Belief in the Immutability of Attitudes Both Increases and Decreases Advocacy

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Abstract

People with an entity theory of attitudes (i.e. the belief that attitudes are relatively unchanging) are more certain of their attitudes than are people with an incremental theory (i.e. the belief that attitudes are relatively malleable), and people with greater attitude certainty are generally more willing to try to persuade others. Combined, these findings suggest that an entity theory should foster greater advocacy. Yet, people with entity theories may be less willing to advocate because they also perceive others’ attitudes as unchanging. Across five studies, we show that both of these countervailing effects occur simultaneously and cancel each other out. However, by manipulating how advocacy is framed (as standing up for one’s views or exchanging one’s views with others), whom people focus on (themselves or others), or which implicit theory applies to oneself versus others, each implicit theory can either increase or decrease willingness to advocate.

*Keywords:* implicit theories, attitudes, advocacy, persuasion, attitude certainty
People frequently advocate for their opinions. They may try to persuade others during a conversation, share their views in a Facebook post, or stand up for their side of a contested issue in political protest. But what motivates people to advocate? Advocacy is an interpersonal exchange, suggesting that people may consider both characteristics of themselves and of others when deciding whether to advocate. In particular, people may assess aspects of their own and others’ attitudes before deciding whether to express their views.

In this paper, we explore people’s beliefs about their own and others’ attitude stability (i.e., implicit theories of attitudes) and show that the same underlying belief about the world can have opposing effects on one’s likelihood of advocating. We show that holding theories of stability (i.e., entity theories) about attitudes can both increase and decrease advocacy, but that each effect occurs as the result of different mechanisms and is found under different circumstances. More specifically, we show that entity theories can simultaneously increase advocacy by increasing attitude certainty and decrease advocacy by making one view others as not persuadable. These processes are offsetting, but either one can dominate depending on how advocacy is framed and whether a given implicit theory is applied to oneself or to others.

Prior Implicit Theories Research

Implicit theories are beliefs about the stability or malleability of human characteristics (for a review, see Molden & Dweck, 2006). Entity theorists believe that human characteristics are relatively stable and unchanging, whereas incremental theorists believe that human characteristics are relatively malleable and dynamic. These theories have been studied in many different domains, such as intelligence (Dweck, Chiu, & Hong, 1995), morality (Chiu, Dweck, Tong, & Fu, 1997), personality (Chiu, Hong, & Dweck, 1997), stereotyping and prejudice (Levy,
Stroessner, & Dweck, 1998; Carr, Dweck, & Pauker, 2012), romantic relationships (Kammrath & Peetz, 2012; Knee, Patrick, & Lonsbary, 2003), and even branding (Yorkston, Nunes, & Matta, 2010; Park & John, 2013). Implicit theories can have important implications for perceptions and for goal pursuit. For example, people with an entity theory of intelligence believe that intelligence is a trait that a person either has or does not have, so they are more concerned with demonstrating their ability through performance. People with an incremental theory, on the other hand, believe that intelligence can be cultivated over time, and are thus more concerned with improving their ability through learning (Dweck & Leggett, 1988; Dweck, 1999).

Despite the large literature on implicit theories, there has been very little research on implicit theories of attitudes (e.g., people’s beliefs about the malleability of attitudes), and no papers have examined how such theories might affect advocacy. A goal of this paper is to provide a new investigation into how implicit theories of attitudes relate to advocacy, thereby extending both the implicit theories and advocacy literatures. Although supporting a cause can take many forms (e.g., donating money, voting, signing a petition, etc.), the current work concentrates on advocacy, which we define as proclaiming one’s beliefs or opinions to others. Our focus in this paper is on advocacy that involves trying to persuade others. This is for two reasons. First, persuading others is clearly differentiated from more general forms of attitude-consistent behavior because it involves clear communication to and influence on others, rather than simply acting in line with one’s attitude, as is arguably the case with other behaviors in support of a cause (e.g., voting). Second, because this form of advocacy involves influencing others, it can be affected by both one’s views of one’s own attitudes, but also one’s views of others’ attitudes. This permits examination of how implicit theories of self and others can lead to
different effects on advocacy. Discussion of how implicit theories may relate to other forms of advocacy is deferred to Study 3 and the General Discussion section.

Implicit Theories of One’s Own Attitude Stability

Despite the large literature on implicit theories, only a single paper has examined whether people hold such theories about their own attitudes (Petrocelli, Clarkson, Tormala, & Hendrix, 2010). This paper showed that those with an entity theory of attitudes had greater attitude certainty. Attitude certainty refers to the sense of confidence or conviction one has about one’s attitudes (Tormala & Rucker, 2007). The more stable and unchanging people thought attitudes were in general, the more likely they were to report that their own attitudes were stable and unchanging. This perception of the stability of their own attitudes led to greater attitude certainty.

Although advocacy was not examined in this paper, its findings suggest a novel prediction, namely that those with entity theories of attitudes would be more likely to advocate. Research has shown that the more certain people are of their attitudes, the more willing they are to engage in various forms of advocacy, such as trying to persuade others (Visser, Krosnick, & Simmons, 2003) and speaking up in town hall scenarios (Akhtar, Paunesku, & Tormala, 2013; but see Rios, Wheeler, & Miller, 2012; Gal & Rucker, 2010).

A synthesis of these two literatures—the effect of implicit theories of attitudes on attitude certainty, and the effect of attitude certainty on advocacy—suggests that entity theories could increase advocacy. Specifically, if people with an entity theory of attitudes are more certain of their own attitudes, and people who are more certain of their attitudes are more willing to try to persuade others, then entity theorists could be more willing to try to persuade others.
Implicit Theories of Others’ Attitude Stability

This prediction ignores the possibility that one’s implicit theories of attitudes could also be applied to other people. Viewed through this lens, one could make the opposite prediction, namely that people with an entity theory would be less willing to try to persuade others. If an entity theory of attitudes is applied to others, it would lead one to believe that others’ attitudes are very difficult to change, potentially leading to lower advocacy. This alternative account is plausible for several reasons. When people decide whether to share their opinions with others, they often consider how message recipients will respond to their persuasion attempt. When people believe others are closed-minded, they are less likely to try to persuade them (Gal & Rucker, 2010). Similarly, more specific to implicit theories, people are less willing to sign petitions or participate in strikes or demonstrations against an out-group when they have an entity theory about the out-group’s ability to change (Cohen-Chen, Halperin, Saguy, & von Zomeren, 2013). These results suggest that implicit theories could make one believe that others are not persuadable, which could decrease advocacy. Hence, entity theorists’ likelihood of advocating could be influenced by the perceived unchanging nature of both their own attitudes as well as the attitudes of others.

Competing Determinants of Advocacy

These two potential effects—entity theories increasing advocacy via attitude certainty and decreasing advocacy via beliefs about the unpersuadability of others—could operate as simultaneous and opposing forces. Although it is common to see mediation effects in the literature, it is much less common to see studies with multiple mediation, or simultaneous mediation by multiple variables (Preacher & Hayes, 2008). Moreover, even when multiple mediators are investigated, there is not much encouragement for researchers to explore the
possibility that some mediators may exert opposing indirect effects on a dependent variable. Yet, identifying opposing mediators is crucial for theory-building and understanding complex social phenomena (Rucker, Preacher, Tormala, & Petty, 2011). It is thought that one of the reasons analyses with opposing mediators are underreported is that, in some cases, they fail to show a direct effect of the independent variable on the dependent variable, and previous approaches required finding a direct effect before testing for mediation (e.g. Baron & Kenny, 1986). Thus, researchers finding no direct effect might prematurely assume that no relationship exists between the two variables under investigation.

However, recent advances in mediation analysis in behavioral research have shown that mediation can occur despite the lack of a direct effect of the independent variable on the dependent variable (Rucker et al., 2011; Preacher & Hayes, 2008; Zhao, Lynch, & Chen, 2010; MacKinnon et al., 2002). Indeed, a commonly postulated scenario for such a phenomenon is the simultaneous presence of two opposing mediators. In such a case, an independent variable may exert both positive and negative indirect effects on the dependent variable, resulting in a nonsignificant direct effect. If a mediation model only includes one of the two opposing mediators, suppression may occur. Suppression is indicated when (1) an indirect effect has a sign that is opposite to that of the direct effect, and (2) the direct effect of the independent variable on the dependent variable is strengthened when the mediating variable is included (i.e. the magnitude of $c'$ is greater than that of $c$; Rucker et al., 2011).

We hypothesized precisely this scenario for the relationship between implicit theories and advocacy. We predicted that an entity theory of attitudes would lead both to greater attitude certainty (which increases willingness to advocate) and lower perceived persuadability of others (which decreases willingness to advocate). Were these countervailing effects to occur
simultaneously in roughly equal magnitude, they would result in suppression and the absence of an overall direct effect of implicit theories on advocacy.

Theoretical Contributions of the Present Research

This type of effect would be novel and substantive for multiple reasons. First, it would elucidate competing drivers of advocacy and test them within a single study. Second, it would illustrate a new source of these drivers (i.e., implicit theories of attitudes) and hence demonstrate both a new effect of implicit theories and a new factor affecting advocacy. Moreover, in this paper, we go beyond testing whether these factors can operate in opposition to examine conditions under which each factor can dominate over the other.

