, 2001).

A second important question to consider when reviewing the empirical literature on morality, thus, is whether and how studies take into account these *self-reflective* mechanisms in the development of people's moral self-views. From a theoretical perspective, it is therefore relevant to examine antecedents and correlates of tendencies to engage in self-defensive and self-justifying responses. From an empirical perspective, it also implies that it is important to consider the possibility that people's self-reported dispositions and stated intentions may not accurately indicate or predict the moral behavior they display.

## The Interplay Between Thoughts and Experiences

A third principle that connects different theoretical perspectives on human morality is the realization that this involves deliberate thoughts and ideals about right and wrong, as well as behavioral realities and emotional experiences people have, for instance, when they consider that important moral guidelines are transgressed by themselves or by others. Traditionally, theoretical approaches in moral psychology were based on the philosophical reasoning that is also reflected in legal and political scholarship on morality. Here, the focus is on general moral principles, abstract ideals, and deliberate decisions that are derived from the consideration of formal rules and their implications (Kohlberg, 1971; Turiel, 2006). Over the years, this perspective has begun to shift, starting with the observation made by Blasi (1980, p. 1) that

Few would disagree that morality ultimately lies in action and that the study of moral development should use action as the final criterion. But also few would limit the moral phenomenon to objectively observable behavior. Moral action is seen, implicitly or explicitly, as complex, imbedded in a variety of feelings, questions, doubts, judgments, and decisions . . . From this perspective, the study of the relations between moral cognition and moral action is of primary importance.

This perspective became more influential as a result of Haidt's (2001) introduction of "moral intuition" as a relevant construct. Questions about what comes first, reasoning

or intuition, have yielded evidence showing that both are possible (e.g., Feinberg, Willer, Antonenko, & John, 2012; Pizarro, Uhlmann, & Bloom, 2003; Saltzstein & Kasachkoff, 2004). That is, reasoning can inform and shape moral intuition (the classic philosophical notion), but intuitive behaviors can also be justified with post hoc reasoning (Haidt's position). The important conclusion from this debate thus seems to be that it is the *interplay* between deliberate thinking and intuitive knowing that shapes moral guidelines (Haidt, 2001, 2003, 2004). This points to the importance of behavioral realities and emotional experiences to understand how people reflect on general principles and moral ideals.

A first way in which this has been addressed resonates with the evolutionary survival value of moral guidelines to help avoid illness and contamination as sources of physical harm. In this context, it has been argued and shown that non-verbal displays of disgust and physical distancing can emerge as unthinking embodied experiences to morally aversive situations that may subsequently invite individuals to reason why similar situations should be avoided in the future (Schnall, Haidt, Clore, & Jordan, 2008; Tapp & Occhipinti, 2016). The social origins of moral guidelines are acknowledged in approaches explaining the role of distress and empathy as implicit cues that can prompt individuals to decide which others are worthy of prosocial behavior (Eisenberg, 2000). In a similar vein, the experience of moral anger and outrage at others who violate important guidelines is seen as indicating which guidelines are morally "sacred" (Tetlock, 2003). Experiences of disgust, empathy, and outrage all indicate relatively basic affective states that are marked with nonverbal displays and have direct implications for subsequent actions (Ekman, 1989; Ekman, 1992).

In addition, theoretical developments in moral psychology have identified the experience of guilt and shame as characteristic "moral" emotions. Compared with "primary" affective responses, these "secondary" emotions are used to indicate more complex, self-conscious states that are not immediately visible in nonverbal displays (Tangney & Dearing, 2002; Tangney, Stuewig, & Mashek, 2007). These moral emotions are seen to distinguish humans from most animals. Indeed, affording to others the perceived ability to experience such emotions communicates the degree to which we consider them to be human and worthy of moral treatment (Haslam & Loughnan, 2014). The nature of guilt and shame as "self-condemning" moral emotions indicates their function to inform self-views and guide behavioral adaptations rather than communicating one's state to others.

At the same time, it has been noted that feelings of guilt and shame can be so overwhelming that they raise self-defensive responses that stand in the way of behavioral improvement (Giner-Sorolla, 2012). This can occur at the individual level as well as the group level, where the experience of "collective guilt" has been found to prevent inter-group reconciliation attempts (Branscombe & Doosje, 2004).

Accordingly, it has been noted that the relations between the experience of guilt and shame as moral emotions and their behavioral implications depend very much on further appraisals relating to the likelihood of social rejection and self-improvement that guide self-forgiveness (Leach, 2017).

Regardless of which emotions they focus on, these theoretical perspectives all emphasize that moral concerns and moral decisions arise from situational realities, characterized by people's *experiences* and the (moral) emotions these evoke. A third question emerging from theoretical accounts aiming to understand human morality, therefore, is whether and how the interplay between the thoughts people have about moral ideals (captured in principles, judgments, reasoning), on one hand, and the realities they experience (embodied behaviors, emotions), on the other, is explicitly addressed in empirical studies.

## Empirical Approaches

Now that we have identified that socially shared, self-reflective, and experiential mechanisms represent three key principles that are seen as essential for the understanding of human morality in *theory*, it is possible to explore how these are reflected in the *empirical* work available. An initial answer to this question can be found by considering which types of research paradigms and classes of measures are frequently used in studies on morality. Do study designs typically take into account the way different social norms can shape individual moral behavior? Do instruments that are developed to assess people's morality incorporate the notion that explicit self-reports do not necessarily capture their actual moral responses? And do responses that are assessed allow researchers to connect moral thoughts people have with their actual experiences?

We examined this by reviewing the empirical literature. Through an electronic literature search, we collected empirical studies reporting on manipulations and/or empirical measures that authors of these studies identified as being relevant to "morality." In a first wave of data collection (see the "Method" section for further details), we extracted 419 empirical studies on morality that were published from 2000 through 2013. These were manually processed and content-coded to determine for each publication the research question that was asked, the research design that was employed to examine this, and the measures that were used (for details of how this was done, see Ellemers, Van der Toorn, & Paunov, 2017). We distinguished between correlational and experimental designs and assessed which manipulations were used to compare different responses (see Supplementary Table A). We also listed and classified "named" scales and measures that were employed in these studies (see Table 1) and additionally indicated which types of responses were captured, in moral judgments provided, emotional and behavioral indicators, or with standardized scales (see Supplementary Table B).

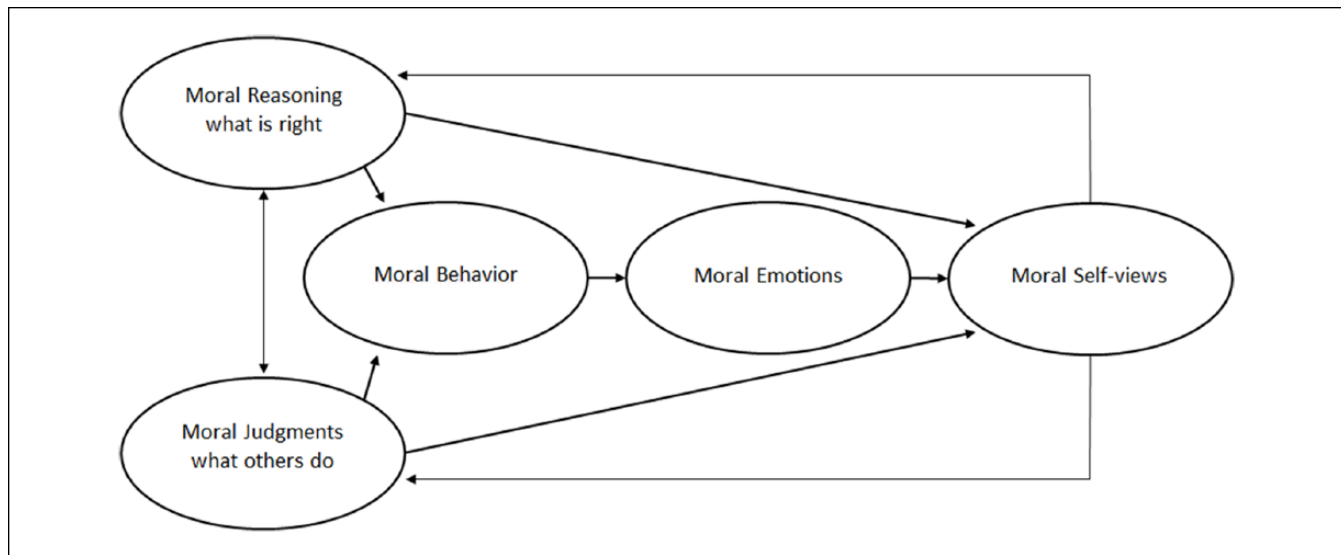
## Are Social Influences Taken Into Account?

An overview of the research designs that were coded in this way (see Supplementary Table A, final column) first reveals that a substantial proportion of these studies (185 of 419 studies examined; 44%) used correlational designs to examine, for instance, which traits people associate with particular targets or how self-reported beliefs, convictions, principles, or norms relate to self-stated intentions. Of the studies using an experimental design, a substantial number (91 studies; about 22%) examined the impact of some situational prime intended to activate specific goals, rules, or experiences. Furthermore, a substantial number of studies examined the impact of manipulating specific target characteristics (51 studies; 12%) or moral concerns (51 studies; 12%). However, experimental studies examining the impact of specific social norms (31 studies; 7%) or a group-based participant identity were relatively rare (four studies; less than 1%). This suggests that the socially shared nature of moral guidelines is not systematically addressed in this body of research.

## Do Standard Instruments Rely on Self-Reports?

The types of responses typically examined in these studies can be captured by looking in more detail at the nature of the scales, tests, tasks, and questionnaires that were used. Our manual content analysis yielded 38 different scales, tests, tasks, and questionnaires that were used in 91 of the 419 studies examined (see Table 1). We clustered these according to their nature and intent, which yielded four distinct categories. We found seven different measures (used in 27 studies; 30%) that rely on *hypothetical moral dilemmas*, where people have to weigh different moral principles against each other (e.g., stealing from one person to help another person), and indicate what should be done in these situations. We found 11 additional measures (used in 12 studies; 13%) consisting of *lists of traits or behaviors* (e.g., honesty, helpfulness) that can be used to indicate the general character/personality type of the self or a known other (friend, family member). Here, we included measures such as the HEXACO Personality Inventory (HEXACO-PI; Lee & Ashton, 2004) and the moral identity scale (Aquino & Reed, 2002). Third, we found 11 different measures (used in 31 studies; 34%) that assess the endorsement of *abstract moral rules* (e.g., "do no harm"). A representative example is the Moral Foundations Questionnaire (Graham et al., 2011), which distinguishes between statements indicating concern for "individualizing" principles (harm/care, fairness) and "binding" principles (loyalty, authority, purity). Fourth, we found nine different measures (used in 20 studies; 22%) aiming to capture people's position on *specific moral issues* (e.g., "it is important to tell the truth"; "it is ok for employees to take home a few office supplies"). We also included in this category different lists of behaviors (for instance, the Morally Debatable





**Figure 1.** The psychology of morality: connections between five research themes.

Behaviors Scale [MDBS]; Katz, Santman, & Lonero, 1994) that focus on the endorsement of behaviors considered relevant to morality (e.g., corruption, violence, discrimination, or misrepresentation).

Importantly, all four clusters of measures we found to rely on *self-reported* preferences and stated character traits or intentions, describing overall tendencies and general behavioral guidelines. However, it is less evident that such measures can be used to understand how people will actually behave in real-life situations, where they may have to choose which of different competing guidelines to apply or where it is unclear how the general principles they endorse translate to a specific act or decision in that context.

### Are “Thoughts” Connected to “Experiences?”

Our manual coding of the different dependent measures that were used (see Supplementary Table B, final column) reveals that the majority of measures aimed to capture either general moral principles that people endorse (72 of 445 measures coded; 16%) or their moral evaluations of specific individuals, groups, or companies (72 measures; 16%). In addition, a substantial proportion of studies examined people’s positions on specific issues, such as abortion, gossiping, or specific political convictions (61 measures; 14%). Substantial numbers of measures assessed the perceived implications of one’s moral principles (48 measures; 11%) or the willingness to be cooperative or truthful in hypothetical situations (44 measures; 10%). Notably, a relatively small proportion of measures actually tried to capture cooperative or cheating behavior in experimental or real-life situations (51 measures; 12%). Similarly, empathy with others and moral emotions such as guilt, shame, and disgust were assessed in 15% (67) of the measures that were coded. Thus, the majority of

measures used focuses on “thoughts” relating to morality, as these capture abstract principles, overall judgments, or hypothetical intentions, while much less attention has been devoted to examining behavioral displays or emotions characterizing the actual “experiences” people have in relation to these “thoughts.”

Thus, this initial examination of empirical evidence available in studies on morality published from 2000 through 2013 suggests that the three key theoretical principles we have extracted from relevant theoretical perspectives on morality are not systematically reflected in the research that has been carried out. Instead, it seems that “moral tendencies” are typically defined independently of the social context, specific norms, or the identity of others who may be affected by the (im)moral behavior. Furthermore, general and self-reported tendencies or preferences are often taken at face value without testing them against actual behavioral displays or emotional experiences. Finally, empirical studies have prioritized the examination of all kinds of “thoughts” relating to morality over attempts to connect these to actual moral “experiences.” Thus, this initial examination of the literature seems to reveal a mismatch between the empirical approach that is typically taken and leading theoretical perspectives—that emphasize the socially shared nature of moral guidelines, the self-justifying nature of moral reasoning, and the importance of emotional experiences.

