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Moral tribalism and its discontents: How intuitive theories of ethics shape consumers' deference to experts

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Abstract

We study the psychology at the intersection of two social trends. First, as markets become increasingly specialized, consumers must increasingly defer to outside experts to decide among complex products. Second, people divide themselves increasingly into moral tribes, defining themselves in terms of shared values with their group and often seeing these values as being objectively right or wrong. We tested how and why these tribalistic tendencies affect consumers' willingness to defer to experts. We find that consumers are indeed tribalistic in which experts they find convincing, preferring products advocated by experts who share their moral values (Study 1), with this effect generalizing across product categories (books and electronics) and measures (purchase intentions, information-seeking, willingness-to-pay, product attitudes, and consequential choices). We also establish the mechanisms underlying these effects: because many consumers believe moral matters to be objective facts, experts who disagree with those values are seen as less competent and therefore less believable (Studies 2 and 3), with this effect strongest among consumers who are high in their belief in objective moral truth (Study 4). Overall, these studies seek not only to establish dynamics of tribalistic deference to experts but also to identify which consumers are more or less likely to fall prey to these tribalistic tendencies.

KEYWORDS
expert choice, moral psychology, social evaluation, tribalism

1 | INTRODUCTION

If your dentist defended the Iraq War, would you let her near your teeth? If your stylist refused to recycle, would you believe him on the latest hair trends? One of us once bought a complex financial product from a service provider we will call Ted. Your author became increasingly alarmed as he received annual Christmas letters from Ted, hinting at a variety of ideological positions at odds with your author's. On subsequent visits to Ted's office, further clues were observed—newspaper clippings and annoying little slogans on the bulletin board.

Increasingly, Ted's expertise was thrown into doubt as minor snafus proliferated and questionable advice proffered. Your author's horror was mixed with vindication when a serious error, years into this relationship, nearly led to a large financial exposure.

This paper looks at how and why alignment in moral values influences our evaluations of experts. This issue has become increasingly important, lying at the confluence of two social–economic trends. First, society increasingly functions through a *division of cognitive labor* (Hayek, 1945; Keil, Stein, Webb, Billings, & Rozenblit, 2008; Kitcher, 1990; Sloman & Fernbach, 2017), with knowledge distributed

widely across individuals. Knowledge about cars, annuities, and teeth is clustered in mechanics, bankers, and dentists; because most consumers have limited expertise in these areas, they pay these experts for their knowledge. Likewise, consumers often are unable to evaluate a product—a movie or a kitchen gadget—before they have bought it, relying on expert product reviewers to inform their choices. Adam Smith (1776) noted that "the division of labour is limited by the extent of the market," with jobs being divided up into smaller and smaller pieces as more and more people are available to do them, resulting in increased economic efficiency. Globalization and technology have kicked this process into overdrive so that consumers seek outside expertise increasingly where they might once have developed internal expertise. One industry survey, for example, claims that only 42% of US motorists have full confidence in their ability to change a flat tire and only 26% in their ability to change their car's oil (Spector, 2016). Such reliance on outside service providers would be unthinkable mere decades ago. Increasingly, knowledge workers devote their cognitive resources to their own specialized areas of expertise, relying on experts to fill the gaps.

Second, they have entered an era of moral tribalism unprecedented in modern memory. People prefer to live near and befriend others with similar values, resulting in dramatic moral sorting by geography and occupation (Bonica, 2014; Pew Research Center, 2014). Of course, moral tribalism is not new. Ever-observant Adam Smith spotted this trend too, noting in his *Theory of Moral Sentiments* (1759) that "nothing pleases us more than to observe in other men a fellow-feeling with all the emotions of our own breast; nor are we ever so much shocked as by the appearance of the contrary." But moral tribalism seems to be accelerating. People increasingly express displeasure at the thought of relatives marrying members of the opposite political party: Thanksgiving dinners in 2016 were nearly 1 h shorter when they included guests from opposite-party precincts (Chen & Rohla, 2018). Moral tribes define a dominant divide in our culture (Chua, 2018; Goldberg, 2018; Greene, 2013; Haidt, 2012).

These two phenomena are fundamental to society, growing in power, and—we suggest—on a collision course. In this article, we map the psychological mechanisms by which tribalism over moral issues leaks into consumers' choices of experts. Our analysis depends on a fundamental distinction in consumers' intuitive morality. On the one hand, people differ in their specific *moral values* (Haidt, 2012; Kahan, Braman, Cohen, Gastil, & Slovic, 2010). We will argue that consumers prefer experts who agree with them on moral matters, and this deference is due to the perception that experts in the consumer's moral out-group are less competent. But at the same time, people also differ in their broader *meta-ethical* views (Goodwin & Darley, 2008)—their intuitive theories about how morality works. Some people believe that moral truths are *objective* (like science or mathematics), whereas others believe they are *subjective* (like aesthetics). We contend that this latter group of subjectivists—the titular "discontents" of tribalism—should be less prone to use their own moral values to evaluate experts: if one cannot be right or wrong on issues of morality, then differences in moral opinion should not signal broader incompetence.

2 | THE PARADOX OF EXPERTISE

Consumers face an increasingly wide array of complex, specialized, and novel products. Although consumers can sometimes develop internal expertise (Alba & Hutchinson, 1987), they must frequently defer to external experts to evaluate such products (Kiel & Layton, 1981; Naylor, Lamberton, & Norton, 2011; Solomon, 1986; White, 2005). Customers rely on expert opinions for a variety of products, including books (Chevalier & Mayzlin, 2006), movies (Basuroy, Chatterjee, & Ravid, 2003), hospitals (Pope, 2009), automotive products (Simonsohn, 2011), and technological controversies (Brossard & Nisbet, 2007).

But expertise poses a paradox. Knowledge is widely distributed across clusters of experts (Hayek, 1945; Sloman & Fernbach, 2017) who often disagree. How do we decide which expert deserves our deference? Consumers can try to evaluate the quality of the expert's advice on its own terms (Chaiken, 1980). Yet the same limits on our knowledge that lead us to consult experts, paradoxically, make it difficult to know which experts to believe (Gershoff, Broniarczyk, & West, 2001; Goldman, 2001).

How do consumers nevertheless evaluate experts despite this ignorance? Researchers distinguish between two dimensions of trust (Siegrist, Cvetkovich, & Roth, 2000; Siegrist, Earle, & Gutscher, 2003; Sperber et al., 2010; Twyman, Harvey, & Harries, 2008; see also Fiske, Cuddy, & Glick, 2007 and Goodwin, Piazza, & Rozin, 2014). First, experts vary in *perceived competence* or *epistemic trustworthiness*—the quality of their judgment. Critical consensus is far from universal in cultural domains from restaurants to television to wine. Expert stock analysts often clash in their predictions and recommendations, fueling endless debates on networks such as CNBC. Even aggregated user reviews often differ from more objective measures of quality (De Langhe, Fernbach, & Lichtenstein, 2016). When opinion varies so wildly, how can one decide which expert has the best judgment?

Second, experts differ in *perceived truthfulness* or *moral trustworthiness*—the absence of ulterior motives and willingness to express their true view. Experts, by definition, know more than consumers do about the relevant field, producing an information asymmetry (Akerlof, 1970). In the financial domain, trust is among the strongest determinants of financial advice seeking (Lachance & Tang, 2012). In the consumer goods domain, consumers may be becoming increasingly wary of user reviews, given cases in which reviews are manipulated by companies to enhance perceived product quality (Hu, Bose, Koh, & Liu, 2012). In a world with both honest and deceptive experts, how can one decide whom to trust?

These evaluations of competence and truthfulness themselves are made by using heuristics (Bonaccio & Dalal, 2006), such as the reliability of past advice (Gershoff, Mukherjee, & Mukhopadhyay, 2003; Yaniv & Kleinberger, 2000). When reputational cues are unavailable, consumers use heuristics such as the expert's confidence (Price & Stone, 2004), knowledgeability (Sternthal, Phillips, & Dholakia, 1978), consensus with other experts (Budescu, Rantilla, Yu, & Karelitz, 2003), and personal factors (e.g., education and life experience; Feng & MacGeorge, 2006). These heuristics often work because they are based

on a sound underlying principle: an expert who is accurate in one instance is likely to be accurate in other instances too. Thus, even if a consumer cannot judge the expert's accuracy on one occasion, these heuristics help a consumer to infer the expert's broader competence. We argue below that consumers who believe in objective morality would likewise perceive an expert with "correct" moral values to be more accurate.

3 | MORAL TRUTH AND TRIBALISM

Cooperation is essential to survival (Tomasello & Vaish, 2013) but creates the risk of exploitation. For this reason, humans have a set of biologically and culturally evolved mechanisms for assessing whom are likely to cooperate versus defect (Boyd & Richerson, 2009; Rand & Nowak, 2013). Chief among these are evaluations of moral reputation (Fehr & Fischbacher, 2003; Uhlmann, Pizarro, & Diermeier, 2015).