We test whether the same implicit theory can have different effects on advocacy depending on how advocacy is framed (e.g., standing up for one's view versus exchanging views). For example, consider the belief that attitudes are stable and fixed. If advocacy were framed not in terms of persuading others, but rather, standing up for one's views, the persuadability of others would be less relevant to one's willingness to advocate than would be the certainty one has in one's own views. As a result, an entity theory could lead to more advocacy than an incremental theory. By contrast, a framing implying the relevance of both others’ persuadability and one's own certainty, such as exchanging views, might not lead to such an effect.

Last, we contribute to the literature by demonstrating that theories about self and other need not always be the same and showing how the application of the same implicit theory to self and others can have opposite effects. Previous research has examined how implicit theories of various types can be applied to both the self (Hong, Chiu, Dweck, Lin, & Wan, 1999) and others
(e.g., Chiu, Hong, & Dweck, 1997) in different contexts, but no research has examined simultaneous effects of an implicit theory as applied to both oneself and others in a single context, let alone shown different effects of the two theory targets (i.e., self and others).

The studies in this paper go a step further and examine not just the application of a single theory to multiple targets, but also whether theories held for self and others can differ. Only one paper has examined the possibility that people could hold different implicit theories for oneself than they do for others, in this case, people in general (Castella & Byrne, 2015). This paper measured implicit theories of intelligence using general items typically used in implicit theory research (e.g., “You can always substantially change how intelligent you are.”) as well as using items modified to assess beliefs specifically about the self (e.g., “I believe I can always substantially improve on my intelligence.”) Results indicated that, although the two measurements were highly correlated ($r = .80$), the self-theory measure explained additional variance (1-6%, depending on the outcome) in academic-related outcomes over and above the general items. In the present paper, to test the separability of implicit theories about self and others, we take two different approaches. In Study 4, we specifically activate implicit theories as applied to the self or other people and show that the manipulations have different effects, thereby providing initial evidence that the theories, or at least their application, can be independently manipulated and have different effects. In Study 5, we use a different manipulation. Through providing false personality feedback, we simultaneously manipulate implicit theories about the self and other people in opposite directions (e.g., your attitudes are fixed, whereas others’ are malleable). Across the two studies, we show that, at least when manipulated, implicit theories about the self and others need not be nearly identical or lead to the same effects, as one might conclude from the results of the prior paper on this topic (Castella & Byrne, 2015).
The Present Studies

We conducted five studies to investigate the effect that implicit theories of attitude stability have on advocacy. Study 1 shows that, though entity theories of attitudes may appear to have no overall effect on advocacy, they can exert an indirect effect via persuadability of others. Study 2 tests the opposing mediator model and explains how implicit theories of attitudes can simultaneously increase and decrease advocacy through independent mediator paths. Study 3 examines how the framing of advocacy can tilt this balance such that believing in attitude stability can lead to a significant increase in advocacy. Study 4 then provides an initial suggestion of the separability of implicit theories about self and others by showing that thinking about the stability of one’s own attitudes has the opposite effect of thinking about the stability of others’ attitudes. Last, Study 5 uses false personality feedback to manipulate implicit theories of self and others in opposite directions and measures advocacy in an interactive online chat environment.

Study 1

Whereas prior literatures link an entity theory of attitude stability with attitude certainty and, separately, attitude certainty with advocacy, no such literature exists examining our other proposed mechanism. That is, no research has yet explored the relationship between implicit theories of attitude stability and perceptions about the persuadability of others. Thus, before experimentally testing for the simultaneous presence of opposing mediators, we wanted to first determine whether a relationship between implicit theories, perceived persuadability of others, and likelihood of trying to persuade others existed, and if so, what the nature of that relationship might be. Study 1 provided an initial test of the possibility that an entity theory of attitudes is
associated with lower perceived persuadability of others and is therefore indirectly associated with lower likelihood of trying to persuade others.

**Participants and design**

One hundred five participants, recruited using Amazon’s Mechanical Turk, took part in exchange for credit toward Amazon.com purchases.

**Procedure**

Participants were told that we were conducting public opinion research and were interested in their thoughts, beliefs, and attitudes about a variety of issues.

**Attitude.** First, participants were told they would be answering questions about the death penalty for those convicted of murder and indicated how much they were for or against the death penalty for persons convicted of murder, using a scale ranging from 1 (against) to 5 (neither against nor in favor) to 9 (in favor). Because our focus was on participants’ likelihood of trying to persuade others to their own side, we removed 10 participants who were neutral, leaving 95 participants for analysis.

**Likelihood of trying to persuade others.** Next, participants were asked the following question about their likelihood of trying to persuade others: “How likely would you be to try to persuade others to your side on this issue?” (1 [very unlikely] – 9 [very likely]).

**Perceived persuadability of others.** Then participants reported how easily they thought they could change people’s minds about the death penalty on a scale ranging from 1 (not easily at all) to 9 (very easily).

**Implicit theories of attitude stability.** Finally, after a ten-minute filler task in which participants responded to a variety of personality scales, participants completed an eight-item questionnaire of implicit theories of attitude stability (ITAS) from Petrocelli et al. (2010). The
measure was designed to distinguish those with an entity theory of attitudes from those with an incremental theory of attitudes (see Appendix). The scale for the items ranged from 1 (strongly disagree) to 6 (strongly agree). Items were reverse-coded where appropriate, and the eight items were averaged together to form a composite index ($\alpha = .95$) such that higher scores indicated greater endorsement of an entity theory of attitudes (range = 1.00-6.00, $M = 4.11$, $SD = 1.14$, Median = 4.125). Afterwards, participants reported their demographic information and were debriefed.

Results

As expected, ITAS was inversely correlated with perceived persuadability of others, $r(90) = -.24$, $p = .019$. The more participants endorsed an entity theory of attitudes, the less easy they thought it would be to change people’s minds about the death penalty. Also, perceived persuadability of others and likelihood of trying to persuade others were significantly correlated, $r(93) = .47$, $p < .001$. However, ITAS and likelihood of trying to persuade others were not correlated, $r(90) = .03$, $p = .79$.

Indirect effect. In order to test for an indirect effect of ITAS on likelihood of trying to persuade others, we conducted a bootstrapped mediation analysis (Preacher & Hayes, 2004; see Figure 1). As noted previously, ITAS significantly predicted perceived persuadability of others ($\beta = -.37$, $SE = .16$), $t(90) = -2.38$, $p = .019$, but it did not predict likelihood of trying to persuade others ($\beta = .06$, $SE = .26$), $t(90) = .26$, $p = .79$. When we entered ITAS and perceived persuadability of others into a regression analysis predicting likelihood of trying to persuade

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1 Attitude extremity (defined as deviation from the scale midpoint; Krosnick & Petty, 1995) and ITAS were not significantly correlated, $r(90) = .15$, $p = .14$. 
others, the relationship between perceived persuadability of others and likelihood of trying to persuade others remained strong and significant ($\beta = .73, SE = .12), t(89) = 5.85, p < .001. The relationship between ITAS and likelihood of trying to persuade others became marginally significant ($\beta = .33, SE = .19), t(89) = 1.73, p = .088. Note that the two conditions indicating suppression are present in these results: (1) The sign of the direct effect of ITAS on likelihood of trying to persuade others is positive, whereas the sign of the indirect effect through perceived persuadability of others is negative, and (2) the relationship between ITAS and likelihood of trying to persuade others is strengthened when the mediator is included. Most important, the indirect effect of ITAS on likelihood of trying to persuade others through perceived persuadability of others was significant and negative, 95% confidence interval (CI) = [-.59, - .04]. Thus, greater endorsement of an entity theory of attitudes was indirectly associated with a lower likelihood of trying to persuade others through the perception that others were less persuadable.

Discussion

Using the same scale with which Petrocelli et al. (2010) found a positive correlation between ITAS and attitude certainty, we found a negative correlation between ITAS and perceived persuadability of others. We should note that our perceived persuadability of others measure was worded in such a way that participants might have been reporting their own perceived ability to persuade others in addition to or instead of their perception of the persuadability of others per se. In Study 2, we sharpened the wording of this variable to make it strictly about the persuadability of others. Of importance, the presence of an indirect effect of implicit theory on advocacy through perceived persuadability of others in the absence of a direct effect is consistent with the notion that an opposing mediator may be involved. Obviously, the correlational nature of these data limits our ability to make causal inferences. It is possible that,
for example, people’s lack of desire to try to persuade others led them to the rationalization that
others are not persuadable, and the belief that others are not persuadable led them to endorse an
entity theory of attitudes. As in Petrocelli et al. (2010), the purpose of the filler task before the
ITAS items was to disrupt the possibility of this alternative explanation, but it is impossible to
rule it out completely. Regardless, this provisional study demonstrates the existence of a
relationship between an entity theory, the perceived unpersuadability of others, and advocacy.
Also, the presence of suppression in this relationship opens up the possibility that an opposing
mediator (which we hypothesize to be attitude certainty) is in fact at work.

Study 2

We had several objectives for Study 2. Our first objective was to allow for causal claims
by manipulating rather than measuring implicit theories of attitude stability. Our second
objective was to replicate the indirect effect of implicit theory on advocacy through perceived
persuadability of others that we established in Study 1. Most important, our third objective was
to simultaneously identify perceived persuadability of others and attitude certainty as opposing
mediators contributing to the nonsignificant direct of implicit theories on advocacy. Because we
included both implicit theory and attitude certainty variables, our fourth objective was to
replicate the effect of implicit theory on attitude certainty from Petrocelli et al. (2010). As noted
previously, they found that an entity theory of attitude stability led to the perception that one’s
own attitudes have been relatively stable over time, which in turn led to the perception that one
has certainty in one’s attitude. In the present study, we also measured perceived attitude stability
as a mediator of the effect of an entity theory on attitude certainty to replicate this effect.
Participants and design

Eighty-two participants, recruited using Amazon’s Mechanical Turk, took part in exchange for credit toward Amazon.com purchases. Participants were randomly assigned to one of two implicit theory of attitudes conditions: entity or incremental.