As others have noted before us (e.g., Abend, 2013), this initial assessment of studies carried out suggests that the empirical breadth of past morality research is constrained in that some approaches appear to be favored at the expense of others. Studies often rely on highly artificial paradigms or scenarios (Chadwick, Bromgard, Bromgard, & Trafimow, 2006; Eriksson, Strimling, Andersson, & Lindholm, 2017). They examine hypothetical reasoning or focus on a

few specific decisions or actions that may rarely present themselves in everyday life, such as deciding about the course of a runaway train (Bauman, McGraw, Bartels, & Warren, 2014; Graham, 2014) or eating one's dog (Haidt, Koller, & Dias, 1993; Mooijman & Van Dijk, 2015). This does not capture the wide variety of contexts in which moral choices have to be made (for instance, whether or not to sell a subprime mortgage to achieve individual performance targets), and it is not evident whether and how this limits the conclusions that can be drawn from such work (for similar critiques, see Crone & Laham, 2017; Graham, 2014; Hofmann et al., 2014; Lovett, Jordan, & Wiltermuth, 2015).

## Understanding Moral Behavior

Our conclusion so far is that researchers in social psychology have displayed a considerable interest in examining topics relating to morality. However, it is not self-evident how the multitude of research topics and issues that are addressed in this literature can be organized. This is why we set out to organize the available research in this area into a limited set of meaningful categories by content-analyzing the publications we found to identify studies examining similar research questions. In the "Method" section, we provide a detailed explanation of the procedure and criteria we used to develop our coding scheme and to classify studies as relating to one of five research themes we extracted in this way. We now consider the nature of the research questions addressed within each of these themes and the rationales typically provided to study them, to specify how different research questions that are examined are seen to relate to each other. We visualize these hypothesized relations in Figure 1.

Researchers in this literature commonly cite the ambition to predict, explain, and influence *Moral Behavior* as their focal guideline for having an interest in examining some aspect of morality (see also Ellemers, 2017). We therefore place research questions relating to this theme at the center of Figure 1. Questions about behavioral displays that convey the moral tendencies of individuals or groups fall under this research theme. These include research questions that address implicit indicators of moral preferences or cooperative choices, as well as more deliberate displays of helping, cheating, or standing up for one's principles.

Many researchers claim to address the likely *antecedents* of such moral behaviors that are located in the individual as well as in the (social) environment. Here, we include research questions relating to *Moral Reasoning*, which can reflect the application of abstract moral principles as well as specific life experiences or religious and political identities that people use to locate themselves in the world (e.g., Cushman, 2013). This work addresses moral standards people can adhere to, for instance, in the decision guidelines they adopt or in the way they respond to moral dilemmas or evaluate specific scenarios.

We classify research questions as referring to *Moral Judgments* when these address the dispositions and behaviors of other individuals, groups, or companies in terms of their morality. These are considered as relevant indicators of the reasons why and conditions under which people are likely to display moral behavior. Research questions addressed under this theme consider the characteristics and actions of other individuals and groups as examples of behavior to be followed or avoided or as a source of information to extract social norms and guidelines for one's own behavior (e.g., Weiner, Osborne, & Rudolph, 2011).

We distinguish between these two clusters to be able to separate questions addressing the *process* of moral reasoning (to infer relevant decision rules) from questions relating to the *outcome* in the form of moral judgments (of the actions and character of others). However, the connecting arrow in Figure 1 indicates that these two types of research questions are often discussed in relation to each other, in line with Haidt's (2001) reasoning that these are interrelated mechanisms and that moral decision rules can prescribe how certain individuals should be judged, just as person judgments can determine which decision rules are relevant in interacting with them.

We proceed by considering research questions that relate to the psychological *implications* of moral behavior. The immediate affective implications of one's behavior, and how this reveals one's moral reasoning as well as one's judgments of others, are addressed in questions relating to *Moral Emotions* (Sheikh, 2014). These are the emotional responses that are seen to characterize moral situations and are commonly used to diagnose the moral implications of different events. Questions we classified under this research theme typically address feelings of guilt and shame that people experience with regard to their own behavior, or outrage and disgust in response to the moral transgressions of others.

Finally, we consider research questions addressing self-reflective and self-justifying tendencies associated with moral behavior. Studies aiming to investigate the moral virtue people afford to themselves and the groups they belong to, and the mechanisms they use for moral self-protection, are relevant for *Moral Self-Views*. Under this research theme, we subsume research questions that address the mechanisms people use to maintain self-consistency and think of themselves as moral persons, even when they realize that their behavior is not in line with their moral principles (see also Bandura, 1999).

Even though research questions often consider moral emotions and moral self-views as outcomes of moral behaviors and theorize about the factors preceding these behaviors, this does not imply that emotions and self-views are seen as the final end-states in this process. Instead, many publications refer to these mechanisms of interest as being iterative and assume that prior behaviors, emotions, and self-views also define the feedback cycles that help shape and develop subsequent reasoning and judgments of (self-relevant) others,



which are important for future behavior. The feedback arrows in Figure 1 indicate this.

Our main goal in specifying how different types of research questions can be organized according to their thematic focus in this way is to offer a structure that can help monitor and compare the empirical approaches that are typically used to advance existing insights into different areas of interest. The relations depicted in Figure 1 represent the reasoning commonly provided to motivate the interest in different types of research questions. The location of the different themes in this figure clarifies how these are commonly seen to connect to each other and visualizes the (sometimes implicit) assumptions made about the way findings from different studies might be combined and should lead to cumulative insights. In the sections that follow, we will examine the *empirical approaches* used to address each of these clusters of research questions to specify the ways in which results from different types of studies actually complement each other and to identify remaining gaps in the empirical literature.

## A Functionalist Perspective

An important feature of our approach is that we do *not* delineate research questions in terms of the specific moral concerns, guidelines, principles, or behaviors they address. Instead, we take a *functionalist* perspective in considering which *mechanisms* relevant to people's thoughts and experiences relating to morality are examined to draw together the empirical evidence that is available. For each of the research themes described above, we therefore consider the empirical approaches that have been taken by identifying the nature of relevant functions or mechanisms that have been examined. This will help document the evidence that is available to support the notion that morality matters for the way people think about themselves, interact with others, live and work together in groups, and relate to other groups in society. In considering the different functions morality may have, we distinguish between four levels at which mechanisms in social psychology are generally studied (see also Ellemers, 2017; Ellemers & Van den Bos, 2012).

### Intrapersonal Mechanisms

All the ways in which people consider, think, and reason by themselves to determine what is morally right refer to *intrapersonal* mechanisms. Even if these considerations are elicited by social norms or reflect the behavior observed in others, it is important to assess the extent to which they emerge as guiding principles for individuals to be used in their further reasoning, for their judgments of the self and others, for their behavioral displays, or for the emotions they experience. Thus, such intrapersonal mechanisms are relevant for questions relating to each of the five research themes we examine.

### Interpersonal Mechanisms

The way people relate to others, respond to their moral behaviors, and connect to them tap into *interpersonal* mechanisms. Again we note that such mechanisms are relevant for research questions in all five research themes, as relations with others can inform the way people reason about morality, the way they judge other individuals or groups, the way they behave, as well as the emotions they experience and the self-views they have.

### Intragroup Mechanisms

The role of moral concerns in defining group norms, the tendency of individuals to conform to such norms, and their resulting inclusion versus exclusion from the group all indicate *intragroup* mechanisms relevant to morality. Considering how groups influence individuals is relevant for our understanding of the way people reason about morality and the way they judge others. It also helps us understand the moral behavior individuals are likely to display (for instance, in public vs. private situations), the emotions they experience in response to the transgression of specific moral rules by themselves or different others, and the self-views they develop about their morality.

### Intergroup Mechanisms

The tendency for social groups to endorse specific moral guidelines as a way to define their distinct identity, disagreements between groups about the nature or implications of important values, or moral concerns that stem from conflicts between groups in society all refer to *intergroup* mechanisms relevant to morality. Here too, examination of such mechanisms is relevant to research questions in each of the five research themes we distinguish. These may inform the tendency to interpret the prescription to be "fair" differently, depending on the identity of the recipients of such fairness, which helps understand people's moral reasoning and the way they judge the morality of others. Intergroup relations may also help understand the tendency to behave differently toward members of different groups, as well as the emotions and self-views relating to such behaviors.

In sum, we argue that each of these four levels of analysis offers potentially relevant approaches to understand the mechanisms that can shape people's moral concerns and their judgments of others. Mechanisms at all four levels can also affect moral behavior and have important implications for the emotions people experience and the self-views they hold. Reviewing whether and how empirical research has addressed relevant mechanisms at these four levels thus offers a better understanding of how morality operates in the social regulation of individual behavior (see also Carnes, Lickel, & Janoff-Bulman, 2015; Ellemers, 2017; Janoff-Bulman & Carnes, 2013).

## Questions Examined

The functionalist perspective we have outlined above is central to how we conceptualize morality in this review. We built a database containing research that is relevant for this review by including all studies in which the authors indicated their research design or measures to speak to issues relating to morality. Thus, we do not limit ourselves to the examination of specific guidelines or behaviors as representing key features of morality, but consider the broad range of situations that can be interpreted in terms of their moral implications (see also Blasi, 1980). We argue that many different principles or behaviors can acquire moral overtones, and our main interest is to examine what happens when these are considered as indicating the morally “right” versus “wrong” way to behave in a particular situation. We think this latter aspect reflects the essence of theoretical accounts that have emphasized the ways in which morality and moral judgments regulate the behavior of individuals living in groups (Rai & Fiske, 2011; Tooby & Cosmides, 2010). As indicated above, this implies that—given the abstract nature of universal moral values—the specific behavior that is seen as moral can shift, depending on the social context (Haidt & Graham, 2007; Haidt & Kesebir, 2010; Rai & Fiske, 2011), as well as the relevant norms or features that characterize distinct social groups (Giner-Sorolla, 2012; Greene, 2013). Shared moral standards go beyond other behavioral norms in that they are used to define whether an individual can be considered a virtuous and “proper” group member, with social exclusion as the ultimate sanction (Tooby & Cosmides, 2010; see also Ellemers & Van den Bos, 2012). In the remainder of this review, we will examine the empirical approaches to examining morality in social psychology from this functionalist perspective:

1. **Emerging trends:** We built a database containing bibliometric characteristics of all studies relevant to our review. This allows us to consider relevant trends in the emergence of published studies, comparing these with general developments in the field of social psychology. We will consider differences in the development of interest in the five types of research questions we distinguish and detail the different mechanisms that are studied to examine questions falling within each of these themes. In this way, we aim to examine the effort researchers have made over the years to understand what they see as the psychological antecedents and implications of moral behavior. We also assess whether and how these emerging efforts have addressed the intrapersonal, interpersonal, intragroup, and intergroup mechanisms relating to morality.
2. **Influential views:** We will identify which (theoretical) publications external to our database are most frequently cited in the empirical publications included in our database. We see these as seminal approaches

that have influenced researchers with an interest in morality. We also assess which empirical publications in our database receive the most cross-citations from other researchers on morality and are frequently cited in the broader literature. This will help understand which theoretical perspectives and empirical approaches have been most influential in further developing this area of research.

3. **Types of studies:** We will use standardized bibliometric techniques to identify interrelated clusters of research and characterize the way these clusters differ from each other. We consider the different types of research questions asked in each of the themes we distinguish and relate them to clusters of studies carried out to specify the empirical approaches that have typically been adopted to address questions within each research theme. This elucidates which conclusions can be drawn from the studies that are available to date and how these contribute to broader insights on the psychology of morality.

By considering the empirical literature in this way, we seek to determine whether and how relevant theoretical perspectives on human morality and the types of research questions they raise are reflected in empirical studies carried out. In doing this, we will assess to what extent this work addresses the role of shared identities in the development of moral guidelines, takes into account the limits of self-reported individual dispositions as proxies for moral behaviors, and considers the interplay between moral principles, guidelines, and convictions as “thoughts,” on one hand, and actual behaviors and emotions as “experiences,” on the other.

## Method

### Data Collection Procedure

The data collection was carried out entirely online using the WoS engine. Information was derived from three databases: the Science Citation Index Expanded (SCI-EXPANDED, 1945-present), the Social Sciences Citation Index (SSCI, 1956-present), and the Arts & Humanities Citation Index (A&HCI, 1975-present). These database choices were determined by user account access. The category criterion was set to “Psychology Social.” The search query was “moral\*” whereby the results listed all empirical and review articles featuring the word “moral” within the source’s title, keywords, or abstract.

The publications initially found in this way were manually screened to determine whether they should be included in our review of empirical studies on morality. Criteria to include a publication in the set accordingly were (a) that it was an English-language publication, (b) that it had been published in a peer-reviewed journal, (c) that it contained an original report of qualitative or quantitative empirical data (either in a correlational or an experimental design), and (d)

that it contained a manipulation or a measure that the authors indicated as relevant to morality.

The complete set of studies examined here was collected in three waves (see Appendix 1, in Supplementary materials). Each wave consisted of an electronic search using the procedure and inclusion criteria detailed above. The publications that came up in the electronic search were first screened to remove any review or theory papers that did not report original data. The empirical publications that were retained were assessed for relevance to our research question by checking whether the study or studies reported actually included a manipulation or measure that was identified by the authors as relating to morality.