Some moral values are essentially universal. For example, harm and fairness are prized across many cultures and political orientations (Graham et al., 2011; Haidt, 2012), but other moral values are more contested, particularly those concerning the organization of society. In our studies, we focused especially on *egalitarianism–hierarchy* (should a social order be flexible and equal vs. rigid and stratified?) and *communitarianism–individualism* (should the group vs. the individual be the unit of moral analysis?). These dimensions appear to be more fundamental than partisanship (Douglas, 1970; Wildavsky & Dake, 1990). In the United States, for example, Republicans are stereotypically individualist/hierarchist, and Democrats communitarian/egalitarian, but other combinations are observed in other countries' politics. These higher order values are contested because they invoke trade-offs among other values (Berlin, 1969). For instance, a more egalitarian society may satisfy our appetite for fairness but not authority; a more individualist society may be fairer, in treating all individuals alike, but harm those who are less well-off. Social harmony, such as it is, is maintained in the face of this disagreement in part by separating ourselves into groups that share these values.

This is a recipe for tribalism. Because one expects to be able to cooperate with in-group members (Balliet, Wu, & De Dreu, 2014), we believe in the moral superiority of our in-group and inferiority of our out-group (Leach, Ellemers, & Barreto, 2007; Parker & Janoff-Bulman, 2013). Indeed, apostasy—disavowal of one's own tribe's values—is intensely taboo because it not only signals uncooperativeness but also betrays the group's shared identity. Moral beliefs act both as norms that coordinate activity within a group and as markers that distinguish one group from another (Haidt, 2012).

Given the dynamics of moral reputation and use of moral values to mark group identity, we expect shared values with a communicator to signal credibility. Specifically, we predicted:

H1. Consumers defer to an expert to the extent that they share the expert's moral values.

This basic phenomenon is tested in Study 1 using two distinct product categories—books (Study 1A) and consumer electronics (Study 1B).

This prediction gains some plausibility from two related studies. Kahan et al. (2010) found that people are likelier to defer to experts on controversial scientific issues (e.g., mandatory human papillomavirus [HPV] vaccination) when those experts share one's moral values. Kahan et al. (2010) argue that experts' values are a cue to the social acceptability of a viewpoint relative to one's cultural group and that this drives political polarization in science. This can be rational because citizens have little incentive to hold the correct beliefs about political issues (as individual citizens have little influence over policy) but a strong incentive to act in accordance with norms held by one's group (Ajzen, 1991; see also Caplan, 2006). However, if this explanation is correct, these results would be unlikely to generalize to consumption behavior, where the consumer *does* bear the consequences of holding true or false beliefs. Aggravating this problem, Kahan et al. (2010) studied the relationship only between expert values and beliefs about other value-laden topics (such as public policy) rather than topics unrelated to morality.

Recently, Marks, Copland, Loh, Sunstein, and Sharto (2019) documented "epistemic spillovers" such that agreeing with a person about one domain (political facts) interferes with the ability to assess that person's skill in unrelated domains (shape categorization) because political agreement is seen to signal competence. Although it may be problematic to generalize from artificial shape categorization tasks to consumer's decision making, the greater limitation in extrapolating from Marks et al. (2019) is their operationalization of political agreement: agreement over *factual* political issues (e.g., the effects of decreasing the voting age) as opposed to *moral* issues. Disagreement over values, unlike disagreement over facts, may not trigger perceptions of incompetence. Thus, though suggestive, this study does not test H1.

Nonetheless, on the basis of research in moral psychology, we expected that shared moral values with an expert *would* continue to drive deference among a subset of people. This is because some people believe that moral values can be objectively right or wrong (Goodwin & Darley, 2008).

Individuals differ not only in their moral values themselves but also in their meta-ethical intuitions about how morality works. Indeed, moral philosophers themselves have differed over whether morality is *objective*—whether there are moral facts, in the sense that there are mathematical or scientific facts. On this view, some acts violate moral laws and are objectively immoral. Variants of moral objectivism have been argued by many historical and contemporary philosophers (Kant, 2012/1785; Nagel, 1986). Other philosophers (Harman, 1975; Nietzsche, 2013/1887) have viewed morality as subjective, like one's preference for gelato flavors or painting styles. Although some acts might be better for maximizing individual happiness or social welfare, there would be no moral facts that obligate people to take such acts.

Given disagreement among philosophers, it may be unsurprising that ordinary people also differ in their meta-ethical intuitions. Like philosophers, however, most laypeople lean toward objectivism. For

example, participants in one study (Goodwin & Darley, 2008) viewed morality as much more objective than preferences (e.g., about music) but less objective than straightforward facts (e.g., the size of Mars). Because moral values are socially central as well as objective in the eyes of many, someone who disagrees with one's values would be seen as wrong, not on just any objective matter, but on an objective matter of fundamental importance. We therefore hypothesized that most people would view moral disagreement as a signal of incompetence. If an expert is wrong about something as important as morality, what else are they wrong about? Thus, Studies 2 and 3 test

H2. The link between shared moral values and expert deference is mediated by perceptions of the expert's competence.

This prediction distinguishes our model of value-based deference from that of Kahan et al. (2010), who theorize that we defer to experts sharing our worldview because they communicate the norms dominant in our social group. This can influence whom we trust irrespective of the expert's reliability. Although this mechanism may also be at play, we argue that value-based deference in our paradigm arises mainly from processes aimed at inferring competence.

Yet people differ in the extent of their moral objectivism. People are less objectivist when there is a lack of consensus over a value (Goodwin & Darley, 2012) or when considering individuals from very different cultures (Sarkissian, Park, Tien, Wright, & Knobe, 2011) and more objectivist in competitive social interactions (Fisher, Knobe, Strickland, & Keil, 2017). People also differ dispositionally in moral objectivism; people who ground their moral systems in religion or self-identity are likelier to be objectivists (Goodwin & Darley, 2008). Given that H2 is based on the assumption that consumers tend to be moral objectivists, individual differences in this trait should influence the magnitude of this effect. Specifically, those higher in objectivism should place greater weight on shared values when assessing expert competence. Therefore, Study 4 tests

H3. The role of perceived competence in mediating between shared moral values and expert deference is moderated by individual differences in moral objectivism.

However, there are several other reasons why people might defer to morally similar experts. As we noted earlier, expert deference is determined by perceptions of both perceived competence (the quality of the expert's opinion) and truthfulness (the honesty of the expert's opinion). Moral similarity could influence perceived truthfulness if values signal in-group membership (Balliet et al., 2014) or moral character (Uhlmann et al., 2015). Although we are mainly interested in competence here, it is plausible that truthfulness might also contribute, and thus, these mechanisms need to be distinguished empirically. We do so in Studies 2 and 3.

In addition, similarity more broadly influences compliance. People are likelier to comply with requesters who are similar in musical taste (Woodside & Davenport, 1974), clothing (Emswiller, Deaux, & Willits, 1971), personality (Burger, Soroka, Gonzago, Murphy, &

Somerville, 2001), height (Evans, 1963), birthday (Jiang, Hoegg, Dahl, & Chattopadhyay, 2010), or even fingerprints (Burger, Messian, Patel, del Prado, & Anderson, 2004). Three mechanisms mediate between similarity and compliance. First, we feel we understand the mental states of similar others, which create a feeling of certainty about information they provide (Faraji-Rad, Samuelsen, & Warlop, 2015). Second, we believe others are likely to have similar preferences, making their input more relevant in matters of taste (Hovland, Janis, & Kelley, 1953; Price, Feick, & Higie, 1989). Third, we comply with similar others to satisfy a need to connect (Jiang et al., 2010), because we like and identify with similar others (Byrne, 1969; Kelman, 1961; Smeaton, Byrne, & Murnen, 1989).

There is little direct work on the persuasive role of similar moral values (except Kahan et al., 2010). But shared values could plausibly signal several other kinds of similarity that could in turn trigger these mechanisms. For example, morally similar others could have similar personalities, leading us to more readily imagine their mental states; morally similar others could have similar preferences, making their opinions more diagnostic; and morally similar others could have similar social circles, triggering a desire to connect with them. Study 4 measures these other aspects of similarity and competes them against perceived competence as mediators, to address these alternative explanations.

Overall, we anticipated that we would find a consistent link between an expert's shared values with a consumer and that consumer's tendency to defer to the expert. Across four studies, we test our proposed mechanism—moral objectivism creates a link between shared values and perceived expert competence—and pit this mechanism against several competitors. In the supporting information, we report four additional studies replicating key results under differing conditions.