Procedure

Participants were told that they would be participating in two ostensibly unrelated studies. The first study was a memory and comprehension test in which participants read an excerpt from an article and answered questions about its content. The second study was a public opinion survey in which participants reported their thoughts, beliefs, and attitudes about a randomly assigned social issue (in reality, all participants answered questions about the death penalty).

Implicit theory of attitudes manipulation. First, participants were asked to read a short excerpt from a recently published scientific article. They were told that after completing an unrelated second task, they would answer comprehension questions about the excerpt. Participants were then randomly assigned to read a passage presenting scientific evidence that supported either an entity or incremental theory of attitudes (adapted from Chiu, Hong, & Dweck, 1997; Yorkston, Nunes, & Matta, 2010; see Appendix). After reading the passage, participants continued on to the second task.

Attitude. Participants reported their attitude towards the death penalty using the same measure as in Study 1. Also as in the previous study, we removed participants with neutral attitudes ($N = 5$).

Perceived attitude stability. Next, we assessed participants’ perceived attitude stability using two items (adapted from Petrocelli et al., 2010): (1) “How stable has your attitude toward
this policy been over time?” (1 [Not stable at all] – 9 [Very stable]), and (2) “How consistent has your attitude toward this policy been over time?” (1 [Not consistent at all] – 9 [Very consistent]). These two items were averaged together to form a composite index of perceived attitude stability (α = .98).

*Attitude certainty.* We then asked participants to report their attitude certainty on a single item (Petrocelli et al., 2010; Fazio & Zanna, 1978): “How certain are you about your attitude toward this policy?” (1 [Not certain at all] – 9 [Very certain]).

*Perceived persuadability of others.* We adjusted the wording of the perception measure from Study 1 to more closely focus on the persuadability of others as opposed to one’s own ability to persuade others: “How easily do you think people can change their minds about this policy?” (1 [Not easily at all] – 9 [Very easily]).

*Willingness to try to persuade others.* Next, we used the same dependent variable measuring advocacy that we used in the first study, except we slightly modified the wording to be about “willingness” to advocate rather than “likelihood” of advocating. We made this adjustment on the possibility that willingness is a substantively different behavioral intention measure than likelihood, and that the former is a better predictor of behavior than the latter is in some cases (for a summary see Fishbein & Ajzen, 2009). Participants reported their willingness to try to persuade other people to their side on the death penalty issue on a scale ranging from 1 (not willing at all) to 9 (very willing).

*Attitude stability ratings.* Finally, participants were directed to think back to the excerpt from the beginning of the session and then answered two questions about attitude stability. Taken from Petrocelli et al. (2010), they reported the extent to which they thought attitudes were stable or unstable (1 [Very unstable] – 9 [Very stable]) and easy or difficult to change (1 [very
easy] – 9 [very difficult]). Responses were averaged together to form a composite index of implicit theory of attitudes ($\alpha = .94$). Afterwards, participants reported their demographic information and were debriefed. Three participants suspected that the two studies were related, which led us to exclude their data from subsequent analysis.\(^2\) Thus, our final sample included 74 participants for analysis.

Results

**Attitude stability ratings.** Our implicit theory manipulation was successful, such that those who read an excerpt endorsing an entity theory ($M = 7.83, SD = 1.43$) reported that attitudes were significantly more stable and difficult to change than those who read an excerpt endorsing an incremental theory ($M = 3.64, SD = 1.74, t(71) = 11.2, p < .001$).

**Perceived attitude stability.** As expected, participants in the entity theory condition ($M = 6.91, SD = 2.24$) perceived their own attitude to be significantly more stable than did those in the incremental theory condition ($M = 5.70, SD = 2.48, t(72) = 2.19, p = .032$).

**Attitude certainty.** Similarly, participants in the entity theory condition ($M = 7.35, SD = 1.78$) were more certain of their attitude than were those in the incremental theory condition ($M = 6.43, SD = 2.17, t(72) = 1.99, p = .050$).

**Attitude certainty mediation.** To examine whether perceived attitude stability mediated the effect of implicit theory on attitude certainty, we conducted a bootstrapped mediation analysis (Preacher & Hayes, 2004). We already noted that the effect of implicit theory was significant on perceived attitude stability and attitude certainty. When we submitted attitude certainty to a regression analysis with implicit theory condition (dummy coded: entity = 1 and

\(^2\) Regardless, the significance of the results does not change when these participants are included.
incremental = 0) and perceived attitude stability as predictors, the relationship between perceived attitude stability and attitude certainty remained strong and significant ($\beta = .43, SE = .09, t(71) = 4.98, p < .001$, but the direct effect of implicit theory was no longer significant ($\beta = .41, SE = .41), t(71) = .91, p = .33$. Most important, a bootstrapped mediation analysis confirmed that the mediating pathway was significant, 95% CI = [0.08, 1.19]. Replicating past research and confirming our hypothesis, an entity theory of attitudes led to greater perceived attitude stability, which in turn fostered greater attitude certainty.

*Perceived persuadability of others.* Implicit theories of attitudes also had a tendency to predict perceived persuadability of others ($M_{\text{incremental}} = 4.22, SD_{\text{incremental}} = 1.72; M_{\text{entity}} = 3.57, SD_{\text{entity}} = 1.61), t(72) = 1.68, p = .098.$ As in Study 1, participants with an entity theory of attitudes perceived others to be less persuadable than did those with an incremental theory.

*Willingness to try to persuade others.* Replicating Study 1 and consistent with the possibility of opposing mediators, the direct effect of implicit theory on willingness to persuade others was not significant ($M_{\text{incremental}} = 4.95, SD_{\text{incremental}} = 2.68; M_{\text{entity}} = 4.86, SD_{\text{entity}} = 2.11), t(72) = .14, p = .88.

*Indirect effects.* In order to test whether implicit theories of attitudes had indirect effects on willingness to try to persuade others through two competing pathways—attitude certainty and perceived persuadability of others—we conducted a bootstrapped multiple mediation analysis according to Preacher & Hayes (2008). We noted above that an entity theory of attitudes led to more attitude certainty and less perceived persuadability of others. In a regression analysis with

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$^3$ Hayes (2009, 2013) recommends that one should examine indirect effects even if there is not a significant prediction of the mediator.
implicit theory, attitude certainty, and perceived persuadability of others simultaneously predicting willingness to try to persuade others, the effect of implicit theory on willingness to try to persuade others was not significant ($\beta = -.33, SE = .50), t(70) = -.66, p = .51. Both attitude certainty, ($\beta = .55, SE = .12), t(70) = 4.52, p < .001, and perceived persuadability of others, ($\beta = .39, SE = .15), t(70) = 2.72, p = .008, significantly predicted willingness to persuade others. Most important, a bootstrapped multiple mediation analysis revealed that an entity theory of attitudes significantly increased participants’ willingness to try to persuade others indirectly through an increase in attitude certainty, 95% CI = [.05, 1.13]. However, an entity theory of attitudes also significantly decreased participants’ willingness to try to persuade others indirectly through a decrease in perceived persuadability of others, 95% CI = [-.75, -.01] (see Figure 2). Thus, although it appeared that implicit theories had no direct effect on willingness to persuade others, it was actually the case that the two opposing indirect effects of attitude certainty and perceived persuadability of others canceled each other out.

Discussion

Study 2 replicated results from both Study 1 and past research, and it identified two opposing mediators of the relationship between implicit theories and advocacy. As in Study 1, people with an entity theory were less likely to perceive others as persuadable. Additionally, as in Petrocelli et al. (2010), people with an entity theory were more certain of their own attitudes because they perceived their attitudes to be more stable. These two effects exerted opposing influence on advocacy. One the one hand, people with an entity theory were more motivated to try to persuade others because they were more certain of their own attitudes. On the other hand, they were also less motivated to try to persuade others because they believed that others’ attitudes were difficult to change. If one looked solely at the (lack of) direct effect of implicit
theories on advocacy, one would erroneously infer that there is no relationship between the two. In reality, there were two competing forces that canceled each other out. Studies 3-5 explore factors that can make one or the other of these competing motivations dominant, thereby affecting advocacy directly.

Study 3

The goal of Study 3 was to determine whether the way advocacy is framed can tilt this balance such that an implicit theory can increase or decrease advocacy. People share their views with those who disagree with them for a variety reasons beyond just trying to persuade others. For example, people can express their opinions in order to compensate for self-uncertainty (Gal & Rucker, 2010; Rios, Wheeler, & Miller, 2012) or to bolster their self-concept (Wojnicki & Godes, 2008). In some cases, disclosing information about oneself can be intrinsically rewarding (Tamar & Mitchell, 2012). People can share their views to increase relationship intimacy via self-disclosure (Greene, Derlega, & Mathews, 2006), or fortify their commitment to their own convictions (Higgins & Rholes, 1978). Thus, people’s willingness to advocate can vary based on what they perceive to be the purpose of advocacy in a given context. Studies 1 and 2 framed advocacy in terms persuading others. But how might implicit theories affect willingness to advocate when advocacy is framed in ways that highlight other goals?