The initial search was done in 2014 and included all publications that had appeared in 2000 through 2013, of which 419 met our inclusion criteria. A second wave of data collection was carried out in 2016 and 2017 to add two more years of empirical publications that had appeared in 2014 and 2015. This yielded 221 additional publications that were included in the set. The data collection was completed with a third wave of data collection conducted in 2018. Here, the same procedure was used to add 275 empirical studies that had been published in 2016 and 2017. In this third wave of data collection, we also searched for publications that had appeared before 2000 and were listed in WoS. This yielded 372 additional studies published from 1940 through 1999. Together, these three waves of data collection yielded a total number of 1,278 studies on morality published from 1940 through 2017 that we collected for this review (see Appendix 2, in Supplementary materials).

We note that complete records of main publication details are only available from 1981 onward, and complete full-text records of publications in WoS are only available from 1996 onward. This is why statistical trends analyses will only be conducted for studies published from 1981 onward, and full bibliometric analyses can only be carried out for the main body of 989 studies on morality published from 1996 through 2017 for which complete publication details are digitally available.

## Data Coding

### *Coding Procedure and Interrater Reliability*

During the first wave of data collection, a coding scheme was jointly developed by the two first authors. Different coders used this scheme to code groups of publications in different waves of data collection. This was decided by determining the main prediction examined and inspecting the study design and measures that were used. In each phase of data coding, ambiguous cases were flagged, and publication details were further examined and discussed with other coders to reach a joint decision on the most appropriate classification. Each time this occurred, the coding scheme was further specified.

After completion of the third wave of data collection, interrater reliability was determined for the full database included in this review. The codes assigned by five different

coders in the first and second wave of data collection, and by six additional coders in the third wave of data collection, were checked by the second group of six coders. An online random number generator was used to randomly select 20 entries for six subsets of years examined (1940 through 2017) that contained about 200 publications each. This resulted in 120 entries (roughly 10% of all publications included) sampled to assess interrater reliability. Each group of 20 entries was then assigned to a second coder and coded in an empty file. Only after completing the 20 entries did the second coder compare their codings with the original codings. The overall interrater agreement was good. For the levels of analysis at which morality was examined, coders were in agreement for 84% of the entries coded. When determining how to classify the main research question under one of the research themes, coders agreed on 84.3% of the entries.

### *Levels of Analysis*

For each entry, we inspected the study design and measures that were used to assess the level at which the mechanism under investigation was located. We distinguish four levels which mirror the categories that are commonly used to characterize different types of mechanisms addressed in social psychological theory (e.g., in textbooks): (a) research on *intrapersonal* mechanisms, which studies how a single individual considers, evaluates, or makes decisions about rules, objects, situations, and courses of action; (b) research on *interpersonal* mechanisms, which examines how individuals perceive, evaluate, and interact with other individuals; (c) research on *intragroup* mechanisms, investigating how people perceive, evaluate, and respond to norms or behaviors displayed by other members of the same group, work or sports team, religious community, or organization; and (d) research on *intergroup* mechanisms, focusing on how people perceive, evaluate, and interact with members of different cultural, ethnic, or national groups. We also include here research that explicitly aims to examine how members of distinct groups differ from each other in how they consider morality.

Interrater agreement was 74% for intrapersonal mechanisms, 83% for interpersonal mechanisms, 92% for intragroup mechanisms, and 88% for intergroup mechanisms.

### *Research Themes*

For each entry, we decided what was the main goal of the research question that was addressed. At the first wave of data collection, the first two authors listed all the keywords provided by the authors of studies included and decided how these could be classified into the five research themes we distinguish in our model. We used this as a starting point to develop our coding scheme, in which ambiguities were resolved through deliberation, as specified above. In this case, coders were instructed to choose a single theme that represented the main focus of the research question in each

of the entries included (which could contain multiple studies). Cases where coders thought multiple research themes might be relevant were flagged and further studied and discussed with other coders to determine the primary focus of the research question. Interrater agreement was 68% for moral reasoning, 89% for moral behavior, 84% for moral judgment, 87% for moral self-views, and 95% for moral emotions.

**Moral reasoning.** Here, we included all research questions that try to capture the moral guidelines people endorse. These include questions about what people consider to be morally right by considering their ideas of what “good” people are generally like or questions about what guidelines people endorse to indicate what a moral person should do. Some researchers aim to examine which choices people think should be made in hypothetical dilemmas and vignettes, asking about people’s positions on specific issues (e.g., gay adoption, killing bugs for science), or wish to assess which values are guiding principles in their life (e.g., fairness, purity). Under this theme, we also classified research questions aiming to examine how moral choices and decisions may differ, depending on specific concerns or situational goals that are activated implicitly (e.g., clean vs. dirty environment) or explicitly (e.g., long-term vs. short-term implications). We note that some of the research questions we included under this theme are labeled by their authors as being about “moral judgment,” as they use this term more broadly than we do. However, in our delineation of the different types of research questions—and in our coding scheme for the five thematic clusters we distinguish—we reserve the term moral judgments for a specific set of research questions, which address the way in which people judge the morality of a *another individual or group*. Research questions investigating people’s judgments about the general morality of a particular decision or course of action—which capture one’s *own* moral guidelines—fall under the theme of “moral reasoning” in our coding scheme.

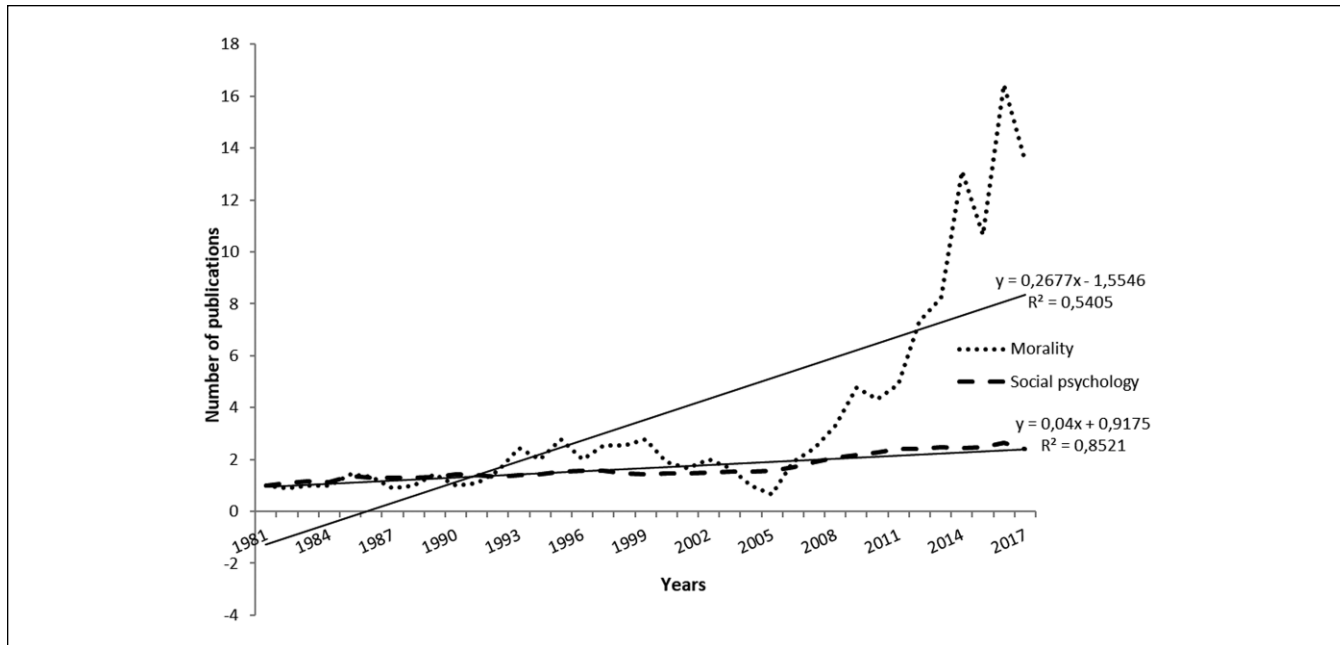
**Moral judgments.** Under this research theme, we classify all research questions addressing ways in which we evaluate the morality of other individuals or groups. We include research questions examining how the general character of specific individuals is evaluated in terms of perceived closeness of the target to the self or overall positivity/negativity of the target (e.g., in terms of likeability, familiarity, or attractiveness). We also consider under this theme research questions aiming to uncover how people assign moral traits (honesty etc.) or moral responsibility to the individual for the behavior described (guilty, intentionally inflicting harm, deserving of punishment). Similarly, we include research questions addressing the judgments of *group* targets (existing social groups, companies, communities) in terms of overall positivity/negativity, specific moral traits (e.g., trustworthiness),

negative emotions raised, or implicit moral judgments implied in lexical decisions. In this cluster, we also consider research questions addressing the perceived severity of behaviors described, wondering whether people think it merits punishment, or affecting the level of empathy versus dehumanization they experience toward the *victims* of moral transgressions.

**Moral behavior.** Here, we include research questions addressing self-reported past behavior or behavioral intentions, as well as reports of (un)cooperative behavior in real life (e.g., volunteering, donating money, helping, forgiving, citizenship) or deceitful behavior in experimental contexts (e.g., cheating, lying, stealing, gossiping). We also include questions addressing implicit indicators of moral behavior (e.g., word completion tendencies, speech pattern analysis, hand-wipe choices). Research questions under this theme consider these behavioral reports as expressing internalized personal norms, convictions, or beliefs, in relation to indicators of “moral atmosphere,” descriptive or injunctive team or group norms, family rules, or moral role models. We also include under this theme research questions that address moral behavior in relation to situational concerns (e.g., moral rule reminders, cognitive depletion) or specific virtues (e.g., care vs. courage).

**Moral emotions.** This theme includes research questions in which emotions are considered in response to recollections of real-life events, behaviors, and dilemmas, including significant historical or political events. We also include research questions examining whether such emotions (after being evoked with experimental procedures) can induce participants to display morally questionable behavior (e.g., in a computer game, in response to a provocation by a confederate) or when prompted with situational primes (e.g., pleasant or abhorrent pictures, odors, faces, or transgressive scenarios). Research questions addressing emotional responses people experience in relation to morally relevant issues or situations (guilt, shame, outrage, disgust) are also included under this theme.

**Moral self-views.** We classified under this research theme all research questions that address the way different aspects of people’s self-views relate to each other (e.g., personality characteristics with self-stated inclinations to display moral behavior), as well as research questions addressing the way experimentally induced behavioral primes, reminders of past (individual or group level) moral transgressions, or the moral superiority of others relate to people’s self-views. This research theme includes research questions addressing personality inventories or trait lists of moral characteristics (e.g., honesty, fairness), as well as self-stated moral motivations or moral ideals (e.g., do not harm) that participants can either explicitly claim as self-defining or



**Figure 2.** Indexed trends and regression coefficients for social psychology as a field and morality as a specialization, WoS, 1981-2017.  
Note. WoS = Web of Science.

implicitly (by examining implicit associations with the self or response times). In addition, we include questions addressing the stated willingness to display moral or immoral behavior (e.g., lie, cheat, help others, donate money or blood), which is also used to indicate the occurrence of moral justifications or moral disengagement to maintain a moral self-view.

## Bibliometric Procedures

### Temporal Trends and Impact Development

The data on relevant publications included in this review were linked to the bibliometric WoS database present at the Centre for Science and Technology Studies (CWTS) at Leiden University (Moed, De Bruin, & Van Leeuwen, 1995; Van Leeuwen, 2013; Waltman, Van Eck, Van Leeuwen, Visser, & Van Raan, 2011a, 2011b). At the time these analyses were prepared, the CWTS in-house database contained relevant indicators for records covering the period 1981 through 2017 (see Appendix 3, in Supplementary materials).