4 | STUDY 1: TRIBALISTIC DEFERENCE

Study 1 tests the basic relationship between shared values and expert deference. Adapting the method of Kahan et al. (2010), these studies introduced participants to two experts who differed in one value (egalitarianism) but not a second value (communitarianism), as normed in a pretest (Appendix S1 in the supporting information). Because egalitarianism and communitarianism are perceived as moderately correlated, we always adjust for both traits in our regression models to test for effects of one value over and above the other.

Participants read a series of product reviews by each expert who disagreed on some of the products. When the experts disagreed, we anticipated that participants would rely on the overlap in their moral values to determine which expert to trust, affecting purchase intentions and their interest in seeking information about that product.

We used two types of products—fiction books (Study 1A) and consumer electronics (Study 1B). These categories have distinct pros and cons, leading us to look for common patterns across categories. Fiction books are ecologically realistic because people

widely rely on reviewers to determine which cultural products to consume. However, such products may be especially likely to be polarized if people consume such products in part for social signaling (Berger & Heath, 2007). Electronics tend not to have strong signaling value, thereby avoiding this issue.

4.1 | Methods

All sample sizes were set a priori. For Studies 1A and 1B, we targeted $N = 200$, achieving 90% power for small to medium effects ($r > 0.22$). For Studies 2–4, we targeted a larger sample size ($N = 400$) to achieve sufficient power to test our mediation and moderation hypotheses. For all studies, we report all measures, conditions, and exclusions.

Except as indicated, participants in all studies were from the United States and were recruited using Amazon Mechanical Turk. Although Mechanical Turk workers are more diverse than traditional undergraduate samples, they do not fully reflect US demographics, as Mechanical Turk workers tend to be younger, more educated, and more politically liberal than the general public. For Study 1, we recruited 398 participants ($M_{age} = 36.1$, 63% female; $n = 198$ and 200 for Studies 1A and 1B). Participants were excluded ($n = 46$) if they failed an attention check (see below).

In Study 1A, participants read about two book critics. These experts were similar in expertise but differed in values. One expert espoused *egalitarian* values:

> Tim Harrison is a San Francisco-based columnist who also writes book reviews on the side. Tim studied English Literature at the University of California-Berkeley and writes for *The San Francisco Chronicle* and has also been published in the *New York Times.* He is the author of *Three Social Evils: Sexism, Racism, and Homophobia.* Tim spends time in community service activities, enjoys traveling, and coaches his son's youth basketball team.

The other expert espoused *hierarchist* values:

> John Minerd is a Dallas-based columnist who also writes book reviews. John studied communications at Texas A&M University and has been published in *The Wall Street Journal* as well as several other outlets. He is the author of *The Crisis of Authority: The Assault on Traditional Values in America.* John is an avid hunter, enjoys fine wine, and plays golf regularly.

A photo was provided for each expert, normed by Kahan et al. (2010) as signaling egalitarian or hierarchical values. Following Kahan et al. (2010), both experts were White males, to avoid possible interactions with the expert's race or gender. The experts

were introduced in a counterbalanced order. On the same page as each expert, participants answered a series of factual multiple-choice check questions (e.g., "What city is Tim based out of?") to verify comprehension. These questions did not ask about the columnists' values. Participants answering more than 30% of these questions incorrectly were excluded from analysis.

Next, participants read reviews of 14 books. For each book, the cover was shown, along with the title, author, and brief synopsis. Below, each critic provided a rating from 1 to 4 stars and a brief review (based on real reviews from lithub.com), roughly equated for length. The first two books were respectively reviewed positively and negatively by both critics. The critics' reviews differed for the other 12 books (presented in a random order), with the egalitarian critic positive and the hierarchist critic negative for half of the books, and the converse pairing for the other half (counterbalanced). Due to an error in the study materials, two items were removed from analysis, but the results are similar if these items are included. The order of the two reviews was always the same (egalitarian or hierarchist critic first), matching the order in which the critics were introduced. For each book, participants rated purchase intention ("What is the probability that you would consider reading *White Tears* by Hari Kunzru?") on a 0–100 scale. Participants could also check a box on each page to receive more information at the end of the study, to measure information seeking.

After the main task, participants completed several additional measures: (1) a memory task asking participants to check boxes corresponding to the covers of books they had seen during the study (participants incorrectly answering more than 30% were excluded from analysis), (2) six-item scales measuring egalitarianism (e.g., "We have gone too far in pushing equal rights in this country" [reverse-coded]; $\alpha = .85$) and communitarianism (e.g., "The government should do more to advance society's goals, even if that means limiting the freedom and choices of individuals"; $\alpha = .90$) on short versions of standard scales (Kahan et al., 2010) in a counterbalanced order, (3) a qualitative question about participants' thought processes and a forced-choice question asking explicitly whether participants tended to follow one or the other expert's advice or instead made decisions case by case, (4) a checklist of which books participants had previously read (we did not exclude any items on this basis, because on average, only 1% of participants had read a given book), and (5) basic demographics.

Study 1B used the same method except participants read about consumer electronics. The expert biographies were lightly altered to reflect consumer product rather than book reviewers. Participants read about 10 products, based on real Amazon customer reviews, for which the experts disagreed on 8. For each product, a photograph, brief description, and retail price were shown. Below, each reviewer provided a star rating on a 1 to 4 scale and a brief review. Products included a tablet, camera, blender, dehumidifier, printer, microwave, pressure cooker, sound bar, vacuum cleaner, and watch, with retail prices ranging from $45 to $240; as for Study 1A, two items were omitted from

analyses due to an error with the materials. The measures were similar to Study 1A.
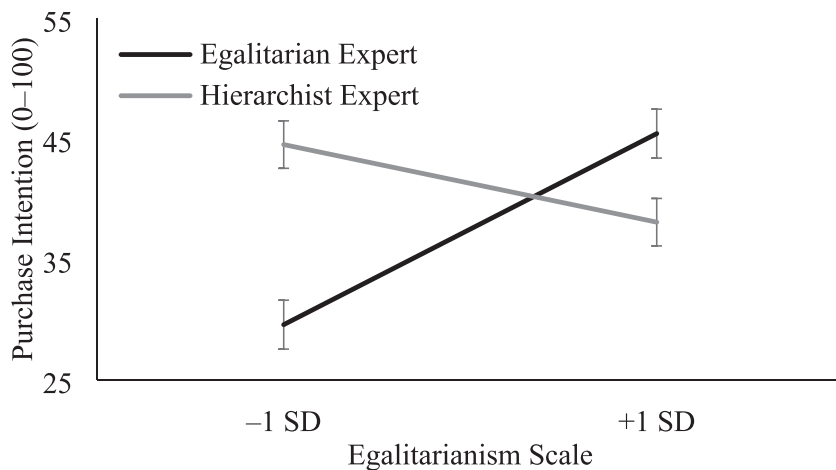
4.2 | Results

Overall, participants reported higher purchase intentions and sought additional information more frequently for products advocated by experts sharing their values. In addition to the analyses reported here, further analyses are reported in the supporting information (Appendix S2).

In preparation for analysis, purchase intentions were averaged separately for products recommended by the egalitarian and hierarchist experts. The key dependent measure is the *difference* in purchase intentions between the two sets of recommendations (egalitarian–hierarchist). Thus, positive difference scores indicate a preference for products reviewed positively by the egalitarian, holding constant the product and review content (because the experts' views were counterbalanced). Because the two experts
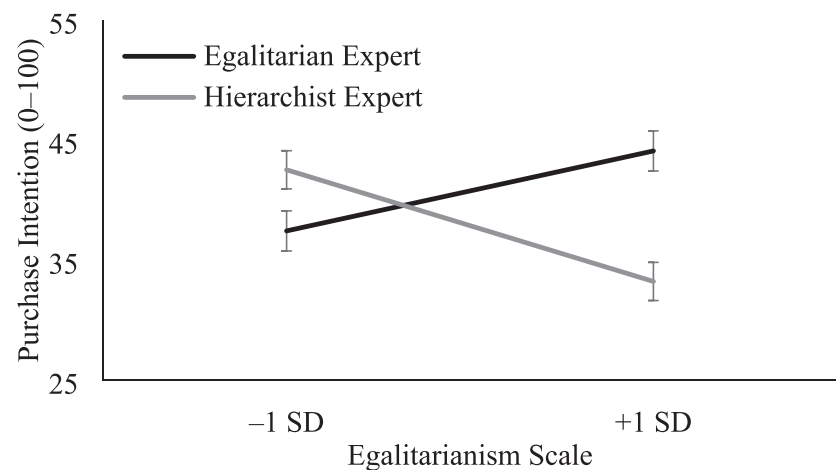
differed in egalitarianism but not communitarianism (Appendix S1), H1 predicts that participants' egalitarianism, but not communitarianism, should predict these scores. This is equivalent to predicting an interaction effect between expert values and participant values, because expert values are manipulated within-subjects and participant values measured between-subjects.