We have shown so far that entity theorists have conflicting motivations regarding their willingness to advocate—they are certain of their attitudes and are thus motivated to share them with others, and they believe that others’ attitudes are difficult to change and are thus less motivated to try to change them. If advocacy were framed not in terms of changing opinions, but instead in terms of standing up for convictions, the perceived persuadability of others could no longer be as relevant to an entity theorist’s willingness to advocate. “Standing up”, then, would
be associated with having certainty in one’s convictions without the association of trying change the minds of others.

Consequently, we hypothesized that if advocacy were framed as standing up for a cause, entity theorists would be more willing to advocate than incremental theorists. By comparison, if the purpose of advocacy were not as clear, one may not expect the same effect. For example, if advocacy were framed in terms of sharing or exchanging views, it would be less clear whether the context involved trying to change minds. Dialoguing or swapping opinions has a more ambiguous purpose, but suggests the possibility of mutual influence, making both one’s own and others’ attitude stability potentially relevant. Thus, we predicted that entity theorists would be more willing to advocate when advocacy was framed as standing up for one’s views, but not when advocacy was framed as exchanging one’s views with others.

Participants and design

Two hundred eighty-four participants, recruited using Amazon’s Mechanical Turk, took part in exchange for credit toward Amazon.com purchases. Participants were randomly assigned to one of two implicit theories of attitudes conditions (entity vs. incremental) and one of two advocacy frame conditions (stand up for vs. exchange views).

Procedure

We used the same implicit theories of attitude stability manipulation that we used in Study 2, with the same cover story of two unrelated studies (one about reading comprehension and the other about political attitudes). After reading the excerpt and completing a 10-minute filler task of personality scales, participants reported their attitudes towards the death penalty.
Thirty-four participants with neutral attitudes toward the death penalty were removed, leaving 250 participants for subsequent analysis.

_Framing manipulation._ Next, right before participants reported their willingness to advocate, we manipulated the way advocacy was framed. Participants were told they would be answering questions about situations in which people take opposing sides on this issue, and then they were exposed to one of two advocacy frames. The first frame was about standing up for one's views to others:

In day-to-day life, people sometimes encounter other people whom they disagree with regarding issues like the death penalty. For example, the subject may come up when talking to a friend, family member, or acquaintance. This creates an opportunity to stand up for or not stand up for one's views. Sometimes people take that opportunity to make their opinions known and represent their side of the issue. Other times, people do not take a stand for their perspective or voice their thoughts.

The second condition framed advocacy in terms of exchanging views with others:

In day-to-day life, people sometimes encounter other people whom they disagree with regarding issues like the death penalty. For example, the subject may come up when talking to a friend, family member, or acquaintance. This creates an opportunity to exchange or not exchange views. Sometimes people take that opportunity to swap opinions and share points of view. Other times, people do not dialogue about their perspectives or exchange their thoughts.

_Willingness to advocate._ To gauge willingness to advocate using wording that was neutral with respect to the perceived function of advocacy so as not to interfere with the framing
manipulation, all participants were asked how willing they would be to tell others about their views on the death penalty (1 [Not willing at all] – 9 [Very willing]).

Attitude stability ratings. Finally, participants rated attitude stability on the same two scales from Study 2 ($\alpha = .56$). Afterwards, they reported their demographic information and were debriefed.

**Results**

Attitude stability ratings. We conducted a 2 (implicit theory: entity vs. incremental) × 2 (advocacy frame: stand up vs. exchange) ANOVA predicting perceived attitude stability, which comprised the same two items from Study 2 ($\alpha = .56$). As expected, participants in the entity theory condition ($M = 5.73$, $SD = 1.71$) rated people’s attitudes as more stable and unchanging than did participants in the incremental theory condition ($M = 5.19$, $SD = 1.55$), $F(1, 247) = 6.81$, $p = .009$. Neither the main effect for advocacy frame, $p = .89$, nor the interaction, $p = .91$, was significant, suggesting that implicit theory ratings were not affected by advocacy frame.

Willingness to advocate. Next, we submitted participants’ willingness to advocate to the same the same 2 × 2 ANOVA. Neither the main effect for implicit theory, $p = .53$, nor the main effect for advocacy frame was significant, $p = .99$. Most important, as depicted in Figure 3, there was a significant interaction, $F(1, 246) = 6.53$, $p = .011$. As hypothesized, when advocacy was framed as standing up for one’s views, participants with an entity theory ($M = 7.17$, $SD = 1.88$) were more willing to tell others their opinions than were those with an incremental theory ($M = 6.37$, $SD = 2.13$), $t(126) = 2.23$, $p = .027$. However, when advocating was framed as exchanging views, those with an incremental theory ($M = 7.02$, $SD = 1.86$) were equally likely to share their views with others as those with an entity theory ($M = 6.52$, $SD = 2.10$), $t(120) = 1.39$, $p = .17$. If
anything, there was a tendency in the opposite direction from the pattern observed in the stand-up frame.

Discussion

Study 3 found that entity theorists could be motivated to advocate more than incremental theorists by framing advocacy as standing up for one's views. We found a tendency for the opposite pattern when advocacy was framed in terms of exchanging one's views with others. Perhaps the notion of sharing or dialoguing is more appealing to incremental theorists, who may see such a scenario as an opportunity to grow (Dweck, 1999). Regardless, these results are consistent with the mechanisms explored in Studies 1 and 2. Thinking of advocacy in terms of standing up for one’s views to others simultaneously appeals to entity theorists’ certainty regarding their convictions while reducing the relevance of the perceived difficulty of changing others’ opinions. This finding has implications for those wishing to promote advocacy. For example, if one knows the dominant theory of attitudes held by an audience, one can increase advocacy by framing it in a way that best matches the theory of the audience. More generally, this study highlights the idea that advocacy behaviors can result from multiple goals, and these goals have different implications for how implicit theories will translate into behavior.

Study 4

Our goal in Study 4 was to examine another means of tilting the balance of the opposing implicit theory processes on advocacy. Specifically, we examined whether one implicit theory could lead to greater advocacy than the other depending on whom participants focused their attention. Study 2 found that a belief in the unchanging nature of one’s own attitudes motivated advocacy, but belief in the unchanging nature of others’ attitudes demotivated advocacy. Previous research has shown that the same accessible construct can affect a person’s perceptions
and behaviors differently depending on whether the self or others are most salient to the person (DeMarree & Loersch, 2009). For example, when participants are primed with aggression, they could perceive themselves as more aggressive or others as more aggressive depending on whom they focus their attention. This difference in focus affects subsequent behavior as well. Participants behave more aggressively when they perceive themselves as aggressive but not when they perceive others (not present in the context) as aggressive.

We tested whether a similar manipulation could affect the target to which an implicit theory is primarily directed, thereby determining its effects on advocacy. An implicit theory (e.g. “Attitudes are relatively unchanging”) could be directed more to oneself (“My attitudes are unchanging”) or to others (“Others’ attitudes are unchanging”), depending on whether one thinks primarily about oneself or others in the context of the theory. This difference in focus could have implications for advocacy. To the extent that perceived persuadability of others influences whether people will advocate, an incremental theory of others’ attitudes should lead to more advocacy than an entity theory of others’ attitudes. However, one could imagine the opposite pattern when people focus on the self. Consistent with one’s own attitude certainty as a determinant of advocacy, people who are focusing on the stability of their own attitudes might be more willing to advocate than those who are focusing on the malleability of their own attitudes. We tested these hypotheses in Study 4. Finally, this study also increased the convergent validity of our findings by manipulating implicit theories in a different way than in Studies 2 and 3.

Participants and design

Three hundred fifty-seven participants, recruited using Amazon’s Mechanical Turk, took part in exchange for credit toward Amazon.com purchases. Participants were randomly assigned
to one of two implicit theories of attitudes conditions (entity vs. incremental) and one of two attention focus conditions (self vs. others).

Procedure

Participants were told that they would be taking part in two ostensibly unrelated tasks. For the first task, we told participants that we were collecting a database of people’s reflections and stories about various aspects of life in order to better understand how people communicate their thoughts. The second task was a public opinion survey in which participants would report their thoughts about a social issue.

Focus on self vs. others and entity vs. incremental theory manipulations. Participants were assigned to one of four conditions in which they were prompted to write about either themselves or other people they knew, and about how the target’s attitudes and opinions have changed greatly over time or not changed at all (see Appendix). Twenty-one participants did not follow the directions in the prompt correctly (e.g. they wrote about themselves when they were supposed to write about others or vice versa, or they wrote about changing opinions when they were supposed to write about unchanging opinions or vice versa). Consequently, these participants were removed from our analysis.

Attitude stability ratings. Participants then rated attitude stability on the same two scales from Study 2, except that the items in the self-focused condition were about participants’ own attitudes, whereas the items in the others-focused condition were about “people’s” attitudes. The two items were averaged together to form a composite index for the self-focused ($\alpha = .65$) and others-focused ($\alpha = .69$) conditions.
Running head: IMPLICIT THEORIES AFFECT ADVOCACY

Attitude. For the second task, participants reported their attitude towards the death penalty as in the previous studies. Again, we removed participants with neutral attitudes ($N = 21$), leaving 315 participants for our analysis.