### Seminal Publications

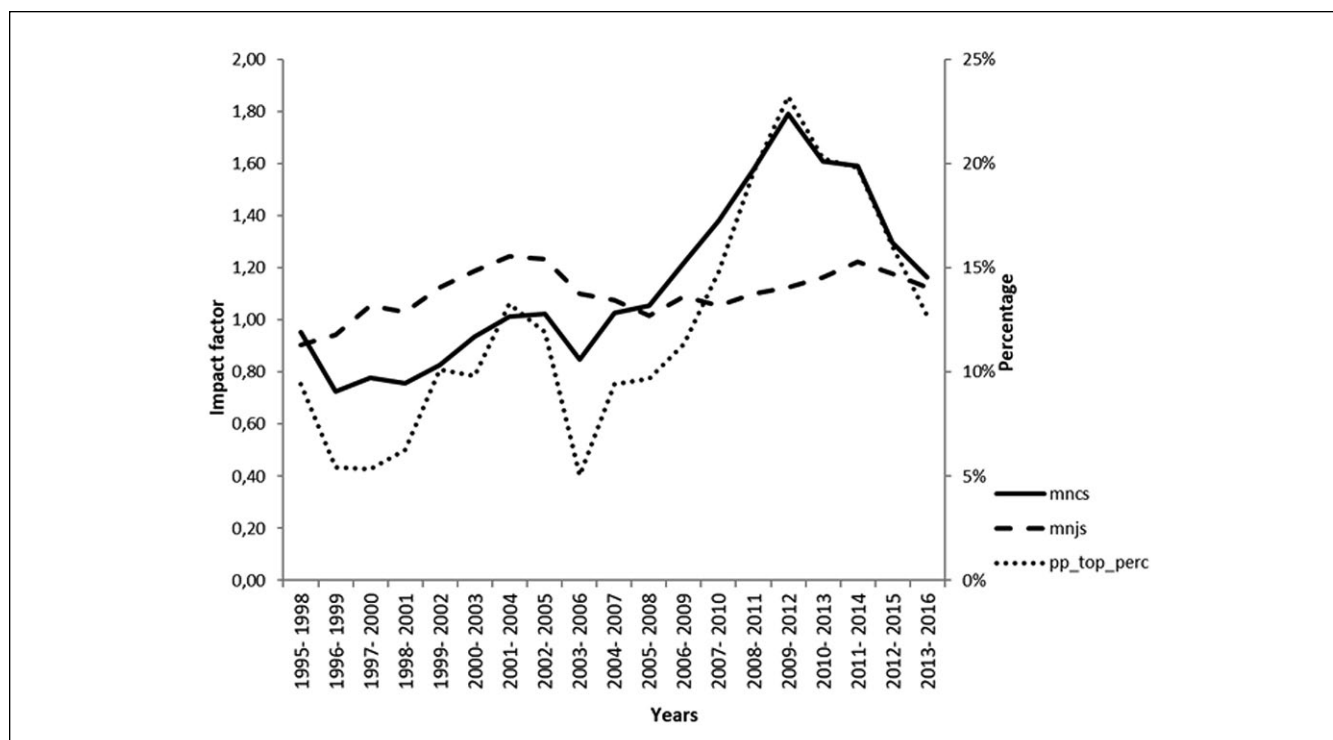
We identified two types of seminal publications. First, we assessed which (theoretical or empirical) publications *outside* our set (excluding methodological publications) are most frequently cited in the publications we examined. Second, we determined which of the empirical publications *within* our set have received an outstanding number of

citations, within the field of morality research, as well as in the wider environment (the general WoS database).

In both cases, the analysis of seminal papers was conducted in three steps. First, we detected publications that were highly cited within this set of studies on morality and recorded in which research theme they were located. Second, within each research theme, we focused on the top 25 most highly cited publications from outside the set and—reflecting the smaller number of publications to choose from—the top 10 most highly cited publications within the set of studies on morality. We then identified how many citations these had received in the publications included in this review to determine a top three of seminal papers *outside* this set and a top three of seminal papers *within* this set, for each of the five research themes represented. We also examined how frequently these seminal papers were cited in the wider context of the whole WoS database.

### Clusters of Approaches

We used VOSviewer as a tool (Van Eck & Waltman, 2010, 2014, 2018) for mapping and clustering (Waltman, Van Eck, & Noyons, 2010) to visualize the content structure in the descriptions of empirical research on morality that we selected for this review. The analysis determines co-occurrences of so-called noun phrase groups in the titles and abstracts of the publications included in the analysis. Because full records of titles and abstracts are only available for studies published from 1996 onward, this analysis could only be conducted for the set of studies published from 1996 through



**Figure 3.** Trends in impact scores in morality, WoS, 1981-2017, indicating the average normalized number of citations (excluding self-citations; mncs), the average normalized citation score of the journals in which these papers are published (mnjs), and the proportion of papers belonging to the top 10% in the field where they were published (pp\_top\_perc).

Note. WoS = Web of Science.

2017. Co-occurrences of noun phrase groups are indicated as clusters in a two-dimensional space where (a) closeness (vs. distance) between words indicates their relatedness, (b) larger font size of terms generally indicates a higher frequency of occurrence, and (c) shared color codes indicate stronger interrelations. We use these clusters to indicate the empirical approaches described in the titles and abstracts of studies included in this review and relate these to the different types of research questions we classified into five themes.

## Results

### Trends in Presence and Impact

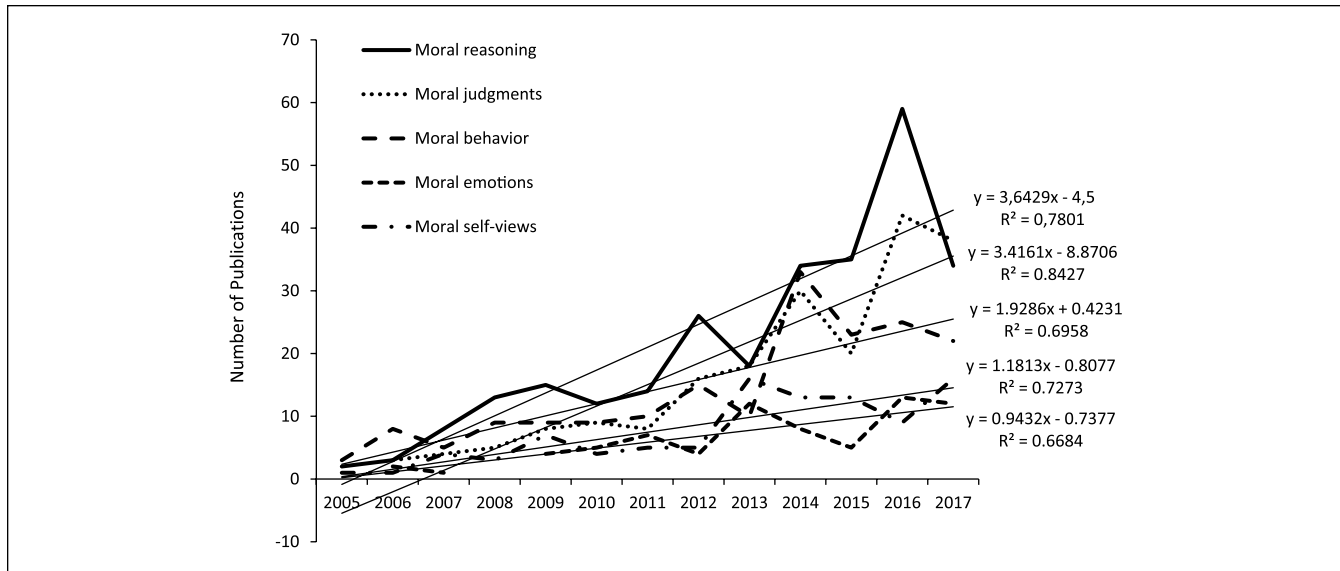
When we compare trends in publication rates over time, we see that in social psychology publications have increased from about 1,500 per year in 1981 to 4,000 per year since 2014. The absolute numbers in publications on morality included in our review are much lower: Here, we found 10 publications per year in 1981, increasing to over 100 per year since 2014. Thus, the absolute number of publications on morality research remains relatively small compared with the whole field of social psychology. Yet, in comparison, the increase is much steeper for publications on morality, when both trends are indexed relative to the number observed in 1981 (see Figure 2). The regression coefficient is

considerably larger for publications on morality (0.27) than for publications on social psychology (0.04). The  $R^2$  further indicates that a linear trend explains 85% of the overall increase observed in publications on social psychology, while the trend in studies on morality is less well captured with a linear equation ( $R^2 = .54$ ). Indeed, the increase in the number of publications on morality that were published from 2005 onward is much steeper than before, with a regression coefficient of 1.22 and an  $R^2$  for this linear trend of .9.

When we assess the *impact* of the studies on morality included in our review, we see the average impact of these publications, the journals in which they are published, and the percentage of top-cited publications going up consistently (see Figure 3). These field-normalized scores show that the impact of studies on morality is clearly above the average in the field, since 2005. At the same time, there is a steady decrease in the percentage of uncited papers, as well as the proportion of self-citations, and increasing collaboration between authors from different countries (see supplementary materials).

### Emerging Themes

When we distinguish between the types of research questions addressed, this reveals that across the board, there is a disproportionate interest in research questions relating to moral



**Figure 4.** Comparative trends in the development of research themes in morality research, 2005-2017.

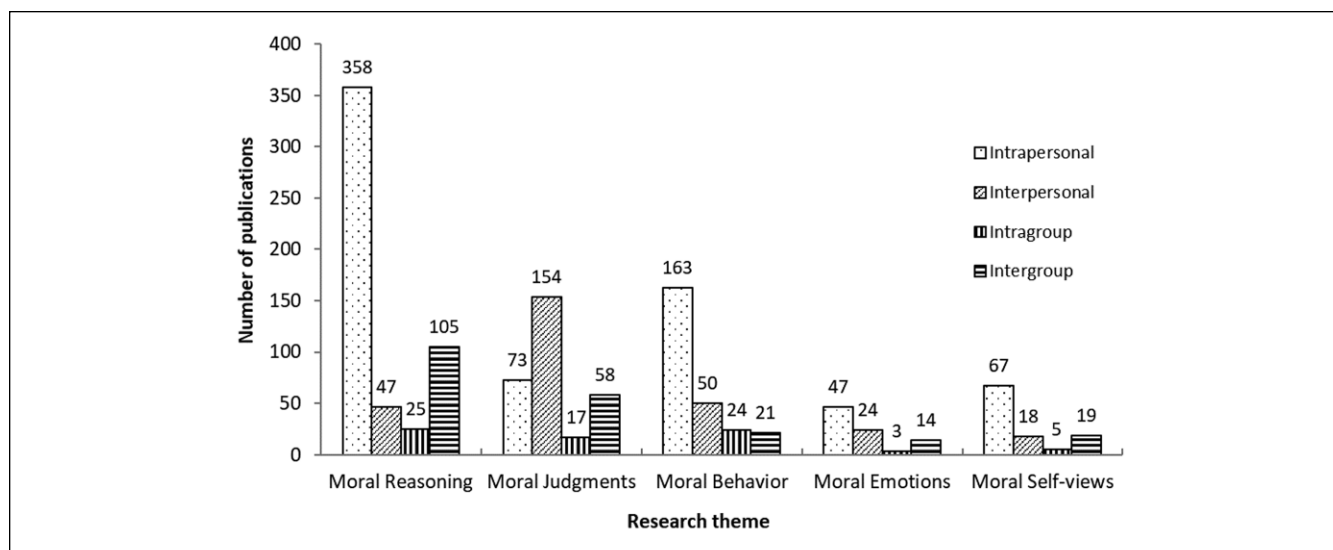
reasoning ( $\chi^2 = 502.19$ ,  $df = 4$ ,  $p < .001$ ). In fact this is the most frequently examined research theme throughout the period examined and has yielded between 35 and 60 publications per year during the past few years. Research questions relating to moral judgments were initially examined less frequently, but from 2013 onward with 30 to 40 publications per year this research theme approaches similar levels of research activity as moral reasoning. The steady stream of publications examining questions relating to moral behavior peaked around 2014 when more than 30 publications were devoted to this research theme, but subsequently this has dropped down to roughly 20 publications per year. Publications on research questions relating to moral emotions and moral self-views have increased during the past few years; however, these remain relatively less examined overall, with around 10 publications per year addressing each of these themes. When we compare how these themes developed since the interest of researchers in examining morality increased so rapidly after 2005, we clearly see these differential trends. During this period, the number of studies addressing moral reasoning increases more quickly than studies on moral judgments, as well as—in decreasing order—moral behavior, moral self-views, and moral emotions (see Figure 4).

### Mechanisms Examined

In a similar vein, we assessed trends visible in the intrapersonal, interpersonal, intragroup, and intergroup levels of mechanisms examined in the studies included in our review. Overall, the interest in these different types of mechanisms is not distributed evenly ( $\chi^2 = 688.43$ ,  $df = 3$ ,  $p < .001$ ). Most of the studies included in this review

have addressed *intrapersonal* mechanisms relating to morality, and the relative preference for examining mechanisms relevant to morality at the intrapersonal level has only increased during the past years. The number of studies since 2005 examining intragroup mechanisms show a steep linear trend that accounts for the majority of variance observed (regression coefficient: 6.35,  $R^2 = .78$ ). Although *interpersonal* mechanisms were initially less examined, the increased research interest in morality since 2005 is also visible in the number of studies that have addressed such mechanisms (regression coefficient: 3.09,  $R^2 = .85$ ). However across the board, the examination of *intragroup* mechanisms remains relatively rare in this literature, with less than 10 studies per year addressing such issues. Here, the regression coefficient is much lower (0.59) and matches the observed variance less well ( $R^2 = .64$ ). The examination of *intergroup* mechanisms is only slightly more popular; however, a linear trend (with a regression coefficient of 0.76) does not explain this trend very well ( $R^2 = .25$ ).

When we assess this per research theme (see Figure 5), we see that the strong emphasis on intrapersonal mechanisms that is visible across all research themes is less pronounced in research questions addressing moral judgments ( $\chi^2 = 249.48$ ,  $df = 12$ ,  $p < .001$ ). In research on moral judgments, the interest in interpersonal mechanisms is much larger. In fact this research theme accounts for the majority of the studies in our review that examine interpersonal mechanisms. The interest in intragroup mechanisms is very rare across the board. It is perhaps most clearly visible in research questions relating to moral behavior. The interest in intergroup mechanisms is relatively small, but more or less the same across the five research themes we examined.



**Figure 5.** Number of studies addressing mechanisms at different levels of analysis, specified per research theme, 1940 – 2017.

### Seminal Publications

In the seminal publications *outside* the set (see Table 2), one publication comes up as a top three seminal paper in more than one research theme. This is the publication by Haidt (2001) in which he develops his theory on moral intuition. Clearly, this publication has been highly influential in developing this area of research. It has also been extremely well cited in the WoS database more generally and can be seen as an important development that prompted the increased interest in research on morality during the past 10 to 15 years. However, besides this one paper, there is no overlap between the five research themes in the top three seminal publications that characterize them. This substantiates our reasoning that different clusters of research questions can be distinguished and underlines the validity of the criteria we used to classify the studies reviewed into these five themes.