This was indeed the case. We used multiple regression, with the difference scores as the dependent variable and egalitarianism and communitarianism as predictors (centered at their midpoints and scaled by their standard deviations). Communitarianism was included as a covariate in all models, because egalitarianism and communitarianism are perceived as correlated (Appendix S1). We repeated all analyses in the main text without this covariate, finding that the results are unchanged except as noted.

More egalitarian consumers preferentially deferred to the egalitarian reviewer in Studies 1A ($b = 11.15$, $p < .001$) and 1B ($b = 7.98$, $p < .001$). Communitarianism did not predict deference in any of these studies ($ps > .53$). The simple slopes are depicted in Figure 1a,b and regression coefficients in Table 1. Thus, people defer to experts

(a)

(b)

FIGURE 1 (a) Simple slopes of egalitarianism on purchase intention for each critic's recommendations in Study 1A (books). Bars indicate 1 SE of the coefficient estimates. (b) Simple slopes of egalitarianism on purchase intention for each critic's recommendations in Study 1B (electronics and appliances). Bars indicate 1 SE of the coefficient estimates

TABLE 1 Regression models (Study 1)

DV: Purchase intention (egal–hier difference scores)		
	Study 1A	Study 1B
Intercept	−3.80 (2.27)#	2.90 (2.16)
Egalitarianism	11.15 (2.12)*	7.98 (1.85)*
Communitarianism	0.48 (1.74)	−0.62 (1.91)
R^2	.17	.09
DV: Clicks (egal–hier difference scores)		
	Study 1A	Study 1B
Intercept	−0.008 (0.017)	−0.011 (0.01)
Egalitarianism	0.035 (0.016)**	0.022 (0.011)**
Communitarianism	−0.028 (0.013)**	−0.015
R^2	.05	.03

Note. Entries are unstandardized *b*s and *SE*s. DV, Dependent Variable.

***<.01.

**<.05.

*<.001.

#<.10.

sharing their moral values along one dimension (egalitarianism, which differed across experts), with the effect specific to that dimension (no effect of communitarianism, which was equated). Results are similar when both participants and items are treated as random in a multilevel model (Appendix S2).

Differences in purchase intentions translated into information-seeking behavior, measured by the frequency of clicks. Differences in clicks between products advocated by the egalitarian versus hierarchist were predicted by egalitarianism in Studies 1A (b = .0354, p = .025) and 1B (b = .0223, p = .037), as shown in Figure 2a,b, with regression results in Table 1. Communitarianism did not positively predict clicks in Study 1A (b = −.0278, p = .032; note that this effect is negative) or Study 1B (b = −.0147, p = .18); however, the effect of egalitarianism becomes nonsignificant in Study 1A and marginally significant in Study 1B if the communitarianism covariate is dropped from the model. As shown in Appendix S2, the effect of values on clicks is mediated by purchase intentions.

Despite the strong influence of expert values on deference, many participants were unaware of this influence. When participants were asked at the end of study to indicate whether they tended to side with one advisor over the other, most (79.4% and 69.3% in Studies 1A and 1B) denied doing so. When this subset is analyzed separately, they continue to show a strong influence of shared values on purchase intentions (b = 4.89, SE = 2.03, p = .017 and b = 4.38, SE = 1.64, p = .009 for Studies 1A and 1B). Consumers thus may fail to detect persuasion attempts made by experts with shared values, perhaps not even recognizing that their attitudes are being influenced.

4.3 | Discussion

These results show that consumers defer to experts who share their moral worldview. Participants holding strong egalitarian values

deferred to experts with egalitarian values and vice versa. This was manifested both in purchase intentions and in information-seeking behavior; Study S1 in Appendix S1 replicates the effect among British students facing consequential choices. Despite the large magnitudes, most participants appeared unaware of these influences (Nisbett & Wilson, 1977). Inferences about experts may occur largely unconsciously, analogous to how people infer competence from brief exposure to faces (Todorov, Mandisodza, Goren, & Hall, 2005) or use complex rules to guide their moral intuitions without being able to articulate those rules (Cushman, Young, & Hauser, 2006; Mikhail, 2009).

Moreover, the role of shared moral values takes a similar shape across very different product categories. Shared values guided deference about fiction books—a cultural and principally hedonic product, where arguably one's choices act as signals of one's social group. But shared values also guided deference about consumer electronics and appliances, such as printers, blenders, and dehumidifiers—comparatively utilitarian products. Consumers prize expert reviews of such products—because such reviews litter the pages of the *New York Times* and *Consumer Reports* alike. We suspect that similar effects are at play for a variety of other product categories where expert reviews are sought, such as cars, resort travel, movies, and restaurants.

5 | STUDY 2: IS TRIBALISTIC DEFERENCE DRIVEN BY PERCEIVED COMPETENCE OR TRUTHFULNESS?

We proposed two reasons why shared values might influence consumers' deference. Consumers might deem an expert sharing their values to be more *competent*—believing that morally similar experts have generally more accurate beliefs. According to H2, this would be the primary link between shared moral values and deference, or consumers might deem an expert sharing their moral values to be more *truthful*—believing that the expert has superior moral values and is therefore less likely to deceive. Study 2 teases apart these possibilities.

5.1 | Methods

We recruited 399 participants (M_{age} = 37.9, 35% female). Participants were excluded (n = 22) based on the same criteria as Study 1.

The procedure was the same as Study 1B, except two changes. First, instead of measuring purchase intentions, we measured willingness to pay (WTP) for each product (e.g., "What is the maximum price you would be willing to pay for this blender?") on a scale centered at the product's retail price (rounded to the nearest $10) and ranging from $0 to twice the retail price. Second, three sets of rating scales were included after the main task (between the check questions and the values scales). These scales asked participants to rate each critic on truthfulness ("I trust Tim to give his objective opinion about the
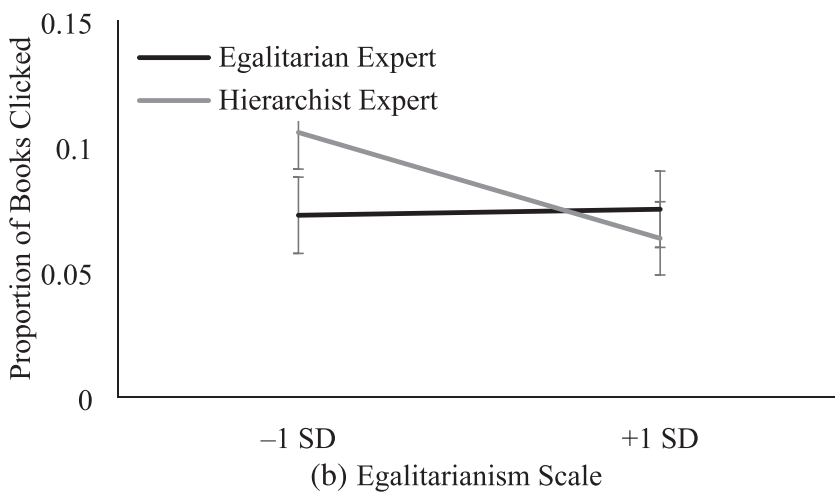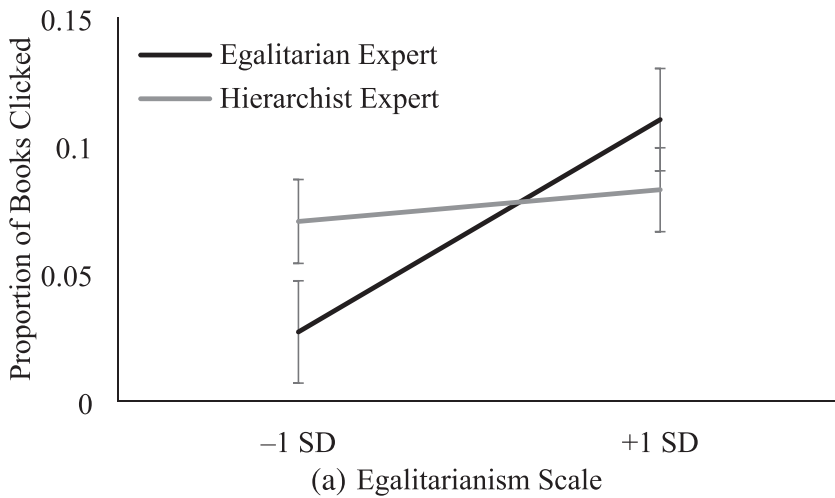
FIGURE 2 (a) Simple slopes of egalitarianism on clicks (information-seeking) for each critic's recommendations in Study 1A (books). Bars indicate 1 SE of the coefficient estimates. (b) Simple slopes of egalitarianism on clicks (information-seeking) for each critic's recommendations in Study 1B (electronics and appliances). Bars indicate 1 SE of the coefficient estimates

products"), competence ("I believe that Tim has good judgment about products"), and similarity ("Overall, I find myself to be similar to Tim") on 0–10 scales. These ratings were made on three separate pages (in a random order for each participant), with the experts listed in the same (counterbalanced) order as in earlier parts of the study.