Willingness to try to change the opinions of others. Next, participants were asked to imagine discussing their views on the death penalty with someone who disagrees with them. We measured advocacy using the same dependent variable in Study 2, except we slightly modified the wording to be about trying to “change the opinions” of others rather than “persuading” others, to more directly link participants’ implicit theories about attitude change with our measure of advocacy. Participants indicated their willingness to try to change the opinions of this person to their side on a scale ranging from 1 (not willing at all) to 9 (very willing). Afterwards, participants reported their demographic information and were debriefed.

Results

Attitude stability ratings. We began by submitting participants’ implicit theory of attitudes ratings to analysis. To allow for any effect of attention focus on these ratings, we conducted a 2 (implicit theory: entity vs. incremental) × 2 (focus: self vs. others) ANOVA predicting implicit theory ratings. First, the main effect for implicit theory was significant, such that participants rated attitudes as more stable in the entity ($M = 6.81$, $SD = 1.57$) than the incremental ($M = 5.94$, $SD = 1.59$) theory condition, $F(1, 313) = 20.8, p < .001$. The main effect for focus was also significant, indicating that participants rated attitudes as more stable when they focused on their own ($M = 6.75$, $SD = 1.46$) rather than others’ ($M = 5.94$, $SD = 1.73$) attitudes, $F(1, 313) = 19.3, p < .001$. The interaction was not significant, $F(1, 313) = 1.76, p = .19$, suggesting that the effect of implicit theory on attitude stability ratings did not vary by whether participants focused on themselves or others.
Willingness to try to change the opinions of others. Next, we conducted the same $2 \times 2$ ANOVA on willingness to try to change the opinions of others. Neither the main effect for implicit theory, $p = .80$, nor the main effect for focus, $p = .64$, was significant. Most important, as depicted in Figure 4, the interaction was significant, $F(1, 307) = 5.30, p = .022$. As hypothesized, when participants focused on the attitudes of others, those with an incremental theory of attitudes tended to be more willing to try to change the opinions of others than were those with an entity theory, $t(143) = 1.85, p = .066$. But when participants focused on their own attitudes, there was a tendency for those with an entity theory to be more willing to try to change the opinions of others than were those with an incremental theory, although this effect was not close to significant, $t(164) = 1.39, p = .17$.

Analyzing the same results from a different angle, participants with an entity theory were significantly more willing to try to change the opinions of others when they focused on their own ($M = 5.36, SD = 2.14$) rather than others’ ($M = 4.67, SD = 2.16$) attitude stability, $t(154) = 2.01, p = .046$. But participants with an incremental theory were not significantly more willing to advocate when they focused on others’ ($M = 5.35, SD = 2.23$) rather than their own ($M = 4.88, SD = 2.28$) attitude stability, $t(153) = 1.27, p = .20$, although the effect was in this direction.

Discussion

The overall pattern of results in the current study is consistent with the process evidence from the previous two studies. The tendency for one implicit theory to lead to more advocacy than the other implicit theory depended on whether people focused their implicit theory on themselves or on others. Because people’s perceptions of the persuadability of others affects their willingness to advocate, focusing on the malleability of others’ attitudes led to more willingness to try to change the opinions of others than did focusing on the unchanging nature of
others’ attitudes. Moreover, because the certainty people have about their own attitudes affects their willingness to advocate, we found a tendency for people to be more willing to advocate when they perceived their own attitudes as stable rather than malleable. However, this latter effect was weaker.

There are several potential reasons why our hypothesized simple effect was weaker in the self-focus condition than in the others-focus condition. First, it could be that focusing strictly on oneself was undermined by the fact that our advocacy question asked participants to report their willingness to change the opinions of others. In other words, whether participants focused on the (un)changing nature of their own or others’ attitudes, ultimately all participants had to consider the (un)changing nature of others’ opinions in order to determine how willing they would be to try to change those opinions. If this explanation is true, it suggests that on some level perceptions about the persuadability of others is inextricably linked to willingness to try to persuade others, regardless of focus. Perhaps a more neutrally worded dependent variable, one that does not explicitly deal with trying to change others’ views (e.g. willingness to “advocate”), would have found significant simple effects in the self-focus condition.

Second, participants generally perceived their own attitudes to be relatively stable, regardless of whether they focused on the stability or malleability of their own attitudes. Note the main effect in which participants rated their own attitudes as more stable and unchanging than others’ attitudes. This effect holds even when looking at participants in the incremental and entity theory conditions separately. That is, entity theorists who focused on and rated their own attitude stability ($M = 7.11, SD = 1.38$) reported greater attitude stability than did entity theorists who focused on and rated others’ attitude stability ($M = 6.49, SD = 1.71$), $t(157) = 2.53, p = .012$. The same was true for attitude stability ratings among incremental theorists ($M_{self-focus} = 6.41$, $M_{other-focus} = 6.25$), $t(157) = 2.48, p = .013$.
Running head: IMPLICIT THEORIES AFFECT ADVOCACY

SD_{self-focus} = 1.47; M_{others-focus} = 5.33, SD_{others-focus} = 1.55, t(154) = 4.46, p < .001. Note also that the stability ratings of entity theorists focusing on others (M = 6.49, SD = 1.71) and incremental theorists focusing on themselves (M = 6.41, SD = 1.47) were not significantly different, t(162) = .29, p = .77. It is possible that self-enhancement motivations affected these ratings (Taylor & Brown, 1988; see also De Castella & Byrne, 2015). To the extent that having stable attitudes is perceived as a positive trait, people may believe they have more of this trait than others do, similar to the finding that people believe that persuasive communications have a greater influence on others than on themselves (Davison, 1983). These self-serving biases might partly explain why the difference between advocacy levels was not as strong in the self-focus condition.

To further explore this possibility, consider differences in willingness to advocate within entity theorists and incremental theorists separately. Consistent with our hypothesis, entity theorists were significantly more willing to try to change the opinions of others when they focused on their own rather than others’ attitude stability. But incremental theorists were not significantly more willing to advocate when they focused on others’ rather than their own attitude (in)stability. A self-serving motivation to perceive one’s own attitudes as less malleable may have dampened the significance of this effect among incremental theorists, but not among entity theorists.

Replication and meta-analysis

Much of the discussion above assumes that the pattern of relatively stronger and weaker simple effects in this study are in fact reliable. In order to validate this assumption, we re-ran Study 4 and meta-analyzed the results from the original study and its replication (Braver, Thoemmes, & Rosenthal, 2014). The replication (N = 400, of which 42 were removed for neutral
attitudes towards the death penalty and 16 were removed for not following the manipulation prompt correctly) produced the same pattern of results.

Attitude stability ratings. The 2 (implicit theory: entity vs. incremental) × 2 (focus: self vs. others) ANOVA predicting implicit theory ratings again had significant main effects for implicit theory ($M_{\text{entity}} = 6.96, SD_{\text{entity}} = 1.40; M_{\text{incremental}} = 5.91, SD_{\text{incremental}} = 1.40; F(1, 339) = 50.8, p < .001$) and focus ($M_{\text{self-focus}} = 6.69, SD_{\text{self-focus}} = 1.52; M_{\text{others-focus}} = 6.13, SD_{\text{others-focus}} = 1.41; F(1, 339) = 19.8, p < .001$), and the interaction was again not significant $F(1, 338) = .44, p = .51$. Participants again perceived their own attitudes to be relatively stable, regardless of the implicit theory condition they were in. Entity theorists reported higher attitude stability ratings when the focus was on their own ($M = 7.34, SD = 1.33$) rather than others' attitude stability ($M = 6.59, SD = 1.37$), $t(168) = 3.65, p < .001$. Incremental theorists did the same ($M_{\text{self-focus}} = 6.15, SD_{\text{self-focus}} = 1.46; M_{\text{others-focus}} = 5.59, SD_{\text{others-focus}} = 1.25, t(170) = 2.65, p = .009$. Hence, although the manipulation was again successful, people in both conditions believed their own attitudes to be more stable than those of others.

Willingness to try to change the opinions of others. The same $2 \times 2$ ANOVA predicting willingness to try to change the opinions of others did not have significant main effects for implicit theory, $p = .69$, or focus, $p = .79$, but the interaction was again significant, $F(1, 338) = 4.22, p = .041$. As in the original study, when participants focused on the attitudes of others, incremental theorists ($M = 5.53, SD = 2.07$) tended to be more willing to try to change the opinions of others than were entity theorists ($M = 4.88, SD = 2.53$), $t(160) = 1.77, p = .078$, but when participants focused on their own attitudes, there was a nonsignificant tendency in the opposite direction ($M_{\text{entity}} = 5.46, SD_{\text{entity}} = 2.27; M_{\text{incremental}} = 5.07, SD_{\text{incremental}} = 2.40), t(178) = 1.12, p = .26$. From a different angle, there was a tendency for entity theorists to be more willing
to try to change the opinions of others when they focused on their own rather than others’ attitude stability, $t(168) = 1.59, p = .11$. But among incremental theorists, there was a nonsignificant trend in the other direction, $t(170) = 1.31, p = .19$.

Meta-analysis. Given that many of the simple effects on willingness to try to change the opinions of others were marginal or nonsignificant in Study 4 and its replication, we conducted a meta-analysis combining the two studies to determine whether the pattern of results are reliable. Following the recommendations of Braver, Thoemmes, & Rosenthal (2014), we conducted a test of heterogeneity of effect sizes and determined that the effect sizes for the simple effects in Study 4 did not significantly differ from their corresponding effect sizes in the replication study (all $I^2$s = 0.0%), thus making it appropriate to pool the results from both studies.