Going through the five themes and their top three seminal papers additionally revealed that there are two *empirical* studies that have been highly influential in this literature. These are not included in our set because they were not published in a psychology journal and hence did not meet our inclusion criteria. In fact, part of the appeal in citing the fMRI study by Greene et al. (2001) in research on moral reasoning or the physical cleansing study by Zhong and Liljenquist (2006) in research on moral self-views may be that these were published in the extremely coveted journal *Science*—which is not a regular outlet for researchers in social psychology. Indeed, there has been some concern that these high visibility publications—and the media attention they attracted—have led multiple researchers to adopt this same methodology for further studies, perhaps hoping to achieve similar success (Bauman et al., 2014; Graham, 2014; Mooijman & Van Dijk, 2015). The drawback of this publication strategy is that this

may have led many researchers to continue examining different conditions affecting trolley dilemma and handwipe choices, instead of broadening their investigations to other issues relating to morality (Hofmann et al., 2014; Lovett et al., 2015).

In the research on *moral reasoning*, besides Haidt's (2001) theory on moral intuition and the fMRI study by Greene et al. (2001) discussed above, the third highly cited review paper addresses political ideologies. This publication by Jost, Glaser, Kruglanski, and Sulloway (2003) reports a meta-analysis examining how individual differences (e.g., authoritarianism, need for closure) correlate with conservative ideologies across 88 research samples in 12 countries. The relationship between moral reasoning and political ideologies is also an important topic in empirical work in this research theme. Indeed, the empirical publication that is most often cited in the WoS database (see Table 3) reports a series of studies that connects the primacy of different moral foundations (e.g., fairness, harm, authority) to liberal versus conservative political views of specific individuals (Graham, Haidt, & Nosek, 2009). The high visibility and impact of the work of John Haidt and his collaborators in research on moral reasoning are further evidenced by the other two empirical publications that come up as most highly cited in our review of this research theme. These report data used for the development and validation of the Moral Foundations Questionnaire (Graham et al., 2011) and research revealing cultural differences in the issues people consider moral and the way they respond to them (Haidt et al., 1993).

Research on *moral judgments* essentially examines the assignment of good versus bad intentions to others, for instance, based on their observed behaviors. An influential theoretical model guiding work in this area argues that people's perceived intentions and abilities form two key



**Table 2.** Top-three Seminal Papers for Each Research Theme, Published Outside the Set.

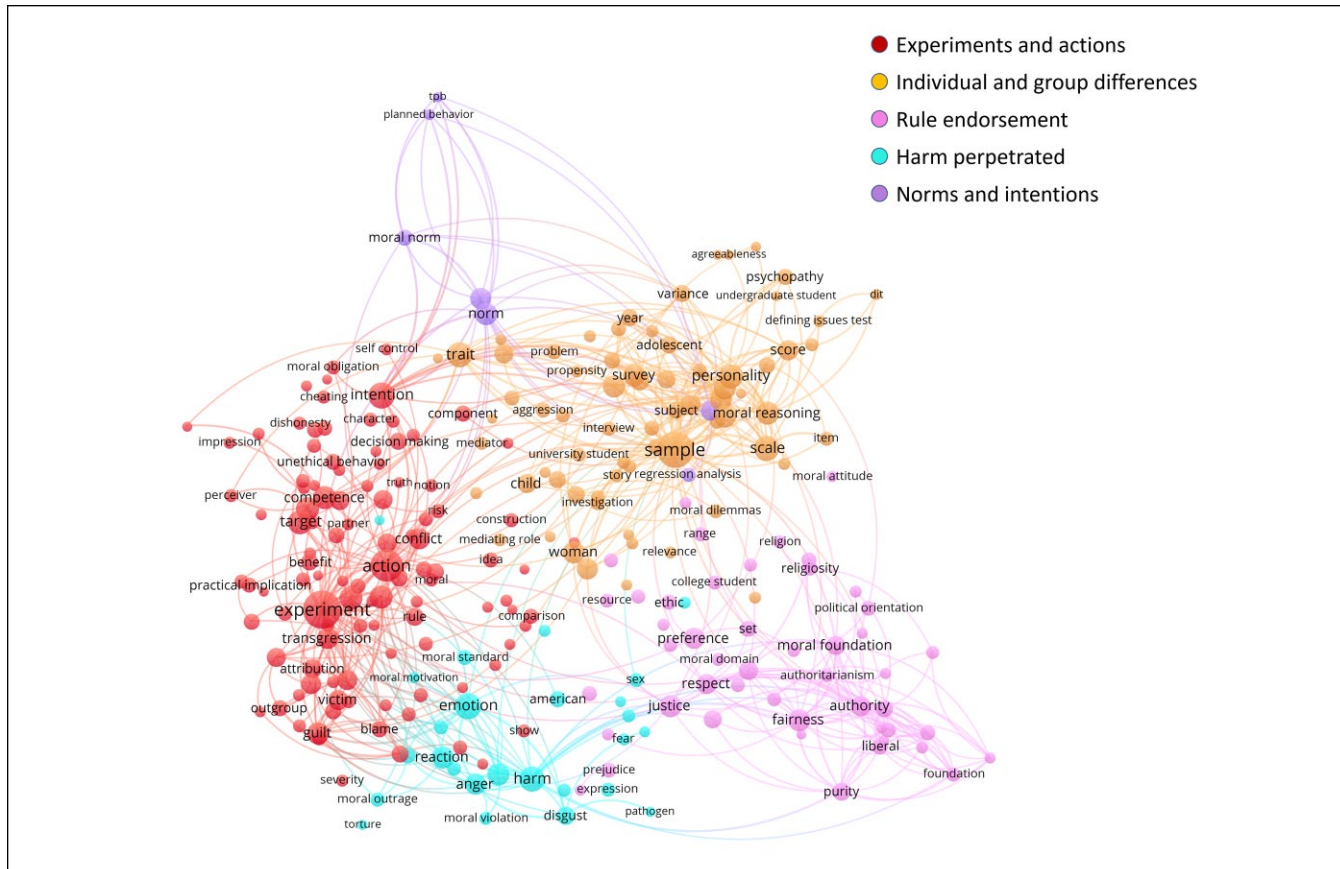
Rank in research theme	Number of citations in data set	Authors	Journal	Title	Publication year	Number of citations in WoS	mncs	mnjs
<b>Moral reasoning</b>								
1	59	Haidt, J.	<i>Psychological Review</i>	The emotional dog and its rational tail: A social intuitionist approach to moral judgment	2001	1994	52.59	10.37
2	36	Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J.	<i>Psychological Bulletin</i>	Political conservatism as motivated social cognition	2003	1238	34.77	9.55
3	35	Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D.	<i>Science</i>	An fMRI investigation of emotional engagement in moral judgment	2001	1360	32.18	13.44
<b>Moral judgments</b>								
1	41	Haidt, J.	<i>Psychological Review</i>	The emotional dog and its rational tail: A social intuitionist approach to moral judgment	2001	1994	52.59	10.37
2	29	Fiske, S. T., Cuddy, A. J. C., & Glick, P.	<i>Trends in Cognitive Sciences</i>	Universal dimensions of social cognition: Warmth and competence	2007	790	22.25	5.44
3	20	Gray, K., Young, L., Waytz, A.	<i>Psychological Inquiry</i>	Mind perception is the essence of morality	2012	154	10.97	4.95
<b>Moral behavior</b>								
1	29	Mazar, N., Amir, O., & Ariely, D.	<i>Journal of Marketing Research</i>	The dishonesty of honest people: A theory of self-concept maintenance	2008	543	23.69	2.16
2	24	Blasi, A.	<i>Psychological Bulletin</i>	Bridging moral cognition and moral action: A critical review of the literature	1980	594	24.15	7.41
3	17	Ajzen, I.	<i>Organizational Behavior and Human Decision Processes</i>	The theory of planned behavior	1991	14495	327.35	8.49
<b>Moral emotions</b>								
1	17	Tangney, J. P., Stuewig, J., & Mashek, D. J.	<i>Annual Review of Psychology</i>	Moral emotions and moral behavior	2007	605	21.51	13.71
2	16	Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F.	<i>Psychological Bulletin</i>	Guilt: An interpersonal approach	1994	631	20.55	10.69
3	14	Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H.	<i>Journal of Personality and Social Psychology</i>	Are shame, guilt and embarrassment distinct emotions?	1996	460	7.02	3.42
<b>Moral self-views</b>								
1	11	Zhong, C. B. & Liljenquist, K.	<i>Science</i>	Washing away your sins: Threatened morality and physical cleansing	2006	323	9.69	10.26
2	10	Haidt, J.	<i>Psychological Review</i>	The emotional dog and its rational tail: A social intuitionist approach to moral judgment	2001	1994	52.59	10.37

Note. The rank order within each theme is specified according to the number of citations within the data set examined, which not always corresponds to the total number of citations in WoS. We consider publications as seminal to research on morality when they attract at least 10 citations within the data set examined. As a result of this criterion, we only identified two external papers that were seminal to research on moral self-views. WoS = Web of Science.

**Table 3.** Top-three Seminal Papers, Published Within the Set, for Each Research Theme.

Rank in research theme	Number citations in data set	Authors	Journal	Title	Publication year	Number citations in WoS	mncs	mnjs
<b>Moral reasoning</b>								
1	129	Graham, J., Haidt, J., & Nosek, B. A.	<i>Journal of Personality and Social Psychology</i>	Liberals and conservatives rely on different sets of moral foundations	2009	671	32.03	3.11
2	51	Haidt, J., Koller, S. H., Dias, M. G.	<i>Journal of Personality and Social Psychology</i>	Affect, culture and morality, or is it wrong to eat your dog?	1993	447	11.54	3.76
3	95	Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H.	<i>Journal of Personality and Social Psychology</i>	Mapping the moral domain	2011	354	23.22	3.14
<b>Moral judgments</b>								
1	45	Schnall, S., Haidt, J., Clore, G. L., & Jordan, A. H.	<i>Personality and Social Psychology Bulletin</i>	Disgust as embodied moral judgment	2008	384	16.13	1.77
2	24	Reeder, G. D., & Spores, J. M.	<i>Journal of Personality and Social Psychology</i>	The attribution of morality	1983	109	2.51	2.52
3	31	Goodwin, J. P., Piazza, J., & Rozin, P.	<i>Journal of Personality and Social Psychology</i>	Moral character predominates in person perception and evaluation	2014	80	13.36	2.43
<b>Moral behavior</b>								
1	54	Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C.	<i>Journal of Personality and Social Psychology</i>	Mechanisms of moral disengagement in the exercise of moral agency	1996	527	11.62	3.63
2	30	Monin, B., & Miller, D. T.	<i>Journal of Personality and Social Psychology</i>	Moral credentials and the expression of prejudice	2001	294	5.98	3.24
3	20	Gino, F., Schweitzer, M. E., Mead, N. L., & Ariely, D.	<i>Organizational Behavior and Human Decision Processes</i>	Unable to resist temptation: How self-control depletion promotes unethical behavior	2011	161	12.24	1.98
<b>Moral emotions</b>								
1	52	Rozin, P., Lowery, L., Imada, S., & Haidt, J.	<i>Journal of Personality and Social Psychology</i>	The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity)	1999	484	11.19	3.52
2	17	Tybur, J. M., Lieberman, D., & Griskevicius, V.	<i>Journal of Personality and Social Psychology</i>	Microbes, mating, and morality: Individual differences in three functional domains of disgust	2009	225	10.29	3.11
3	26	Horberg, E. J., Oveis, C., Keltner, D., & Cohen, A. B.	<i>Journal of Personality and Social Psychology</i>	Disgust and the moralization of purity	2009	144	6.88	3.11
<b>Moral self-views</b>								
1	96	Aquino, K., & Reed, A.	<i>Journal of Personality and Social Psychology</i>	The self-importance of moral identity	2002	561	12.00	3.01
2	63	Leach, C. W., Ellemers, N., & Barreto, M.	<i>Journal of Personality and Social Psychology</i>	Group virtue: The importance of morality (vs. competence and sociability) in the positive evaluation of in-groups	2007	233	7.26	3.09
3	15	Ford, M. R., & Lowery, C. R.	<i>Journal of Personality and Social Psychology</i>	Gender differences in moral reasoning: A comparison of the use of justice and care orientations	1986	87	1.40	3.49

Note. The rank order within each theme is specified according to the total number of citations in WoS, which not always corresponds to the number of citations within the data set examined. WoS = Web of Science.



**Figure 6.** Publications on morality, 1996-2017.

Note. Clustering and interrelations based on content analysis of publication titles and abstracts.

dimensions in social impression formation (Fiske, Cuddy, & Glick, 2007). In addition, many researchers in this area have referred to the work of Gray et al. (2012, see Table 2) who consider the intentional perpetration of interpersonal harm—which requires the assignment of mental capacities to others—as a hallmark of human morality. Among the empirical studies examining these issues, the classic research by Reeder and Spores (1983), which examines how situational information affects the perceived morality of individual actors, has become a seminal publication. A more recent study highly cited within this research theme was conducted by G. P. Goodwin, Piazza, and Rozin (2014) on the primacy of morality in person perception (see Table 3). The influence of Haidt's (2001) seminal publication on moral intuition in this research theme is visible in a frequently cited study by Haidt and colleagues on the role of disgust as a form of embodied moral judgment (Schnall et al., 2008; see Table 3).