5.2 | Results

Consumers' moral values again shaped their deference, manifesting in greater WTP for products endorsed by morally similar experts (H1). Perceived competence, but not truthfulness, was the key mediator (H2).

In preparation for analysis, WTP for each item was normed as a proportion of retail price. The normed WTP was averaged separately for the products recommended by the egalitarian and the hierarchist recommenders, and the difference between these WTP scores (egalitarian–hierarchist) used as the key dependent measure, analogous to Study 1.

These difference scores were predicted using multiple regression, with egalitarianism and communitarianism as predictors (Table 2). Like Study 1, egalitarianism was a significant predictor of WTP differences ($b = .0745$, $p < .001$), whereas communitarianism was not ($b = .0169$, $p = .27$). The simple slopes (Figure 3) show that among those low in egalitarianism, WTP was about 10% higher for books recommended

TABLE 2 Regression model (Study 2)

DV: Willingness to pay (proportion of retail value) (egal–hier difference scores)	
Intercept	0.019 (0.019)
Egalitarianism	0.075 (0.017)[*]
Communitarianism	0.017 (0.015)
R^2	.18

Note. Entries are unstandardized *b*s and *SE*s.
[***]<.01.
[**]<.05.
[*]<.001.
[#]<.10.

by the hierarchist expert, whereas among those high in egalitarianism, WTP was about 20% higher for books recommended by the egalitarian. Results are similar when both participants and items are treated as random in a multilevel model (Appendix S2).

Next, we test mediators to understand the mechanisms underlying this relationship between shared values and deference. We used parallel mediation (PROCESS Model 4; Hayes, 2013) to simultaneously test the independent contributions of the competence and truthfulness pathways. As shown in Figure 4, the shared values → competence → WTP path was significant ($b = .0429$, 95% CI [.0151, .0742], $p = .001$), whereas the shared values → truthfulness → WTP path was not ($b = -.0111$, 95% CI [$-.0411, .0174$], $p = .46$). This supports H2.

5.3 | Discussion

These results support our framework. First, shared values once again guided expert deference. As in Study 1, egalitarianism but not communitarianism predicted deference, consistent with H1 because the experts differed in egalitarianism but not communitarianism. Second, this result was underpinned by judgments about
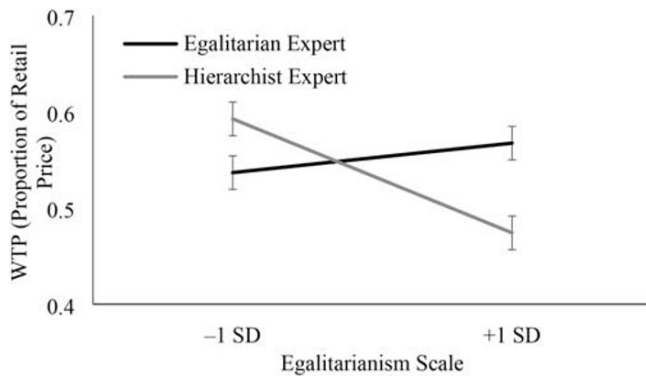
competence. Shared values informed judgments of similarity, influencing beliefs about expert competence, which in turn fueled deference. This is consistent with H2: consumers take the fact that an expert has adopted the correct views on morality as evidence of broader competence. Appendix S1 reports a replication (Study S2), which used the book stimuli from Study 1A and purchased intention as the dependent measure. The results were similar, indicating that these effects and mechanisms generalize across stimuli.

Perceived truthfulness, however, was not a significant mediator. Even though shared values did inform perceived truthfulness, these intuitions did not drive purchase intentions. This may be because their chief source of uncertainty was not the risk of deception but of error. If so, perceived truthfulness may emerge as a mediator in situations where deception is more plausible (e.g., experts paid by a company) or costly (e.g., medical advice).
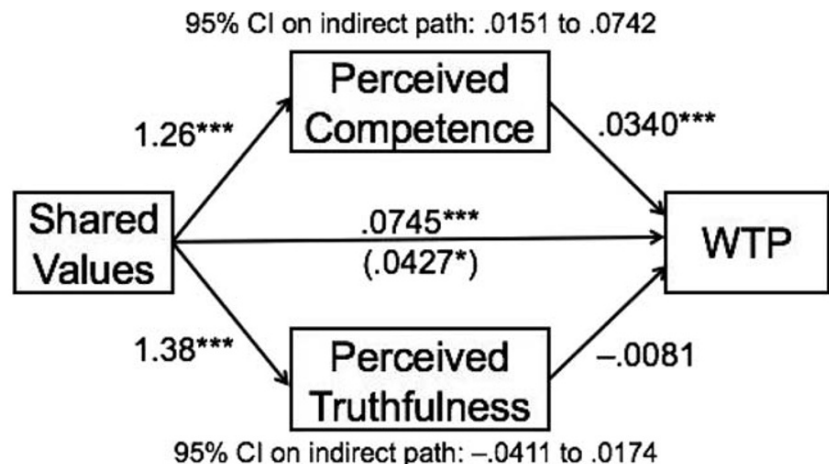
6 | STUDY 3: NONTRIBAL MORAL VALUES

Previous studies operationalized moral similarity in terms of agreement on values that systematically differ across individuals. This approach captures the notion of tribalism but has the shortcoming that we cannot randomly assign agreement with expert values. In Study 3, we relied instead on nontribal moral values—fairness and harm (Graham et al., 2011)—manipulating whether the advisor embraced or rejected these socially normative values. Study 3 thus aimed to adopt a design conducive to random assignment and extend our results to a new dimension of values.

6.1 | Methods

We recruited 400 participants ($M_{age} = 37.3$, 50% female). Participants were excluded from all analyses ($n = 50$) based on the same criteria used in Studies 1 and 2 (see below for additional exclusion criteria). The methods and analyses were preregistered at OSF (https://osf.io/k9bqv).

FIGURE 3 Simple slopes of egalitarianism on willingness to pay for each reviewer's recommendations in Study S3. Bars indicate 1 SE of the coefficient estimates

FIGURE 4 Parallel mediation of value–deference relationship by perceived competence and truthfulness in Study 2

Participants were introduced to a single reviewer. The main portion of the biography was analogous to that used in Studies 1 and 2 but designed to be ideologically neutral. The reviewer's values were instead manipulated between-subjects by including titles of recent newspaper columns he had written. In the *normative expert* condition, the titles implied socially common moral positions (e.g., "Why community matters" and "How and why to honor our parents"), whereas in the *counter-normative expert* condition, the titles implied rejections of socially common values (e.g., "The virtue of unfairness" and "Why the age of consent should be lowered to 14"). All other details about the reviewer's biography and photograph were held constant across conditions. After reading the biography, participants answered a set of multiple-choice questions to verify comprehension, as in other studies.

Next, participants rated eight consumer electronics products. For four products (counterbalanced), the reviewer positively reviewed the product, whereas for the other four products the reviewer negatively reviewed the product. This was analogous to Studies 1 and 2, except only one reviewer's opinion was given for each item. The dependent measures were the same as in Study 1. After providing all product ratings and completing a recognition memory check (same as Studies 1 and 2), participants rated the reviewer on the same dimensions used in Study 2—perceived competence ("I believe that Tim has good judgment about products"), truthfulness ("I trust Tim to give his objective opinion about the products"), and similarity ("Tim and I share the same moral value system").

6.2 | Results and Discussion

As predicted, the reviewer was deemed less competent when he rejected rather than embraced socially common moral beliefs, which in turn predicted lower levels of deference to the reviewer's recommendations, supporting H2. The total effect of the moral values manipulation on deference was less consistent and was dependent on analytical choices (see below).

Our predictions were predicated on the manipulation of reviewer values successfully leading to higher versus lower levels of perceived moral similarity. Perceived moral similarity did indeed differ across conditions ($M = 6.17$, $SD = 1.93$ vs. $M = 4.48$, $SD = 2.79$; $t[348] = 6.62$, $p < .001$, $d = 0.71$), though perhaps not as much as one would expect. To address the problem that some participants may themselves hold counter-normative values, we analyze the data in multiple ways. Here, we report a (preregistered) analysis that removes the 20% of participants rating themselves least similar in the normative expert condition and the 20% most similar in the counter-normative expert condition. In Appendix S2, we report two other analyses (a preregistered analysis excluding no one based on similarity and an exploratory analysis that uses a stricter exclusion rule), noting below where these analyses differ.