Across both studies, when participants focused on the attitudes of others, incremental theorists were more willing to try to change the opinions of others than entity theorists were, $d = .29, 95\% \text{ CI} = [.06, .51], p = .012$. When participants focused on their own attitudes, entity theorists were more willing to try to change the opinions of others than incremental theorists were, though the effect was weaker, $d = .19, 95\% \text{ CI} = [-.02, .40], p = .077$. From the other angle, entity theorists were more willing to try to change the opinions of others when they focused on their own rather than others’ attitude stability, $d = .28, 95\% \text{ CI} = [.06, .50], p = .011$. But among incremental theorists, focusing on others led to greater willingness to try to change the opinions of others than focusing on oneself did, though this effect was also weaker, $d = .20, 95\% \text{ CI} = [-.01, .42], p = .070$.

The results of the replication and meta-analysis support the interpretations we outlined in the discussion section above. Because people’s willingness to try change the opinions of others depends on both their perceptions of others’ attitudes (i.e. persuadability) and their own attitudes
(i.e. attitude certainty), focusing on others or oneself affects willingness to advocate. These results also add further plausibility to the role that self-serving biases may play in dampening the effects of implicit theories on willingness to advocate.

Study 5

Study 5 addressed several goals. Whereas Studies 1-4 measured the effect of implicit theories on advocacy intentions, Study 5 assessed participants’ actual advocacy behavior in a completely different paradigm. Specifically, we gave participants an opportunity to chat online with someone who took a different viewpoint on a social issue. The stated goal of the interaction was to change the other person’s attitude on the issue in an online chat. Consistent with previous research, we assessed participants’ advocacy effort in terms of the number of arguments they made (Briñol, McCaslin, & Petty, 2012) and the number of words they wrote in support of their position (Gal & Rucker, 2010; Akhtar et al., 2013). In addition to measuring actual behavior, we also changed the attitude issue to increase the generalizability of our findings. Moreover, we enhanced the convergent validity of our results by manipulating implicit theories in yet another way, via false personality feedback.

Finally, we also wanted to explore further the extent to which people’s implicit theories of their own attitudes are tied to their beliefs about others’ attitudes. Studies 1 and 2 suggest that people generally apply the same implicit theory of attitudes simultaneously to themselves and others, e.g. someone who thinks his own attitudes are unchanging will think that others’ attitudes are also unchanging (see also De Castella & Byrne, 2015). This finding is consistent with the notion that people tend to think their own beliefs are typical of others’ beliefs (Ross, Greene, & House, 1977). Study 4 raised the possibility, though, that under certain circumstances people may view their own attitude stability somewhat differently from how they view the stability of
others’. To explore the consequences of holding to one implicit theory for one’s own attitudes while simultaneously holding to the opposite implicit theory for others’ attitudes, we created a false personality feedback paradigm in which participants were told that their own attitudes were fixed (malleable) but others’ attitudes were malleable (fixed). We hypothesized that participants with an entity theory of their own attitudes and an incremental theory of others’ attitudes would engage in more persuasion effort than would participants with an incremental theory of their own attitudes and an entity theory of others’ attitudes. Studies 1 and 2 showed that the application of the same implicit theory of attitudes both to oneself and to others leads to the null effect of implicit theories on advocacy. Thus, if the perceptual barrier that prevents entity theorists from advocating more (i.e. the belief that others are also difficult to persuade) can be removed by dissociating one’s beliefs about oneself from one’s beliefs about others, we should expect entity theorists to engage in more persuasion effort than incremental theorists. Although this manipulation has the benefit of providing realistic personality feedback to individual participants and of showing that theories of self and others can move in opposite directions, it does not permit the statistical isolation of the multiple effects of a single implicit theory (about one’s own or others’ attitudes), an issue we return to in the discussion.

Participants and design

One hundred thirty-eight university students and staff participated in a lab study for monetary compensation. Participants were randomly assigned to one of two implicit theory conditions: entity theory of one’s own attitudes and incremental theory of others’ attitudes vs. incremental theory of one’s own attitudes and entity theory of others’ attitudes.
Procedure

Participants were told that they would be participating in two ostensibly unrelated tasks. The first task was a personality questionnaire that provided participants with a personality assessment upon completion. Participants answered questions about their assessment later in the session supposedly to test their memory of the feedback they received. For the second task, we told participants that we were conducting public opinion research on the U.S. population’s beliefs and opinions about current events. All participants answered questions about immigration reform and were presented with the opportunity to chat online with another participant about their beliefs on the topic.

Implicit theory of attitudes manipulation. In order to manipulate participants’ implicit theories of their own and others’ attitudes, we used a false personality feedback paradigm (Forer, 1949). First, participants were asked to take a personality questionnaire, which involved completing the 44-item Big Five Inventory (John, Naumann, & Soto, 2008), reporting the number of car accidents the participant had been involved in within the past year, and describing a typical day in the participant’s life. After completing the questionnaire, participants were led to believe that a reputable software program developed by personality research experts would analyze their responses and provide an assessment of their personality. We also told participants that we were interested in how well people remembered their personality assessments and that consequently they would be asked questions about their assessment after completing the second task. In a question at the end of the study, 92% of participants selected the midpoint or higher when rating the perceived accuracy of the personality feedback (1 [very inaccurate] – 9 [very accurate]), thus confirming the general believability of the assessment.
After completing the questionnaire, participants were randomly assigned to receive the feedback that their own attitudes were fixed whereas others’ attitudes were malleable or that their own attitudes were malleable whereas others’ attitudes were fixed. Across both conditions, participants also received the same feedback on how well-liked and how self-critical they were (see Appendix). After reading their assessments, participants moved on to the second task about current events.

**Attitude.** Participants reported their attitude towards enacting stricter immigration laws in the United States on a scale ranging from 1 (completely oppose) to 5 (neither oppose nor support) to 9 (completely support).

**Online chat.** Next, participants were told that they would have the opportunity to chat online with someone who was also participating in the study but whose stance on immigration was different from theirs. Specifically, we told participants that the chat was an opportunity to try to change the other person’s opinion on the issue. In reality, the other person in the chat was a research assistant posing as another participant. To bolster the cover story, we told participants that the person with whom they were chatting would report their attitude on the issue again after the chat, thus allowing the researchers to measure how much the person’s attitude towards immigration changed as a result of the chat. Participants were told that they could chat however much they wanted, and that when they were finished they could thank the other participant and move on to the next part of the study. After reading the instructions, participants had to indicate whether they did or did not want to proceed with the online chat (56 agreed to chat, 71 declined). Those who declined to chat were taken directly to the personality trait ratings.

Once participants agreed to chat, they were given further instruction on how the chat session would go. Participants were told that after they exchanged pleasantries, they should...
restrict their communication to taking turns advocating for their position, beginning their messages with the clauses, “I believe…”, “I feel…”, “I think…”, “In my opinion…”, “Yes, but…”, or “No, actually…”. In addition to minimizing communication unrelated to advocacy, structuring the chat this way also allowed us to standardize the messages that the confederate would communicate to the participant. We provided the confederate with ten arguments for and ten arguments against stricter immigration laws that they could use during the online chat. If the participant and confederate exchanged ten arguments each, the confederate was instructed to thank the participant for the interaction and end the chat. The participant was always instructed to make the first argument so that the confederate could respond with arguments for the other side, though all participants, including those with neutral views, were given the opportunity to chat. If the participant stated he or she was neutral, the confederate asked the participant which side he or she leaned towards and to advocate for that position so that neutral participants could be retained in the analysis to maximize the power from this lab sample.

*Number of arguments.* For each participant’s chat session, we counted the number of arguments the participant made in favor of their position. If a participant declined the opportunity to chat, we coded their number of arguments as 0. Number of arguments ranged from 0-10, \( M = 1.28, SD = 2.20 \) (range = 0-10, \( M = 2.28, SD = 2.53 \) among those who agreed to chat).

*Number of words.* We calculated the number of words the participant used when advocating by adding up the number of words from each of the participant’s arguments. Thus, word count did not include any of the pleasantries exchanged at the beginning and end of each session. If a participant declined the opportunity to chat, we coded their word count as 0.
Number of words ranged from 0-754, $M = 74.6$, $SD = 141.6$ (range = 0-754, $M = 164.8$, $SD = 173.2$ among those who agreed to chat).

Personality trait ratings. Finally, participants were asked to think back to the personality feedback they received earlier in the session and then answered four items about the extent to which various traits characterized them. They reported how likable or unlikable they thought they were (1 [Very unlikable] — 9 [Very likable]), how flexible or inflexible they thought their attitudes were (1 [Very inflexible] — 9 [Very flexible]), how unstable or stable they thought their attitudes were (1 [Very stable] — 9 [Very unstable]), and how self-critical they would say they were (1 [Very Not self-critical at all] — 9 [Very self-critical]).

Afterwards, participants reported their demographic information, were checked for suspicion, and were debriefed. Seven participants suspected that the other person in the chat was an RA or that the personality assessment was fake, so we excluded their data from subsequent analysis. We removed four participants from analysis due to errors with their chat session. One participant made an ambiguous first argument that led the confederate to argue for the wrong (i.e. the participant’s) side. One participant’s chat session was disconnected before the chat was complete. One participant exited the chat because he thought the other participant got disconnected. One participant agreed to chat but could not because the chat platform was not working. Thus, our final sample included 127 participants for analysis.