In *moral behavior*, the most highly cited theory papers emphasize the connection between conceptualizations of the moral self and displays of moral behavior. In addition to the classic review paper arguing for this connection (Blasi, 1980), many studies in this research theme refer to the different strategies people can use to maintain their self-concept of being a moral person, even if they are not immune to moral lapses

(Mazar et al., 2008). Seminal studies within this research theme reveal the implications of the connection between moral self-views and moral behaviors, which is in line with relations between research themes visualized in Figure 1. Accordingly, the most frequently cited publications reveal that even well-meaning individuals can display unethical behavior as their self-control becomes depleted (Gino, Schweitzer, Mead, & Ariely, 2011). In addition, research elucidates the different strategies people can use to disengage from their moral lapses (Bandura et al., 1996). The possible implications are demonstrated empirically, for instance, in work showing that people freely express prejudice once they have established their moral credentials (Monin & Miller, 2001).

In the research theme on *moral emotions*, the most highly cited theory papers focus on the experience of *guilt* and *shame* as relevant self-condemning emotions, indicating how people reflect upon and experience moral transgressions associated with the *self*. These exemplify the social implications of moral behavior and are generally considered uniquely diagnostic for human morality (Baumeister, Stillwell, & Heatherton, 1994; Tangney, Miller, Flicker, & Barlow, 1996; Tangney et al., 2007). However, the most highly cited empirical publications drawing from these theoretical perspectives all address *disgust* as a response, indicating that *other*

individuals or situational contexts are considered impure and should be avoided (Horberg, Oveis, Keltner, & Cohen, 2009; Rozin, Lowery, Imada, & Haidt, 1999; Tybur, Lieberman, & Griskevicius, 2009).

Finally, the studies on *moral self-views* comprise a relatively small and dispersed research theme, which is not characterized by a specific theoretical perspective. This is also exemplified by the fact that we only found two papers external to the set that met our criteria for being considered seminal. Researchers working on this theme most often cite the study of Zhong and Liljenquist (2006), suggesting that people engage in symbolically cleansing acts to alleviate threats to their moral self-image. In addition, the seminal paper by Haidt (2001) is frequently cited by publications in this research theme. Empirical publications on moral self-views that have attracted many citations also from outside the morality literature include a validation study of the moral identity scale (Aquino & Reed, 2002), a series of studies documenting the importance of morality for people's group-based identities (Leach, Ellemers, & Barreto, 2007), and a classic study on gender differences in moral self-views (Ford & Lowery, 1986).

### Clusters of Approaches

We examined the interrelations and clusters of research approaches in the studies reviewed, on the basis of titles and abstracts for 989 studies in our set, published in 1996 through 2017 (see Figure 6). The first cluster, containing 107 inter-related terms (indicated in red—*Experiments and actions*), contains studies examining a variety of actions and their consequences in experimental research. The second cluster contains 70 terms (indicated in orange—*Individual and group differences*) capturing studies on personality and individual differences as well as differences between social groups in correlational research. The third cluster connects 48 terms (indicated in pink—*Rule endorsement*) referring to studies on justice and fairness, authority, and moral foundations. The fourth cluster contains 26 terms (indicated in turquoise—*Harm perpetrated*) indicating responses to violation and harm. The fifth cluster contains seven terms (indicated in purple—*Norms and intentions*) referring to norms and deliberate intentions in planned behavior.

These clusters help us characterize the studies conducted within each of the research themes we distinguish in this review. We assess this by examining overlay “heat maps” indicating the density of studies within each research theme (ranging from low—blue to yellow—high) by projecting them on the clusters of research approaches outlined above (see supplementary materials).

The overlay map for research on *moral reasoning* connects clusters of research relating to individual and group differences (orange) and rule endorsement (pink). However, studies on moral reasoning have largely neglected to examine how such reasoning relates to actions in experimental contexts (red), harm perpetrated (turquoise), or norms and

intentions (purple). Studies on *moral judgments* by contrast mainly involve experiments and examine actions (red) as well as harm perpetrated (turquoise). However, research addressing questions on moral judgments has been less concerned about examining individual and group differences (orange), rule endorsement (pink), or norms and intentions (purple). Research on *moral behavior* has most frequently addressed norms and intentions (purple), and to a lesser extent experiments and actions (red) and individual and group differences (orange). Researchers in this area have not systematically examined rule endorsement (pink) or harm perpetrated (turquoise). The research on *moral emotions* is mostly carried out in relation to harm perpetrated (turquoise), which is examined in terms of experiments and actions (red), rather than individual and group differences (orange). Rule endorsement (pink) and norms and intentions (purple) are rarely taken into account. The research on *moral self-views* connects approaches addressing individual and group differences (orange), experiments and actions (red), and harm perpetrated (turquoise), but is less concerned with rule endorsement (pink) or norms and intentions (purple).

### Conclusions Emerging From Five Research Themes

The quantitative analyses reported above have allowed us to specify the overall characteristics of the studies included in our review, in terms of their most influential publications as well as most frequently used research approaches. We will now consider how the nature of the research questions addressed in the studies reviewed and the empirical approaches that were used affect current insights on the psychology of morality.

**Moral reasoning.** This is by far the most popular research theme in the empirical literature on morality, and this preference has only intensified over the years. Research based on Haidt and Graham's (2007) moral foundations theory has established that conservatives in the United States are more likely to show support for civil rights restrictions (Crowson & DeBacker, 2008), to have a prevention focus (Cornwell & Higgins, 2013), and to perceive moral clarity (Schlenker, Chambers, & Le, 2012) than liberals. This not only predicts their political voting behavior and candidate preferences (Skitka & Bauman, 2008) but also relates to more general tendencies in how individuals relate to others, as indicated by their social dominance orientation, authoritarianism (Federico, Weber, Ergun, & Hunt, 2013), or parenting styles (McAdams et al., 2008).

However, research on this theme also reveals how the moral principles people endorse relate to their life experiences, family roles, and position in society. For instance, exposure to war (Haskuka, Sunar, & Alp, 2008) or abusive/dysfunctional family relations (Caselles & Milner, 2000) impedes moral reasoning. More generally, many studies have shown that the moral judgments people make depend

on their age, gender (e.g., Kray & Haselhuhn, 2012; Skoe, Cumberland, Eisenberg, Hansen, & Perry, 2002), parental status, education, multicultural experiences (Lin, 2009), war experiences, family experiences, or religious status (Simpson, Piazza, & Rios, 2016).

While this work attests to the power and resilience of moral convictions, at the same time, there is an abundance of evidence that people are not very consistent in their moral reasoning. Indeed, it has clearly been demonstrated that moral reasoning also depends on the way a moral dilemma is framed or specific concerns that are (implicitly) primed. Such primes can make salient the monetary cost of their decisions (e.g., Irwin & Baron, 2001), the intentions and goals of the actors involved, the harm done as a result of their actions (Sabini & Monterosso, 2003), or specific events in history (Lv & Huang, 2012). But also more subtle and implicit cues can have far-reaching effects for moral reasoning. For instance, the moral acceptability of the same course of action differs depending on whether people are implicitly prompted to focus on their head (vs. their heart; Fetterman & Robinson, 2013), on cleanliness (Zhong, Strejcek, & Sivanathan, 2010), on approach versus avoidance (Broeders, Van Den Bos, Müller, & Ham, 2011; Janoff-Bulman, Sheikh, & Hepp, 2009; Moore, Stevens, & Conway, 2011), on the present versus the future, or on own learning versus the education of others (Tichy, Johnson, Johnson, & Roseth, 2010).

In sum, the accumulated research on moral reasoning has led to two types of conclusions. First, it has been extensively documented that different social roles and life experiences can have a long-term impact on the way people reason about morality and the moral principles they prioritize. Second, more immediate situational cues also affect moral reasoning and moral decisions. Both these conclusions from studies on moral reasoning complement philosophical analyses as well as evolutionary accounts emphasizing the objective survival value of adhering to specific principles or guidelines.

**Moral judgments.** Studies on moral judgments generally attest to the fact that information about morality weighs more heavily in determining overall impressions of others than diagnostic information pertaining to behavioral domains such as competence or sociability (e.g., S. Chen, Ybarra, & Kiefer, 2004). This is the case for evaluations of individuals, as well as for groups and organizations. Information about morality is seen as being more predictive of behavior in a range of situations (Pagliaro, Ellemers, & Barreto, 2011) and more likely to reflect on other members of the same group (Brambilla, 2012). However, people find it easy to accept lapses or shortcomings as indicating moral decline, while they require more evidence to be convinced of people's moral improvement (Klein & O'Brien, 2016). Furthermore, the relative importance people attach to specific features may differ, depending, for instance, on the cultural context (e.g., Chinese vs. Western) in which this is assessed (F. F. Chen, Jing, Lee, & Bai, 2016; X. Chen & Chiu, 2010).

Inferences about people's good intentions—presumably indicating their morality—are often derived from features indicating agreeableness and communality. Individuals are seen as moral when they can make agentic motives compatible with communal motives, for instance, by displaying self-control, honesty, reliability, other-orientedness, and dependability (Frimer, Walker, Lee, Riches, & Dunlop, 2012). Whether this is perceived to be the case also depends on situational cues such as the harm done to others (e.g., Guglielmo & Malle, 2010), the benefit to the self (Inbar, Pizarro, & Cushman, 2012), or the perceived intentionality of the behavior that has led to such outcomes (e.g., Greitemeyer & Weiner, 2008; Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002).

Other target characteristics (such as their social status or their national, religious, cultural, or sexual identity; e.g., Cramwinckel, van den Bos, van Dijk, & Schut, 2016), as well as contextual guidelines (e.g., instructing people to focus on the action vs. the person; duties vs. ideals; appearance vs. behavior of the target) may also color the way research participants interpret and value concrete information about specific targets (Heflick, Goldenberg, Cooper, & Puvia, 2011). Even unrelated contextual cues may have such effects, for instance, when information is presented on a black-and-white background (Zarkadi & Schnall, 2013) or when research participants are positively or negatively primed with a specific odor, mood induction, or room temperature (e.g., Schnall et al., 2008).

In addition, judgments of other individuals and groups also depend on the physical and psychological closeness of these targets to the *self* (e.g., Cramwinckel, van Dijk, Scheepers, & van den Bos, 2013; Haidt, Rosenberg, & Hom, 2003). Self-anchoring, self-distancing, and self-justifying effects can all be raised when moral judgments about others can be seen to reflect upon own social class or race, one's personal convictions, the salience of specific social roles (e.g., as a parent, Eibach, Libby, & Ehrlinger, 2009; as a subordinate, Bauman, Tost, & Ong, 2016), or any group memberships that is seen as self-defining (e.g., Iyer, Jetten, & Haslam, 2012). Related concerns can lead people to protect just-world beliefs (Gray & Wegner, 2010) by dehumanizing stigmatized targets (e.g., Cameron, Harris, & Payne, 2016; Riva, Brambilla, & Vaes, 2016), increasing their physical distance from them, pointing to moral failures they or other group members have displayed in the past, or referring to "natural" differences that justify differential treatment (e.g., Kteily, Hodson, & Bruneau, 2016).

In sum, even if people are strongly inclined to evaluate the moral stature of others they encounter, research in this area reveals that the morality of other individuals and groups is largely in the eye of the beholder. In general, people find it easier to acknowledge the moral questionability of specific behaviors, when these are perpetrated by an individual or group that is more distant from the self. Self-protective mechanisms can also lead people to reduce the moral

standing of victims of immoral behavior or alleviate the blame placed on perpetrators.

**Moral behavior.** Studies on moral behavior have often addressed the interplay between individual moral guidelines, on one hand, and social norms, on the other. This is examined, for instance, in studies on moral rebels and moral courage—those who stand up for their own principles (Sonnentag & McDaniel, 2013)—as well as moral entrepreneurs and people engaged in moral exporting—those who actively seek to convince others of their own moral principles (Peterson, Smith, Tannenbaum, & Shaw, 2009). Research shows that the *strength* of personal moral beliefs, attitudes, or convictions can make people resilient against social pressures (Brezina & Piquero, 2007; Hornsey, Majkut, Terry, & McKimmie, 2003; Langdridge, Sheeran, & Connolly, 2007). However, in domains where personal moral convictions are less strong, moral norms (indicated by team atmosphere or principled leadership) can also overrule individual concerns (e.g., Fernandez-Dols et al., 2010). At the same time, it has been documented that social pressures can tempt people either to behave less morally (e.g., M. A. Barnett, Sanborn, & Shane, 2005) or to display more group-serving (instead of selfish) behavior (e.g., Osswald, Greitemeyer, Fischer, & Frey, 2010), depending on what these norms prescribe (Ellemers, Pagliaro, Barreto, & Leach, 2008).