To measure deference, we average separately the product ratings across the four items reviewed positively by the expert and the four items reviewed negatively, taking the difference score so that positive numbers indicate higher ratings for the recommended items. Results are similar when both participants and items are treated as random in a multilevel model (Appendix S2).

Overall, there was a highly significant effect of expert values on perceived competence ($M = 7.91$, $SD = 1.39$ vs. $M = 6.04$, $SD = 2.14$; $t[258] = 8.22$, $p < .001$, $d = 1.02$), as well as a strong correlation between perceived competence and deference ($r[258] = .42$, $p < .001$), pooling across conditions. These two effects led to a marginally significant effect of expert values on deference ($M = 41.2$, $SD = 29.0$ vs. $M = 34.9$, $SD = 24.4$; $t[258] = 1.92$, $p = .056$, $d = 0.24$). The effect of condition on competence and the correlation between competence and deference are consistent across exclusion criteria, whereas the total effect of expert values on deference becomes stronger when using a stricter exclusion rule and nonsignificant when using no exclusion rule (Appendix S2).

To test whether the effect of condition was mediated by competence (H2), we conducted a parallel mediation analysis (PROCESS Model 4) analogous to Study 2. Condition was the independent variable, perceived competence and truthfulness were mediators, and purchase intention was the dependent variable. As shown in Figure 5, this analysis uncovered a significant pathway via perceived competence ($b = 9.27$, 95% CI [3.76, 15.54], $p < .001$) but not via perceived truthfulness ($b = 1.90$, 95% CI [−1.93, 5.93], $p = .32$).
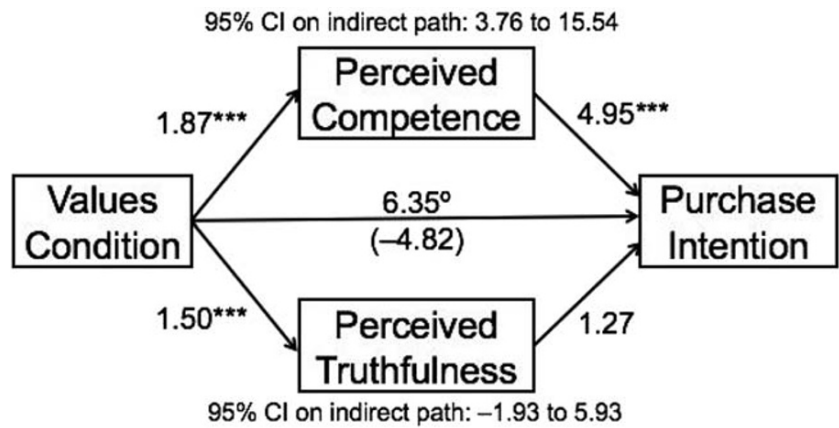
Overall, Study 3 found further support for H1 and H2—the impact of shared values on expert deference due to competence inferences. Results were similar to previous studies despite key methodological differences—showing only a single reviewer, manipulating values between-subjects, and using acceptance or disavowal of socially normative values to operationalize values.

7 | STUDY 4: THE ROLE OF MORAL OBJECTIVISM

Study 4 tested the moderating role of moral objectivism (H3). People vary in their belief that moral truths are objective rather than subjective (Goodwin & Darley, 2008). We theorized that moral similarity is a better guide to competence when morality is thought to be objective, because disagreement on objective (but not subjective) matters signals incompetence. The mediating role of competence should be moderated by moral objectivism.

Study 4 also looked at alternative mechanisms. Shared moral values might signal other socially important types of similarity. Experts with similar values might have (i) similar *preferences*, which might increase the relevance of the expert's judgment and therefore compliance (Price et al., 1989); (ii) similar *social groups* (Kahan et al., 2010), which may trigger a need to connect and therefore increase compliance (Jiang et al., 2010); and (iii) similar *personalities*, making it easier to simulate the expert's mental states and therefore comply (Faraji-Rad et al., 2015). We were agnostic about these other potential

FIGURE 5 Parallel mediation of condition–deference relationship by perceived competence and truthfulness in Study 3

95% CI on indirect path: 3.76 to 15.54

Values Condition — 1.87*** → Perceived Competence — 4.95*** → Purchase Intention

Values Condition — 6.35° (−4.82) → Purchase Intention

Values Condition — 1.50*** → Perceived Truthfulness — 1.27 → Purchase Intention

95% CI on indirect path: −1.93 to 5.93

mediators, aiming to empirically separate any such effects from perceived competence. If these effects were observed, we would not expect them to be moderated by moral objectivism.

7.1 | Methods

We recruited 395 participants (M_{age} = 38.9, 57% female). Participants were excluded (n = 8) based on the same criteria used in previous studies.

The task was streamlined, relative to previous studies. After reading the same descriptions of the experts used in Study 1A and answering the same questions about them, participants read two sets of reviews—one for a book recommended by the egalitarian but not the hierarchist expert, and one the converse. The order of the books and reviews was counterbalanced. For each book, participants answered two questions measuring their attitude toward the book (rating each book from *poor quality* [0] to *high quality* [10] and their opinion from *unfavorable* [0] to *favorable* [10]; r > .80) and one question about their purchase intention ("What is the probability that you would purchase a copy of [book] in the future?" from 0 to 10). The composite attitude ratings and purchase intention ratings were highly correlated (r > .70), so we averaged them for analysis. After completing all ratings, participants were given the opportunity enter themselves into a lottery, choosing which of the two books they wished to receive if they won; most participants participated (n = 331). One participant was selected at random as the winner and mailed her choice.

Next, participants made judgments about each expert. This included four aspects of similarity (moral ["John's moral values are similar to mine"], preference ["John's preferences are similar to mine"], social ["John's friends are similar to mine"], and personality ["John's personality is similar to mine"]) and competence ("I believe that John has good judgment about books"), all on 0–10 scales. The four similarity judgments were completed in a random order on a separate page for each expert, followed by the competence judgments on the subsequent page.

Finally, participants completed the same egalitarianism and communitarianism scales used in previous studies, followed by a five-item moral objectivism scale derived from previous research (Goodwin &

Darley, 2008, 2012), measuring beliefs about the objectivity of morality ("Considering your values and beliefs on questions of morality, how strongly do you agree or disagree with each of these statements?"). An exploratory factor analysis revealed two distinct subscales (r = −.03): one measuring the *normativity* of the beliefs ("Every good person on earth, regardless of culture, holds these beliefs," "The truth of these beliefs is self-evident," and "A society could not survive without its citizens holding these beliefs"; α = .77) and one measuring *subjectivity* ("If someone strongly disagreed with you about one of these beliefs, it is possible that neither you nor the other person are mistaken" [reversed] and "There are no clearly true or false answers to these questions" [reversed]; α = .61).

7.2 | Results

The composite product ratings (collapsing across attitude and purchase intention ratings) were predicted by the consumers' alignment with the advisors' values. A regression on the difference scores (analogous to previous studies; Table 3) found that egalitarianism was associated with the difference between ratings for products endorsed by the egalitarian and hierarchist advisors (b = 1.32, SE = 0.15, p < .001), whereas communitarianism was not (b = 0.14, SE = 0.15, p = .36).

Moreover, these effects on product ratings manifested in consequential choices. In a binary logistic regression (Table 4), egalitarianism (z = 5.11, p < .001) but not communitarianism (z = 0.53, p = .60)

TABLE 3 Regression model predicting product ratings (Study 4)

DV: Composite product ratings (egal–hier difference scores)	
Intercept	−0.34 (0.018)#
Egalitarianism	1.32 (0.15)*
Communitarianism	0.14 (0.15)
R^2	.07

Note. Entries are unstandardized bs and SEs.
***<.01.
**<.05.
*<.001.
#<.10.

TABLE 4 Logistic regression predicting product choices (Study 4)

DV: Choice of egalitarian-recommended product		
	b (SE)	z
Intercept	−0.14 (0.16)	−0.86
Egalitarianism	0.76 (0.15)	5.11*
Communitarianism	0.08 (0.15)	0.53

Note. Entries are unstandardized bs and SEs. An inverse logit transformation was used to calculate the estimated choice shares in the main text.
***<.01.
**<.05.
*<.001.
#<.10.

predicted choices aligned with the egalitarian. A participant one SD above the midpoint on egalitarianism was predicted to side with the egalitarian expert 65% of the time, whereas a participant one SD below would side with the egalitarian 29% of the time.