Results

Personality trait ratings. Our personality feedback manipulation was successful, such that those who received the feedback indicating an entity theory of one’s own attitudes and an incremental theory of others’ attitudes ($M_{entity} = 5.51$, $SD_{entity} = 1.65$) rated their attitudes as significantly less flexible than did those whose feedback indicated an incremental theory of one’s
own attitudes and an entity theory of others’ attitudes ($M_{incremental} = 6.88$, $SD_{incremental} = 1.77$), $t(123) = 4.46, p < .001$). Entity theorists rated their attitudes as significantly less unstable as well ($M_{entity} = 3.66$, $SD_{entity} = 1.85$; $M_{incremental} = 5.15$, $SD_{incremental} = 2.00$; $t(123) = 4.30, p < .001$).

However, entity and incremental theorists did not differ on how likable or self-critical they perceived themselves to be ($ps > .49$).

**Number of arguments.** As hypothesized, entity theorists made significantly more arguments in favor of their position ($M = 1.72$, $SD = 2.66$) than did incremental theorists ($M = .88$, $SD = 1.57$), $t(125) = 2.19, p = .030$.

**Number of words.** Similarly, entity theorists typed significantly more words in their effort to persuade their chat partner ($M = 101.2$, $SD = 181.0$) than did incremental theorists ($M = 50.0$, $SD = 85.7$), $t(125) = 2.06, p = .041$.

**Discussion**

Study 5 bolstered the external validity of the results from Studies 1-4 by demonstrating the effect of implicit theories of attitudes on actual advocacy behaviors (number of arguments and words), in a different paradigm (online chat), with a different attitude issue (immigration reform), and using a different implicit theories manipulation (false personality feedback). Moreover, the current study explored the effects of a context in which people’s implicit theories of their own attitudes differed from their implicit theories of others’ attitudes. Although Studies 1 and 2 showed that people on average tend to apply the same implicit theories of attitudes to themselves and others, the current study further demonstrates that it is possible for people to separate the two. Receiving feedback that one’s own attitudes are fixed but others’ attitudes are malleable increases advocacy by increasing attitude certainty, but that same feedback buffers against the countervailing notion that naturally accompanies an entity theory of one’s own
attitudes – that others’ attitudes are also fixed and therefore difficult to change. By decoupling the belief that if one’s own attitudes are fixed then others’ attitudes are as well, an entity theory of attitudes leads to greater efforts to persuade others. Thus, Study 5 joins Studies 3 and 4 in demonstrating another context in which implicit theories can be made to have a direct impact on advocacy. It should be noted that although this design highlights the separability of one’s implicit theories for self and others, it does not by itself conclusively establish the simultaneous operation of theories of self and other. That is, the results of Study 5 could have been driven by theories about one's own attitudes, theories about others’, or some combination of the two.

Studies 1-4 all provided various forms of evidence that beliefs about the stability of both one’s own and others’ attitudes can affect advocacy, either simultaneously or in isolation, but this study does not add unambiguously to showing these opposing processes. Rather, this study should be viewed as providing evidence of actual advocacy behaviors following realistic personality feedback about one’s own and others’ attitude stability when those characteristics are different. Future research could profitably explore manipulations that could provide individual feedback while manipulating theories of self and others orthogonally.

Meta-analysis

Our primary hypothesis in this paper was that implicit theories of attitude stability could affect advocacy through two offsetting paths, one based on the perceived malleability of others’ attitudes and one based on the perceived malleability of one’s own attitudes. We conducted a meta-analysis in order to assess the strength of the effects of implicit theories on advocacy across Studies 1-5 and the replication of Study 4. Within each combination of effects described below, the effect sizes did not differ significantly across studies (all $I^2$s = 0.0%), thus making it
appropriate to calculate all of the corresponding pooled estimates. In order for each meta-analysis to only include comparable effects, we avoided combining the indirect effects of Studies 1 and 2 with the direct effects of Studies 3-5.

*Direct effect of implicit theory on willingness to advocate.* Across Studies 1 and 2, the direct effect of implicit theories on advocacy was not significant, \( d = .05 \), 95% CI = [-.26, .35], \( p = .76 \).

*Effect of implicit theory on perceived persuadability of others.* Across Studies 1 and 2, entity theorists perceived others to be significantly less persuadable than incremental theorists did, \( d = -.44 \), 95% CI = [-.77, -.12], \( p = .007 \).

*Effect of perceived persuadability of others on willingness to try to persuade others.* Across Studies 1 and 2, greater perceived persuadability of others was associated with significantly greater willingness to try to persuade others when controlling for the effect implicit theory, \( d = 1.01 \), 95% CI = [.69, 1.33], \( p < .001 \).

*Indirect effect of implicit theory on willingness to try to persuade others.* Across Studies 1 and 2, an entity theory of attitudes significantly decreased willingness to try to persuade others indirectly via a decrease in the perceived persuadability of others, \( a \times b = -.27 \), \( SE = .11 \), 95% CI = [-.48, -.05], \( p = .014 \).\(^4\)

*Effect of implicit theory on advocacy among those focused on others.* We noted earlier that across Study 4 and its replication, incremental theorists were more willing to advocate than

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\(^4\) Because no commonly accepted method of calculating and reporting the effect size of indirect effects in multiple mediation models exists in the literature (Preacher & Kelley, 2011; cf. Wen & Fan, 2015), we report the pooled estimate of the indirect effect (i.e. \( a \times b \)) instead.
entity theorists were when the focus was on others' attitude stability, $d = .29$, 95% CI = [.06, .51], $p = .012$. Also as noted earlier, the design of Study 5 manipulates theories of one's own and others' attitude stability simultaneously. One could therefore argue that Study 5 also compares the effect of implicit theories among those who are focused on others. If one views Study 5 in that way, then a meta-analysis combining the effects from Study 4, its replication, and the effects on number of arguments and word count in Study 5 would be appropriate. This analysis also shows that incremental theorists were significantly more willing to advocate than entity theorists were when focusing on others, $d = .33$, 95% CI = [.16, .49], $p < .001$.

Effect of implicit theory on advocacy among those focused on themselves. If one considers the “stand-up” framing condition in Study 3 to be an instance in which participants focused on their own attitude stability as opposed to others' because standing up for one's views does not necessarily involve considering other people’s attitude stability, then Study 3 also provides an effect of implicit theory on advocacy when participants focused on themselves. Across Studies 3, 4, and its replication, entity theorists were significantly more willing to advocate than incremental theorists were when focusing on themselves, $d = .24$, 95% CI = [.06, .42], $p = .008$. Similar to the previous meta-analysis, if one considers Study 5 to be a test of the effect of an entity theory of one’s own attitudes versus an incremental theory of one's own attitudes on advocacy, then the effect of implicit theory on number of arguments and word count could be included in the meta-analysis as well. Combining these effects from Studies 3, 4, Study 4's replication, and Study 5, entity theorists were again significantly more willing to advocate than incremental theorists were when focusing on the self, $d = .29$, 95% CI = [.15, .44], $p < .001$. 
Taken together, the meta-analysis confirms the central arguments put forward in this paper. Although there appeared to be no direct effect of implicit theory on advocacy, there were opposing indirect effects through attitude certainty and perceived persuadability of others. As a result, entity theorists were more willing to advocate when focusing on the self, and incremental theorists were more willing to advocate when focusing on others.

General Discussion

The current studies provide the first evidence that implicit theories can affect advocacy, even though under some circumstances it may appear that there is no relationship between the two. In doing so, they reveal two distinct determinants of peoples’ willingness to persuade others. The first determinant was uncovered by uniting previously distinct literatures on the effects of implicit theories on attitude certainty and attitude certainty on advocacy. This is a means by which entity theories of attitudes can increase advocacy. The second determinant was uncovered by considering how implicit theories of attitudes could affect views of others’ persuadability and shows that entity theories can decrease advocacy. Studies 1 and 2 provide correlational and causal evidence that attitude certainty and perceived persuadability of others exert countervailing effects on entity theorists’ willingness to advocate, canceling out an overall direct effect.

Studies 3-5 show that implicit theories of attitude stability can lead to net direct effects under some circumstances. Specifically, entity and incremental theorists can become more or less willing to advocate, depending on how advocacy is framed, on whom they focus their attention, and to whom each (different) theory is applied. Study 3 showed that entity theorists become more willing to advocate than do incremental theorists when advocacy is framed as standing up for one’s views, but not when advocacy is framed as exchanging views. When
advocacy is construed less in terms of what impact it may have on the convictions of others (e.g. exchanging views), and more in terms of acting on behalf of one's own convictions (e.g. standing up for views), entity theorists become more likely to tell others about their views. Study 4 showed that those who focused on the changeable nature of others’ attitudes were more willing to advocate than those who focused on the fixed nature of others’ attitudes. Hence, incremental theories led to more advocacy. But when participants focused on their own attitudes, there was a tendency for entity theorists to become more willing to advocate. Moreover, Study 5 showed that when people receive feedback that the stability of their own attitudes differs from that of others’, an entity theory of one’s own attitudes and an incremental theory of others’ attitudes leads to greater advocacy than an incremental theory of one’s own attitudes and an entity theory of others’ attitudes. Thus, not only can people separate their beliefs about their own attitudes from their beliefs about others’ attitudes, but doing so affects their willingness to try to persuade others.

Studies 1-2 underscore the importance of testing for mediation even when there is no direct effect (Rucker et al., 2011; Zhao, Lynch, & Chen, 2010). Preacher & Hayes (2008) note that multiple mediation testing receives relatively little attention in both the methodological and applied literatures, despite the fact that “potential uses for such methods are clear and abundant” (p. 881). In our studies, simultaneously measuring opposing indirect effects was crucial to understanding the true relationship between implicit theories and advocacy. The current research adds to the growing literature on the role that multiple mediation hypothesis testing plays in theory building.