Research has also revealed that once their moral standing is affirmed, people more easily fall prey to “moral licensing” tendencies. This can even happen vicariously. For instance, it has been demonstrated that people are more likely to display prejudice and bias in hiring decisions after having seen that other members of their group have hired an ethnic minority applicant for a vacant position (Kouchaki, 2011). Yet, positive emotional states resulting from immoral behavior (such as “cheater’s high”; Ruedy, Moore, Gino, & Schweitzer, 2013, or “hubristic pride,” for example, Bureau, Vallerand, Ntoumanis, & Lafreniere, 2013) occur only rarely. Instead, most studies show that people find it aversive to realize they have behaved immorally and have documented different compensatory strategies that can be displayed (e.g., Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001). For instance, confronting people with moral lapses (of themselves and others) impairs the recall, cognitive salience, and perceived applicability of moral rules (“moral disengagement”; Bandura, 1999; Fiske, 2009). When caught in a moral transgression, people emphasize that this behavior does not reflect their true intention or identity (Conway & Peetz, 2012) or speculate that others are likely to do even worse (“moral hypocrisy”; Valdesolo & DeSteno, 2007; Valdesolo & DeSteno, 2008).

In sum, research on moral behavior demonstrates that people can be highly motivated to behave morally. Yet, personal convictions, social rules and normative pressures from others, or motivational lapses may all induce behavior that is not considered moral by others and invite self-justifying responses to maintain moral self-views.

**Moral emotions.** The intensity of emotional responses to the moral acts of the self and others has been shown to depend on the nature of the *situation* (importance of the moral dilemma, distance in time, resulting from action vs. inaction; Kedia & Hilton, 2011), as well as on specific characteristics of the victim or *target* of morally questionable acts (e.g., perceived vulnerability, physical proximity; Dijk, 2010). These include factors relating to the self (experience of pride; Camacho, Higgins, & Luger, 2003), to the social situation (social validation of action perpetrated), or to the victim of the transgression (dubious moral character; Jiang et al., 2011). All these situational characteristics may buffer people against the emotional costs of witnessing or perpetrating immoral acts.

Research has further examined the antecedents and implications of specific emotions. This has revealed that disgust can elicit (symbolic) cleansing behaviors (Gollwitzer & Melzer, 2012) and is raised in response to various health cues (e.g., relating to taste sensitivity—Skarlicki, Hoegg, Aquino, & Nadisic, 2013—sexuality, or pathogens). However, such disgust is not necessarily related to morality (Tybur et al., 2009). Other studies have addressed moral anger, which has been associated with the tendency to aggress against others (protest, Cronin, Reysen, & Branscombe, 2012; scapegoating and retribution, Rothschild, Landau, Molina, Branscombe, & Sullivan, 2013) or attempts to restore moral order (e.g., Pagano & Huo, 2007).

In this literature, guilt and/or shame emerge as self-reflective emotions that uniquely indicate the felt moral implications of actions perpetrated by the self (or others that imply the self, for example, ingroup members). Shame and guilt each have their specific properties and effects (e.g., Sheikh & Janoff-Bulman, 2010; Smith, Webster, Parrott, & Eyre, 2002). Shame is more clearly associated with the Behavioral Inhibition System, related to public exposure, blushing, and (in problem populations) anxiety and substance abuse. Guilt relates more clearly to the Behavioral Activation System and is related to private beliefs, empathy, and (in problem populations) religious activities. Nevertheless, both shame and guilt have been found to relate specifically to justice violations rather than other types of negative experiences (e.g., Agerström, Björklund, & Carlsson, 2012). Furthermore, the experience of guilt and/or shame is associated with endorsing victim compensation and support and reparation efforts (e.g., Pagano & Huo, 2007) but does not necessarily elicit other forms of prosocial behavior (e.g., De Hooge, Nelissen, Breugelmans, & Zeelenberg, 2011).

In sum, both the intensity and the nature of emotions reported indicate the extent to which people experience situations encountered by themselves and others as having moral implications and as requiring action to enact moral guidelines or redress past injustices. The secondary, uniquely human, and self-reflective emotions of guilt and shame appear to be particularly important in this process.

**Moral self-views.** In this literature, “concern for others,” derived from self-proclaimed levels of agreeableness or communion, are seen to indicate people’s moral character. Accordingly, much of the research on moral self-views has assessed self-proclaimed levels of honesty/humility or warmth/care (contained, for instance, in Lee and Ashton’s (2004) HEXACO-PI or Aquino and Reed’s (2002) “moral identity” scale). Individuals who combine a focus on agency and goal achievement with expressions of communion and care for others are seen as “moral exemplars” (e.g., Frimer, Walker, Dunlop, Lee, & Riches, 2011). When such moral behavior is displayed by others, this can also increase people’s confidence in their own ability to act morally (e.g., Aquino, McFerran, & Laven, 2011).

Different studies have established that self-reported character traits correlate with accounts of delinquency, unethical business decisions, or forgiveness provided by research participants (e.g., Cohen, Panter, Turan, Morse, & Kim, 2013). In addition, the moral self-views people report have been found to converge with actual behavioral displays (e.g., cheating vs. helping others) during experimental tasks in the lab (e.g., Stets & Carter, 2011). However, results from this research also suggest that people deliberately use such acts to communicate their good moral intentions, for instance, by donating money after lying (Mulder & Aquino, 2013) or demonstrating that they resist pressure from others to behave immorally (Carter, 2013).

Unfortunately, this tendency to self-present as being morally good can also prevent people from acknowledging their moral lapses. Indeed, after behaving in ways that violate moral standards (violence, delinquency, unethical decision making), people have been found to display a range of moral disengagement strategies. These include placing the event at a more distant point in time or describing it in more abstract terms (Lammers, 2012), rationalizing one’s behavior by invoking a more distant moral purpose (Aquino, Reed, Thau, & Freeman, 2007), or dehumanizing those who suffered from it (Monroe, 2008). In a similar vein, actions that call into question the moral integrity and standards of one’s ingroup have been found to invite negative attitudes (prejudice), emotions (outrage), and behaviors (intolerance) directed toward the outgroup (e.g., Täuber & Zomer, 2013).

In sum, this literature suggests that people reflect on their moral character and how they present this in their self-descriptions as well as in acts they can use to convey their moral intentions. However, the available evidence shows this may primarily lead them to preserve moral self-regard instead of making them improve or prevent morally questionable behaviors. Indeed, the focus on communality and concern for others as indicators of moral character may be too broad to provide sufficient guidance on how to act morally in specific situations.

## Discussion and Future Directions

The past years have witnessed a marked increase in the interest of (social) psychologists in “morality” as a topic for

empirical research. Our bibliometric analysis reveals the increasing maturity of this area of scientific inquiry, in terms of amount of research effort invested and relative impact. Yet, overviews that are still often cited are by now outdated in terms of the studies covered (Blasi, 1980, reviewing 71 studies) or have tended to focus on specific issues or research themes (e.g., Bauman et al., 2014).

## Observed Trends and Neglected Issues

Substantial knowledge has accumulated about the way people *think* about morality; however, we know much less about how this affects their moral *behavior*. We draw this conclusion based on the observation that by far most of the published studies in our review have addressed issues relating to moral reasoning—what people consider right and wrong ways to behave. Furthermore, many researchers have examined the judgments we make about the moral behaviors of *other* individuals and groups. Of course, these are important research themes in their own right. However, part of the interest of social psychological researchers in the topic of morality stems from the fact that moral reasoning and moral judgments of others are seen to inform the choices people make in their *own* moral behaviors, as is also visualized in Figure 1. Yet, we see that studies on moral reasoning and moral judgments have tended to focus on a limited number of specific research questions, methodologies, and approaches, which are not clearly connected to each other or to other research themes.

As a result, current insights on moral reasoning mostly pertain to relatively abstract principles (such as “fairness”) that people can subscribe to, as well as individual differences in which moral guidelines they endorse. The concrete implications of these general principles for specific situations remain less considered. Research on moral judgments complements this by addressing people’s situational experiences, for instance, resulting from concrete choices or behaviors displayed by others. However, these more specific judgments are not systematically traced back to the general moral principles that might inform them or the (dis)agreement that may exist about how to prioritize these.

Research on moral behavior and moral self-views has examined a broader range of issues and is less bound to specific research paradigms and approaches. Accordingly, researchers examining these topics have been more successful in connecting different clusters of research—validating the central role assigned to such research questions in Figure 1. Nevertheless, overall these integrative empirical approaches have received much less interest from researchers examining issues in morality and have remained relatively dispersed. In fact, we were unable to clearly identify a seminal theoretical approach that has guided research on moral self-views. We suspect this may be a side-effect of some highly visible research paradigms and successful measures that are cited and followed up by many researchers.

### Imbalance in Research Themes Addressed and Mechanisms Examined

A second conclusion relates to the choices researchers have made in directing their efforts to examine different issues relating to morality. Our classification of this body of research into distinct themes addressed and types of mechanisms examined has allowed us to quantify and characterize these choices. The comparison of studies carried out to address different *research themes* revealed that a large part of this literature is relatively limited in terms of the questions raised and the type of methodologies that are used. As a result, the concrete value of the detailed knowledge we have accumulated about moral reasoning and moral judgments as *antecedent conditions for moral behavior* unfortunately has remained hypothetical. That is, emerging insights into the way people *think* about morality and moral behavior have not systematically been followed through by assessing how broader guidelines and principles actually *inform* behavior, emotions, and self-views. Instead, these latter types of studies are relatively rare. Similarly, the literature reviewed here yields relatively little insight into the way behavior, emotions, and self-views feed *back* into the development of people's moral reasoning over time. Nor does this body of work systematically address how people's own experiences affect their judgments of others. These process-oriented and integrative questions constitute promising avenues for future research.

Our decision to classify published studies in terms of the *level of analysis* adopted has additionally revealed that the mechanisms examined (e.g., how the moral principles people subscribe to relate to the moral intentions they report) are mostly located at the intrapersonal level. In addition, there is a considerable body of research that examines interpersonal mechanisms in particular in studies examining how these relate to the impressions we form of others. However, much less research effort has been devoted to examining how people may come to share the same moral values or how members of different groups in society respond to each other's moral value endorsements. Yet, the studies that adopt such an approach have clearly established that *intragroup* mechanisms can and do play a role, also in the moral reasoning individuals develop. Furthermore, research has shown that individuals adapt the moral principles they prioritize, depending on group identities and salient concerns these prescribe. Bicultural individuals, for instance, have been found to shift between prioritizing autonomy or community concerns in their moral reasoning, depending on which of their cultural identities is more salient in the situation they encounter (Fu, Chiu, Morris, & Young, 2007).

Because studies taking this type of approach are so rare, our understanding of when and how people converge toward shared moral views, how they influence each other in adapting their moral convictions, and how social sanctions and rewards are used to make individuals adhere to shared moral norms has largely remained uncharted territory. Yet, these

latter types of questions are those that guide the public debate on morality—and are often cited as a source of inspiration by researchers in this area. Similarly, relatively few researchers have addressed *intergroup* mechanisms, even though their relevance—for instance, for moral reasoning—is revealed in work showing that group memberships define the “moral circles” in which people are afforded or denied deservingness of moral treatment (e.g., Olson, Cheung, Conway, Hutchison, & Hafer, 2011; see also Ellemers, 2017).

The relative neglect of intragroup and intergroup mechanisms in this literature is all the more striking because different theoretical approaches—that are frequently cited by researchers working on morality—emphasize that moral principles are considered so important because they indicate *shared* notions about “right” and “wrong” that regulate the behavior of individuals. Indeed, prominent approaches to morality commonly acknowledge that general moral principles such as the “golden rule” can be interpreted differently in different *contexts* or by groups of people who translate these into specific behavioral guidelines (e.g., Churchland, 2011; Giner-Sorolla, 2012; Greene, 2013; Haidt & Graham, 2007; Haidt & Ksebir, 2010; Harvey & Callan, 2014). This is also the key message of the seminal study on moral reasoning by Haidt et al. (1993). Such group-specific interpretations of the same universal values also help to explain why conflicts about moral issues are so stressful and difficult to resolve (see also Ellemers, 2017; Ellemers & Van der Toorn, 2015). Yet, researchers have only recently begun to examine these issues more systematically (e.g., Rom & Conway, 2018).

Thus, the imbalance observed in research themes addressed and levels of analysis at which relevant mechanisms have been examined reveal an important discrepancy between empirical research on morality and leading theoretical approaches that emphasize the importance of morality for *group* life and for individuals living together in *communities* (e.g., Gert, 1988; Janoff-Bulman & Carnes, 2013; Rai & Fiske, 2011; Tooby & Cosmides, 2010). As a result, we know a lot about intrapersonal and some about interpersonal considerations relating to morality, but have relatively little insight into the *social functions* of morality (see also Ellemers & Van den Bos, 2012) that also incorporate relevant mechanisms pertaining to intragroup dynamics and intergroup processes.

### Key Characteristics of Human Morality Remain Underexamined in Research

A third conclusion emerging from this review is that there is a disjoint between seminal theoretical approaches to human morality and empirical work that is carried out. Our identification of seminal publications revealed that the theoretical perspectives that we have used to derive key characteristics of human morality are also the ones that are frequently cited by researchers in this area. However, closer inspection of the research included in our review reveals



that the *studies* these researchers conducted do not systematically address or reflect the key features characterizing foundational theoretical approaches. This is visible in different ways.

To begin with, the notion that shared identities shape the development of specific moral guidelines, which in turn inform the behavioral regulation of individuals living in social groups, is a key feature identified by different approaches seeking to understand the psychology of morality. Yet, cluster analysis of the studies carried out to examine this reveals that empirical approaches tend to focus either on the identification of general principles and individuals who endorse them or on the impact of specific norms and how these affect the choices people make in concrete realities. However, they mostly do this while neglecting to examine how moral norms pertaining to specific behaviors can be traced to general moral principles. Yet, the ambiguity in translating abstract moral principles into specific behavioral guidelines is where the action is. This is what causes disagreement between individuals or groups endorsing diverging interpretations of the same moral rule. This ambiguity also provides the leeway for people to redeem their moral self after moral transgressions by selectively choosing which specific behaviors are diagnostic for their broader moral intentions and which are not.