Next, we tested the moderating role of moral objectivism (Figure 6). We used a moderated mediation model, with objectivism as the moderator; PROCESS Model 7 was used because our theory predicts that objectivism should moderate the effect of shared values on perceived competence. Egalitarianism (but not communitarianism) predicted differences in perceived competence ($b = 1.60$, $SE = 0.18$, $p < .001$), but this was qualified by the interaction between egalitarianism and objectivism ($b = 0.47$, $SE = 0.16$, $p = .003$), such that the effect of egalitarianism was stronger for participants higher in objectivism. Consequently, the indirect effect of egalitarianism on product ratings was stronger for participants 1 SD above the mean on egalitarianism ($b = 1.18$, 95% C I[0.87, 1.51], $p < .001$) compared with participants 1 SD below the mean ($b = 0.70$, 95% CI [0.39, 1.03], $p < .001$), leading to a significant index of moderated mediation ($b = 0.27$, 95% CI [0.07, 0.47], $p = .009$). (This moderation was driven by the subjectivism, rather than the normativity, subscale of objectivism scale.) This supports H3.

Finally, we tested the alternative similarity-based mechanisms against perceived competence. We fit a parallel mediation model (PROCESS Model 4), to separate the independent contributions of each mechanism. The model used moral similarity as the independent variable, product ratings as the dependent variable, and our four mechanistic proxies as mediators: competency, preference similarity, social similarity, and personality similarity. All of these variables are egalitarian–hierarchist difference scores. As shown in Figure 7, the

indirect effect via perceived competence was the strongest ($b = 0.23$, 95% CI [0.15, 0.31], $p < .001$), and the indirect effect via preference similarity was also significant ($b = 0.13$, 95% CI [0.04, 0.22], $p = .005$), whereas the other indirect effects were not significant. The results are similar with egalitarianism instead of moral similarity as the independent variable.

To test which of these pathways were moderated by moral objectivism, we fit a moderated mediation model (PROCESS Model 7), with objectivism as a moderator of the links between moral similarity and the four mediators. Consistent with our theory, the index of moderated mediation was significant only for the competence pathway ($b = 0.030$, 95% CI [0.006, 0.059], $p = .016$) but only marginally for similarity of preferences ($b = 0.006$, 95% CI [−0.001, 0.015], $p = .095$). This further supports our reasoning behind H3. Shared moral values would be an equally good guide to shared preferences regardless of whether those values are objective, because subjective values could still correlate with subjective preferences. But shared values would not be a good guide to competence if those values are subjective, because competence reflects objective abilities.

7.3 | Discussion

Participants higher on moral objectivism used shared values as a stronger cue to competence compared with participants lower on moral objectivism—the discontents of tribalism. These results not only support our theoretical model but also help to shore up various empirical questions about Studies 1–3. Study 4 used a wider variety of product ratings, as well as a consequential choice (because participants could win their chosen book in a lottery). Nonetheless, the basic influence of shared values on deference was robust across these measures. Moreover, relying on a much smaller number of items decreases the risk that participants would infer and comply with the experimenter's intention. A near-exact replication (Study S3 in Appendix S1) found very similar results.

8 | GENERAL DISCUSSION

Consumers must often defer to experts when they seek out products that are novel or complex, but experts often disagree, leaving consumers to choose who to believe. Consumers use a variety of cues as they attempt to discern which experts are truthful (accurately
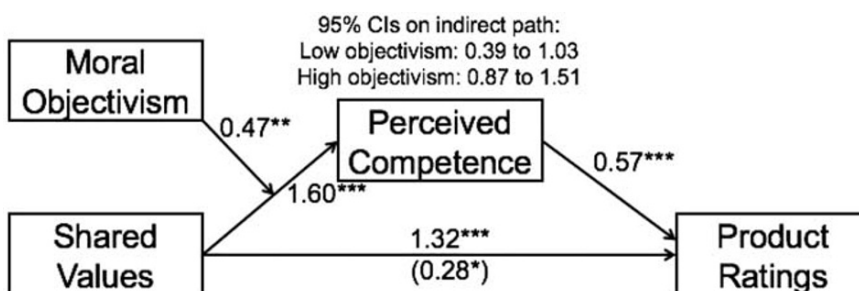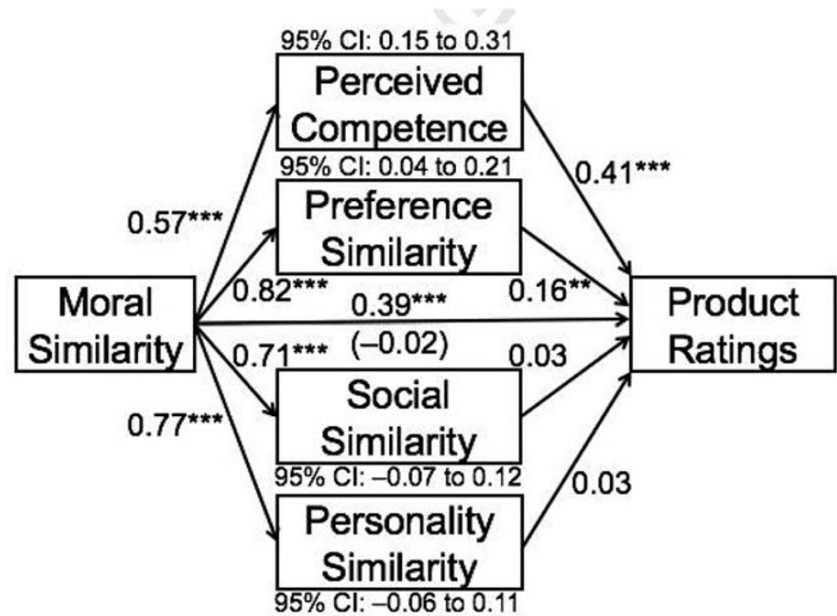

FIGURE 6 Moderated mediation of values–deference relationship by competence (mediator) and moral objectivism (moderator) in Study 4

reporting their opinions) and competent (having opinions worth reporting).

Here, we demonstrated a potent cue consumers use for deciding which experts are worthy of deference—the similarity between the expert's and consumer's moral value system. We reasoned that many consumers are *moral objectivists*, believing that moral values are facts in the same kind of way that scientific or mathematical facts can be objectively true or false (Goodwin & Darley, 2008). Thus, experts who differ from a consumer's moral values would be making an objective error of judgment, leading to decreased perceptions of competence and in turn less deference. In support of this framework, we found that consumers express stronger purchase intentions and WTP for products recommended by experts who share their values (H1) and that this effect is mediated by perceived competence (H2) and moderated by individual differences in moral objectivism (H3). Thus, we not only identified that moral similarity predicts deference to experts, but why and for whom this effect occurs most strongly.

8.1 | Robustness and limitations

Between the main text and Appendix S1, we report nine studies with collectively over 3,000 participants, which consistently support our theoretical framework. The basic effect of moral similarity on expert deference was robust across every measure we could think of (purchase intention, WTP, product attitudes, information-seeking, and consequential choices) and across hedonic (books) and utilitarian products (consumer electronics). In a separate line of research, we are finding similar results for investors' deference to financial advisors with shared or unshared values. Further, we showed that the results are robust to different statistical models, including

hierarchical models and alternate mediation specifications (Appendix S2). Despite this robustness over measure, product type, and modeling choices, there are several areas where the robustness is arguably less clear cut and where future research may be illuminating.

First, how well would these results would generalize across populations? We do find similar results across two different populations (American online panel and British students). Yet, as with much behavioral research, it is unclear how well the results would generalize to non-Western populations. If our theoretical framework has correctly identified moral objectivism as the key lever that determines the extent of tribalistic deference, then our theory might in fact predict differences in value-based deference across cultures, to the extent that objectivism differs across cultures. Because existing research finds similar patterns of objectivism in China, Poland, and Ecuador as in the United States (Beebe, Qiaoan, Wysocki, & Endara, 2015), we would expect our results to generalize to those countries. Still, additional cross-cultural research could illuminate both tribalistic deference and moral objectivism itself.

Second, how well would the results generalize across different kinds of moral values? In Studies 1, 2, and 4, we operationalized similarity on moral values in terms of differences in egalitarianism (Wildavsky & Dake, 1990), which is correlated with political party, lending credence to the concern that the results could be specific to partisanship. Two considerations weigh against this possibility. First, our experts differed principally in egalitarianism rather than communitarianism (Appendix S1), and consequently, we find that participants' egalitarianism but not communitarianism predicts deference. This was true even though both values are associated with political party in the United States. Second, Study 3 operationalizes values in terms of those that are shared across political parties (e.

g., fairness; Haidt, 2012) and value similarity in terms of whether experts share these normative values versus counter-normative values. This study found very similar results, including mediation by competence. However, even though these results do not appear to be specific to political partisanship, further research might test whether they would generalize to other dimensions of moral values.

Third, how strong is the support for the competence–inference mechanism? The results suggest it is quite robust across measures, but it may be less robust across contexts. We find support for perceived competence as a mediator in six studies (between the main text and Appendix S1) that rely on many different measures of deference and two different measures of competence (a single-item measure and a scale). Moreover, we pitted this mechanism against several other explanations. Perceived truthfulness was tested as a potential mediator in several studies, never finding any support. Study 4 tested several other dimensions of similarity that might be confounded with moral similarity (preference, social, or personality similarity), competing them as alternate mediators. There was some support for preference similarity as an additional mediator, but perceived competence remained a significant mediator in that analysis (and only the perceived competence pathway was moderated by moral objectivism, consistent with our theory). Although these results provide confidence that perceived competence is the key mediator in the contexts we studied, other mechanisms might come into play in other situations. We studied contexts where there is no particular reason to doubt that experts would lie. In contexts where experts are known to often have conflicts of interest or a history of malfeasance or where the stakes are high, truthfulness may emerge as a potent mechanism.

Finally, how confident can we be in the strength of our causal claims? Many of the studies rely on individual differences (rather than randomly assigned treatments) for making mechanistic claims, particularly individual differences in egalitarianism and in moral objectivism. We acknowledge that these studies are potentially susceptible to "lurking third variable" problems and would encourage other researchers to test specific alternative theories about the causal relationships among these variables. However, these concerns are mitigated by three considerations. First, although mediation analyses are themselves correlational, they reveal an intricate pattern of effects—including selective mediation by theoretically relevant variables (perceived competence) and not by irrelevant variables (perceived truthfulness), as well as moderation by moral objectivism. Any alternative explanation would need to account for this full pattern of mediation and moderation effects. Second, we statistically adjust for one potential lurking variable—communitarianism—which helps to buttress our account. Third, Study 3 replicates our key findings using random assignment, rather than individual differences, to capture moral similarity. Although the correlational nature of many of these studies precludes airtight causal inference, our theoretical framework appears to be the best available explanation, absent an alternative that can explain the full pattern of results.

8.2 | Theoretical contributions and further research

8.2.1 | Influence and expertise

How do attitudes change and opinions spread? Here, we have documented a novel mechanism of attitude change—objectivist views of morality lead shared moral values to signal competence. This research can be extended in two directions.

First, we tested this mechanism in the domain of expertise. Would this mechanism extend to other sources of influence? Attitude change is at the center of several interrelated literatures, including persuasion (Hovland et al., 1953), advice taking (Bonaccio & Dalal, 2006), and social contagion (Iyengar, Van den Bulte, & Valente, 2010). Moreover, various forms of interpersonal influence are increasingly crucial in the marketplace, including mavens (Clark & Goldsmith, 2005), influencers (Brown & Hayes, 2008), and celebrity endorsements (Erdogan, 1999). Could salespeople signal their values in order to increase their persuasiveness? Is a consumer likelier to defer to one's friends who most closely share her values? Do shared values within an organization increase the likelihood of compliance with advice? If they exist, these effects could be driven by competence, as in the current studies, but it would be interesting to test the role of truthfulness in these contexts.

Second, there has been relatively little work within consumer behavior looking at cues people use to evaluate experts—a surprising gap, given the large amount of attention given to this topic within psychology and philosophy (Goldman, 2001; Keil et al., 2008; Kitcher, 1990; Landrum, Mills, & Johnston, 2013; Marks et al., 2019; Mills, 2013; Sperber et al., 2010; Suldovsky, Landrum, & Stroud, 2019). Therefore, we believe the mechanisms by which consumers defer to experts are a ripe topic for exploration within consumer behavior, with the current results constituting one of the initial steps. Further work might examine when and which consumers are likelier to rely on their own judgment versus that of an expert, whether the mechanisms of expert deference differ across product categories, and what cues, aside from shared values, drive consumers' deference to particular product experts.

We suspect that one useful theoretical approach toward answering both sets of questions is to more carefully consider the roles of narratives and identity in economic decision making (Shiller, 2017; Tuckett & Nikolic, 2017). For example, managers often seek to imbue their employees with organizational identity to improve worker productivity (Akerlof & Kranton, 2005), and professional money managers use narratives to make sense of company activities to make judgments about the future with sufficient conviction to act (Tuckett, 2011). More broadly, we often make choices with the goal of enacting our identities—adding harmonious deeds to the stories we tell about ourselves (McAdams & McLean, 2013). Likewise, here we document a way that consumers enact their social identities—here in the form of closely held moral values—in their patterns of deference and consumption. When experts and other agents of influence promote a particular point of view, it is often useful to think of their view as a narrative in

competition with other narratives the consumer is exposed to. An area of great importance for consumer behavior and the social sciences more broadly is to understand how these narratives are taken up and the effects of this process on decision making.

8.2.2 | Ideology and morality

How do values shape consumption? In addressing this question, our work contributes to three distinct literatures. First, a growing literature studies the relationship between ideology and consumption (Fernandes & Mandel, 2014; Jung, Garbarino, Briley, & Wynhausen, 2017; Khan, Misra, & Singh, 2013; Kidwell, Farmer, & Hardesty, 2013; Shepherd, Chartrand, & Fitzsimons, 2015). Whereas most of these studies have focused on ways that individual differences in ideology influence consumption (e.g., conservatives are more prone to variety seeking; Fernandes & Mandel, 2014), we focus on a mechanism common to individuals across the moral spectrum: tribalism with respect to expert deference.

Second, many researchers are interested in moral judgment and behavior in consumption contexts (e.g., Reczek, Irwin, Zane, & Ehrich, 2018; Samper, Yang, & Daniels, 2018; White & Simpson, 2015; among many others). Separately, social psychology and cognitive psychology have been experiencing a revolution in research on moral judgment. We bring one aspect of this emerging research tradition—the construct of moral objectivism (Goodwin & Darley, 2008)—to the consumption domain. However, we suspect that there is much more to learn about consumption behavior from new discoveries in the basic science of moral psychology. For example, in addition to warmth and competence, morality has been argued to be a third fundamental dimension of person perception (Goodwin et al., 2014), and some research has already begun to demonstrate the profound impact of perceived morality on consumers' judgments of service providers (Kirmani, Hamilton, Thompson, & Lantzy, 2017). There is much work to be done in unpacking the implications of this insight for consumer behavior.

Third, several streams of research examine how culture shapes behavior, both within and across countries (Arnould & Thompson, 2005; Luna & Gupta, 2001). Here, we take an experimental approach to the question of how intranational culture, manifested in moral tribes, influences consumer behavior. By focusing on social groups defined by shared moral commitments, this work bridges the literatures on culture (Arnould & Thompson, 2005) and intergroup dynamics (Kahan et al., 2010; Tajfel & Turner, 1986).

8.3 | Practical implications

This work has implications for marketing consumer products (because they are often recommended by experts, such as salespeople or product reviewers) and for the expertise market itself (such as publishers of product reviews or providers of expert services). Most straightforwardly, putative experts should seek to establish connections with consumers via shared values whenever feasible. For example, if salespeople are to provide expert advice to consumers (e.g., in cosmetics or car sales), this advice is more likely to be taken seriously if the salesperson can establish shared values. Shared values would not only be likely to benefit interpersonal trust, but, as we have shown, consumers would be more likely to consider the underlying advice valid. As another example, if a company wishes to market a product toward a specific moral demographic, the company should take steps to get the product reviewed by members of that moral in-group. More speculatively, negative reviews by the ideological out-group may be less harmful or perhaps even beneficial in some cases; for example, a book reviewed negatively by Ann Coulter could appeal to those who do not respect Coulter's judgment. Future work might examine this potential "backfire" effect.

This research also points to strategies for segmenting along ideological lines and marketing separately to each demographic. For example, marketers could choose to seek reviews in publications differentially read by different ideological groups (e.g., the *New York Times* vs. *Wall Street Journal*, Fox News vs. MSNBC, or Breitbart vs. the Huffington Post). Given concerns about misinformation, perceived truthfulness as well as competence could play a mediating role in evaluating reviews published in different outlets. In addition, ideological groups tend to be geographically clustered. Marketing communications sent by mail could feature different product reviewers depending on the postal code. Religiosity—another geographically clustered characteristic—is linked with moral objectivism (Goodwin & Darley, 2008), potentially increasing the power of this segmentation strategy.

In other contexts, the effect of shared values may be a threat rather than an opportunity. For example, if the strongest endorsement for a product comes from an expert who is known to be highly religious, this may undermine the effectiveness of this endorsement for secular consumers. Indeed, more than cultivating perceived competence by signaling shared values, it is probably especially important to avoid cultivating the perception of *incompetence* among sales staff by signaling unshared values (as in our opening anecdote), because negative effects are often more powerful than positive effects (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). One possibility is that framing endorsements from moral out-group members as an exception may prove more effective (e.g., "This is not normally the sort of book I read, but I couldn't put it down!"). Such framing differentiates the product from the endorser's typical judgment (which the ideological out-group may not respect) while maintaining the positive content of the message. More generally, understanding how message framing interacts with shared and unshared values may be of great practical significance.

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SUPPORTING INFORMATION

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