Furthermore, the emotional burden of moral experiences and the impact this has on subsequent moral reasoning and moral judgments are strongly emphasized in different perspectives that are seen as influential in this literature (e.g., Blasi, 1980; Haidt, 2001). Notably, the emotions that are seen as distinctive for human morality (shame and guilt) refer to explicitly self-reflective states. The experience of these particular emotions helps people to identify the moral implications of their judgments and behaviors, and the anticipation of these emotions supports efforts to regulate their behavior accordingly. Here too there is a disjoint between what theoretical perspectives emphasize and what empirical studies examine. That is, across the board, moral emotions constitute the least frequently examined research theme. Furthermore, even the studies that do address moral emotions do not always tap into these uniquely human and self-reflective moral emotions. Instead, there seems to be a preference for research paradigms that focus on the emergence of disgust. While this allows researchers to use implicit measures to assess physical or symbolic distancing of the self from aversive situations, other studies have noted that the stimuli examined in this way may not necessarily have moral overtones. As a result, the added value of such work for understanding the emotional implications of moral situations or charting the role of emotions in the regulation of one's own moral behavior is limited.

Highly influential approaches that are very frequently cited in the studies reviewed (most notably, Blasi, 1980; Haidt, 2001) emphasize the importance of connecting "thoughts" and cognitions to "experiences" and actions.

Yet, we conclude that the clusters of research that emerge are located in a space where these emerge as opposite extremes. Most studies either address general principles, overall guidelines, or abstract preferences in rule endorsement or focus on concrete experiences and actions, without connecting the two. Furthermore, the role of moral emotions in relation to moral judgments, moral reasoning, moral behaviors, and moral self-views remains underexamined in this literature.

### *Reliance on Self-Reports Versus Observation of Self-Justifying Tendencies*

A fourth conclusion emerging from our review resonates with concerns expressed by Augusto Blasi, more than 35 years ago. That is, he noted that researchers examining moral cognition (including information, norms, attitudes, values, reasoning, and judgments) ultimately aim to understand the role that different elements play in creating moral action. At the same time, he concluded that the designs and measures used in the 71 studies he reviewed actually did not allow researchers to substantially advance their understanding of the issues they aimed to examine and accused them of "intellectual laziness" (p. 9) in failing to provide a clearly articulated theoretical rationale for relations examined.

In our review examining more than 1,000 empirical studies that were published since, we still see similar concerns emerging. In fact, there is a marked reliance on self-reports, explicit judgments or choices, and self-stated behavioral intentions, and we found very few examples of studies using implicit indicators of moral concerns or (psycho)physiological measures. This is unfortunate, in view of the far-reaching social implications of moral choices and moral behaviors, causing self-presentational concerns and defensive responses to guide the deliberate responses of research participants (see also Ellemers, 2017).

Furthermore, the empirical measures generally used largely rely on self-reports of *general* dispositions or *overall* preferences and intentions. This does not reflect current theoretical insights on the prevalence of defensive and self-justifying mechanisms in the way people think about the moral behaviors of themselves and others. It is also not in line with the results of empirical studies reviewed here, documenting how strategic self-presentation, biased judgments, and other self-defensive responses can be raised by various types of *situational* features that may be incidental and unrelated to the moral issue at hand. In light of the empirical evidence demonstrating various types of bias in each of the research themes examined, it is difficult to understand why so many researchers still rely on measures that capture individual differences or general tendencies and assume these have predictive value across situations.

Even though studies documenting factors that may induce biased judgments call into question the predictive value of standardized measures of morality, we do think it is

theoretically meaningful to establish these situational variations. The crucial implication of these findings is that seemingly unimportant or irrelevant situational features can have far-reaching implications for real-life moral decisions. This knowledge can be used to redesign relevant conditions, for instance, at work, to support employees who feel they need to blow the whistle (Keenan, 1995) or to help sales persons decide how to deal with customer interests (Kurland, 1995).

### *Recent Developments and Where to Go From Here*

We devote this final section of our review to promising avenues that researchers have started to pursue, which offer concrete examples of how to connect different strands of research and examine additional levels of analysis that may inspire future researchers. Even though we have criticized the lack of integration between the different research themes examined, some of the seminal studies in our review stand out in that they are also frequently cited in another theme than where they were classified. This is the case for the seminal study by Graham et al. (2009) on moral reasoning, the work of Bandura et al. (1996) on moral disengagement, and the work by Leach et al. (2007) on the importance of morality for group identities. This attests to the fact that at least some of the studies reviewed here have successfully connected different themes in research on morality.

This tendency seems to be followed up in some recent studies we found. For instance, several researchers have begun to investigate how general principles in moral reasoning relate to concrete behaviors in specific situations. These include studies revealing relations between the endorsement of abstract moral principles to donations people make to different causes (migrants, medical research, international aid; Nilsson, Erlandsson, Vastfjall, 2016). Similarly, endorsement of general moral principles or values has been related to specific behaviors in experimental games (trust game, thieves game; Clark, Swails, Pontinen, Boverman, Kriz, & Hendricks, 2017; Kistler, Thöni, & Welzel, 2017). This has yielded more insight into how abstract principles relate to specific behaviors and has demonstrated which principles are relevant in which situations. For instance, actions requiring the exercise of self-control were found to relate to “binding” moral foundations in particular (Mooijman, Meindl, et al., 2018).

Another promising avenue for future research is charted by researchers who have begun to address the role of emotions in guiding other responses relating to morality. This includes work demonstrating how individual differences in emotion regulation affect moral reasoning (Zhang, Kong, & Li, 2017). Furthermore, it has been shown that interventions that alter emotional responses can affect moral behaviors (e.g., Jackson, Gaertner, & Batson, 2016; see also Yip & Schweitzer, 2016). Others have shown that understanding the experience of guilt and shame in response to harm done

to others helps predict subsequent self-forgiving and self-punishing responses (Griffin, Moloney, Green, et al., 2016).

The overreliance on intrapersonal and interpersonal mechanisms in the study of morality has been noted before (see also Ellemers, 2017; Ellemers, Pagliaro, & Barreto, 2013). Recent research has begun to document a number of intragroup mechanisms that are relevant to increase our understanding of moral behavior. This includes work showing the reluctance of groups to include individuals in particular when their morality is called into question (Van der Lee, Ellemers, Scheepers, & Rutjens, 2017). Recent studies also document the ways in which shared social identities and group-specific moral norms may affect moral reasoning (Gao, Chen, & Li, 2016), affect moral behaviors, and overrule individual convictions as people seek to receive respect from other ingroup members (Bizumic, Kenny, Iyer, Tanuwira, & Huxey, 2017; Mooijman, Hoover, Lin, Ji, & Dehghani, 2018).

Depending on the nature of the group and the moral norms these endorse, this can have positive as well as negative implications (Pulfrey & Butera, 2016; Renger, Mommert, Renger, & Simon, 2016; Stoeber & Hotham, 2016; Stoeber & Yang, 2016). The relevance and everyday implications of these phenomena are also documented in studies examining the emergence of moral conformity on social media (Kelly, Ngo, Chituc, Huettel, & Sinnott-Armstrong, 2017) or the way international experiences and exposure to multiple moral norms in different foreign countries can elicit moral relativism (Lu, Quoidbach, Gino, Chakroff, Maddux, & Galinsky, 2017).

Furthermore, the overreliance on U.S. samples and political ideologies is now beginning to be complemented by studies examining how moral concerns may be similar or different in different cultural and political contexts (e.g., Nilson, & Strupp-Levitsky, 2016). Recent work has compared the moral foundations endorsed by Chinese versus U.S. samples (Kwan, 2016), has examined this among Muslims in Turkey (Yilmaz, Harma, & Bakçekapili, & Cesur, 2016), and has made other intercultural comparisons (Stankov & Lee, 2016a, 2016b; Sullivan, Stewart, Landau, Liu, Yang, & Diefendorf, 2016). This helps understand that some moral concerns emerge consistently across different cultural contexts, and the macro-level cultural values and corruption indicators that characterize them (Mann, Garcia-Rada, Hornuf, Tafurt, & Ariely, 2016). However, it has also revealed that different political systems (in Finland, Kivikangas, Lönnquist, & Ravaja, 2017), cultural values (in India, Clark, Bauman, Kamble, & Knowles, 2017), or relations between social groups (in Lebanon and Morocco, Obeid, Argo, & Ginges, 2017) may raise different moral concerns and behaviors than are commonly observed in the United States (see also Haidt et al., 1993).

### *The Paradox of Morality*

The increased interest of psychological researchers in issues relating to morality was prompted at least partly by societal

developments during the past years. These have raised questions from the general public and made available research funds to address issues relating to civic conduct, ethical leadership, and moral behavior in various professional contexts ranging from finance and sports, to community care and science. Therefore, we think it is relevant to consider how the body of evidence that is currently available speaks to these issues.

A recurring theme in this literature, which also explains some of the difficulties encountered by empirical researchers, relates to what we will refer to as the “paradox of morality.” That is, from all the research reviewed here, it is clear that most people have a strong desire to be moral and to appear moral in the eyes of (important) others. The paradox is that the sincere motivation to do what is considered “right” and the strong aversion to being considered morally deficient can make people untruthful and unreliable as they are reluctant to own up to moral lapses or attempt to compensate for them. Paradoxically too, those who care less about their moral identity may actually be more consistent in their behavior and more accurate in their self-reports as they are less bothered by appearing morally inadequate. As a result, all the research that reveals self-defensive responses when people are unable to live up to their own standards or those of others, or when they are reminded of their moral lapses, implies that there is limited value in relying on people’s self-stated moral principles or moral ideals to predict their real-life behaviors.

On an applied note, this *paradox of morality* also clarifies some of the difficulties of aiming for moral improvement by confronting people with their morally questionable behaviors. Such criticism undermines people’s moral self-views and likely raises guilt and shame. This in turn elicits self-defensive responses (justifications, victim blaming, moral disengagement) in particular among those who think of themselves as endorsing universal moral guidelines prescribing fairness and care. Furthermore, questioning people’s moral viewpoints easily raises moral outrage and aggression toward others who think differently. This is also visible in studies examining moral rebels and moral courage (those who stand up for their own principles) or moral entrepreneurship and moral exporting (those who actively seek to convince others of their own moral principles). While the behavior of such individuals would seem to deserve praise and admiration as exemplifying morality, it also involves going against other people’s convictions and challenging their values, which is not always welcomed by these others. All these responses stand in the way of behavioral improvement. Instead of focusing on people’s explicit moral choices to make them adapt their behavior, it may therefore be more effective to nudge them toward change by altering goal primes, situational features, or decision frames.

We have noted above that it would be misleading to think that morality can be captured as an individual difference that has predictive value across situations. Yet, this is

the conclusion that is often implicitly drawn and also informs many of the attempts to monitor and guard moral behavior in practice. For instance, in many businesses, the standard response to integrity incidents or moral transgressions is to sanction or expel specific individuals and to make newcomers pass assessment tests and take pledges. The research reviewed here suggests that attempts to guard moral behavior, for instance at work, may be more effective when these also take into account contextual features, for instance, by critically assessing organizational norms, team climates, or leadership behaviors that have allowed for such behavior to emerge.

The overreliance on intrapersonal analyses and individual moral judgments easily masks that individual moral standards are defined in relation to group norms. Whether individuals are considered to do what is “good” or “bad” depends on how their moral standards relate to what the group deems (in)appropriate. Indeed, we have seen that what is considered “immoral” behavior by some might be seen as morally adequate or even desirable by others. For instance, collective interests and limits to the circle of care may lead individuals to show loyalty to the moral guidelines of their own group while placing others outside their circle of care. Bolstering people’s sense of community and common identity or appealing to their altruism and empathy may therefore not necessarily resolve moral issues. Instead, this may just as well increase biased decision making or intensify intergroup conflicts on what is morally acceptable behavior. The current emphasis of many studies on individual differences and the focus on finding out how to suppress selfishness or how to avoid cheating may mask such group-level concerns.

## Conclusion

During the past years, many researchers have examined questions relating to the psychology of morality. Our main conclusion from the studies reviewed here is that these have yielded insights that are unbalanced, neglect some key features of human morality specified in influential theoretical perspectives, and are not well integrated. The current challenge for theory development and research in morality therefore is to consider the complexity and multifaceted nature of the psychological antecedents and implications of moral behavior and to *connect* different mechanisms—instead of studying them in isolation.

## Author Contributions

The division of tasks and responsibilities between the authors was as follows: N.E. designed the study; developed the coding scheme; coded and interpreted studies published from 2000 through 2017; supervised the further data collection, analyses, and preparation of tables and figures; and prepared text for the introduction, method, results, and discussion. J.V.d.T. designed the study, helped develop the coding scheme and

coded studies published from 2000 through 2017, and revised text for the introduction, method, results, and discussion. Y.P. collected and interpreted studies published from 2000 through 2013 and prepared the database emerging from the first wave of data collection for further coding and analysis. T.v.L. conducted the bibliometric analyses, prepared figures and statistics reporting these analyses, and prepared text describing the method and results of the bibliometric analyses.

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### Supplemental Material

Supplemental material is available online with this article.

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