The present studies also make broader contributions both to the implicit theories and advocacy literatures and provide directions for future research. Regarding implicit theories
research, this paper is the second application of implicit theories to attitudes, and it is the first to show that implicit theories can affect advocacy. Additionally, we show that the same implicit theory can have very different effects, depending on the focus of the individual, the implications of the theory for behavior, and the target to whom the theory is applied. Last, we introduce two new manipulations of implicit theories, and in doing so, we provide some of the earliest evidence that implicit theories of self and others can differ and show that they can differ much more substantially than was suggested by the only other paper examining a similar distinction (De Castella & Byrne, 2015).

The current research raises an important question about implicit theories: When do people apply the same implicit theory to themselves as they do to others, and when do they not? Study 4 raised the possibility that people might sometimes hold different theories for themselves and others. Specifically, participants rated their own attitudes as more stable and unchanging than they did others’ attitudes. It could be that “stable” or “consistent” attitudes are perceived as more desirable than “unstable” or “inconsistent” attitudes. If so, this self-enhancement in implicit theories (e.g., Taylor & Brown, 1998; Davison, 1983) would parallel that found in other work (De Castella & Byrne, 2015). This pattern could potentially be modified by the way stability is framed. For example, using terms like “inflexible” or “rigid” to describe an entity theory of attitudes might make having an incremental theory seem more desirable and could potentially reverse the effect.

It could also be that certain traits are associated with an implicit theory of attitudes but not associated (or differently associated) with implicit theories in other domains. We know from prior work that implicit theories can be domain-specific (e.g. if a person has an entity theory about morality, it does not necessarily follow that she has an entity theory of intelligence as well;
Dweck, Chiu, & Hong, 1995). Further, it may be that traits associated with different types of implicit theories are domain-specific as well. For example, though previous work found that political party identification and ideology were not correlated with implicit theories of morality or intelligence (Dweck, Chiu, & Hong, 1995), we have preliminary evidence that Republicans and conservatives are more likely to have an entity theory of attitudes. Using the demographic data from the survey in Study 1, we found that being Republican (on a scale ranging from 1 [Strong Democrat] to 7 [Strong Republican]), \( r(90) = .25, \ p = .017 \), and conservative (on a scale ranging from 1 [Extremely Liberal] to 7 [Extremely Conservative]), \( r(90) = .22, \ p = .037 \), were significantly correlated with higher scores on the ITAS scale (indicating greater endorsement of an entity theory of attitudes). Future research could explore how robust this relationship is and whether it has implications for the advocacy strategies Republicans and Democrats employ.

Moving beyond implicit theories research, the present studies provide new insights into advocacy research as well. Most of the limited research on advocacy has focused on factors that are intrinsic to the person doing the persuading, e.g. attitude strength, issue importance (Krosnick & Petty, 1995), attitude certainty, and perceived argumentation efficacy (Akhtar et al., 2013; Visser et al., 2003). Our research demonstrates that people’s perceptions of the target of their persuasive effort (e.g. the persuadability of the target) also play an important role in predicting advocacy. Indeed, our studies indicate that sometimes the same factor (e.g. an entity theory of attitudes) simultaneously influences people’s perceptions of themselves and of those whom they are trying to persuade.

This work also provides clarity regarding attitude certainty’s effects on advocacy. Although greater attitude certainty generally fosters greater advocacy, this is not necessarily the case when that greater certainty is derived from an entity theory of attitudes. Thus, an entity
theory of attitudes stands as the first known example of a factor that increases attitude certainty but not the concomitant advocacy. This finding suggests that in order to accurately predict when attitude certainty will lead to greater advocacy, it is important to know its source. Future research may discover that other predictors of greater attitude certainty, of which there are many (see Bizer, Tormala, Rucker, & Petty, 2006), do not ultimately lead to greater advocacy as well.

The current work also highlights the importance of distinguishing between different types of behaviors in support of a cause. The previous work on implicit theories of attitude stability found that an entity theory of attitudes led to greater attitude certainty, which in turn made students in favor of a campus initiative more willing to support a campus group promoting the initiative (Petrocelli et al., 2010, Study 2). Entity theorists might not need to consider the presumed unpersuadability of others when supporting a campus group, but they might when trying to persuade others. Attitude-consistent behaviors differ in the extent to which they involve mere attitudinal expression, as opposed to an attempt to change others’ minds. Hence, factors that predict some types of supportive behaviors (e.g. signing petitions; Barden & Petty, 2008) may not predict other types (e.g. trying to persuade others; Visser et al., 2003), despite the tendency for prior research to conflate these various types (e.g. Akhtar et al., 2013).

There could additionally be idiosyncratic variance in how people perceive a given advocacy behavior, such as putting a bumper sticker on one’s car. To the extent one views such an activity as standing up for one’s views (as opposed to persuading others), and entity theory could lead to a greater propensity to advocate. Similarly, as shown in Study 3, the same activity could be framed to supporters in different ways, with corresponding effects on willingness to advocate. In the present studies, we used willingness to try to persuade others, both because it makes the intention of the behavior explicit (i.e., it is about persuading others, and so others’
attitude stability is an important factor), and because it maximizes the likelihood for both of our demonstrated mechanisms to be operating. Future research could examine a wider array of advocacy behaviors to examine how the behaviors, and the way individuals perceive them, interact with implicit theories to determine action.

Our findings also have potential implications for the strategies people use to gain compliance from others. Some interpersonal interactions, like negotiations, often necessitate that people from two sides of an issue adjust their stances and come to some sort of agreement. In such a case, a person’s implicit theory about the malleability of attitudes could influence the strategies that she uses in negotiation. For example, someone with an incremental theory of attitudes could be more willing to try to persuade her opponent due to her more optimistic view of the persuadability of others. On the other hand, an entity theorist could be more likely to use other strategies, like coercion, that still seek compliance from the opponent without any attempts to change the opponent’s convictions. It could be that the strategies that people use to gain compliance or influence others differ significantly based on their lay theories about the malleability of attitudes.

Finally, the current work also has implications for persuasion research in general. Although persuasion research has traditionally focused primarily on attitude change, the current research underscores the importance of exploring other aspects of persuasion, such as factors that motivate people to try to change the attitudes of others. Pursuing research on determinants of advocacy is all the more important given the ubiquity of social media, in which users are given unparalleled opportunities to communicate their convictions to others, influence their social networks, and change the course of companies, organizations, and governments. Indeed, to the extent that marketers or organizations will continue to pursue strategies that empower their
supporters to persuade others on behalf of their causes, understanding what motivates people to proclaim their convictions or try to persuade others will continue to be an important area of persuasion research.
Appendix

ITAS scale in Study 1

1. You have a certain set of attitudes, and you can't really do much to change it.
2. No matter who you are, you can significantly change your attitudes.*
3. You can learn new things, but you can't really change your basic attitudes.
4. Someone's attitudes are a part of them that they can't change very much.
5. A person can do things to cover their attitudes up, but they can't change their real attitudes.
6. People can always change their attitudes.*
7. The kinds of attitudes someone holds are something that is very basic about them, and they can't be changed much.
8. Everyone, no matter who they are, can significantly change their attitudes.*

*Reverse-scored item

Stimuli in Studies 2 and 3

Excerpt endorsing an entity theory of attitudes

Scientists have concluded that people's core beliefs, opinions, and attitudes tend to be static rather than dynamic. In other words, who you are and what you truly believe is basically set well before you enter adulthood, and these features of your personality are durable throughout adulthood.

Research has confirmed that people generally do not change much over time. Human nature used to be thought of as a bundle of potentialities, each of which could be developed. However, through years of rigorous research, scientists have arrived at the view that you possess a finite set of rather fixed traits. In his talk at the American Psychological Association’s annual convention held at Washington D.C. in August, Dr. George Medin argued that “in most of us, by the age of ten, our character has set like plaster and will never soften again.” He reported numerous large longitudinal studies which show that you “age and develop, but you do so on the foundation of enduring dispositions.” He also reported research findings showing that your personality characteristics are fixed and cannot be changed.


Excerpt endorsing an incremental theory of attitudes

Scientists have concluded that people's core beliefs, opinions, and attitudes tend to be dynamic rather than static. In other words, who you are and what you truly believe is susceptible to significant change throughout life, and these features of your personality are highly malleable throughout adulthood.

Research has confirmed that people generally change a great deal over time. Human nature used to be thought of as a finite set of rather fixed traits. However, this view is now outmoded. Through years of rigorous research, scientists have arrived at the view that you possess dynamic potentialities that can be cultivated and developed over a lifetime. In his talk at the American Psychological Association's annual convention held at Washington D.C. in August, Dr. George Medin argued that 'your character is pliable. You only need a little effort and determination to effect changes.' He reported numerous large longitudinal studies which show that you can mature and can change your character. He also reported research findings showing that your personality characteristics can be changed even in your late sixties.

Stimuli in Study 4

Self-focus writing prompt [entity theory/incremental theory]

Now, think about how your own attitudes and opinions on various issues have [remained the same/changed a great deal] over time. In the space below, please carefully describe how your attitudes and opinions have [been consistent and stable/shifted greatly], and how [you have not changed them/your attitudes have been malleable] over the course of your life, even across different life experiences.

Others-focus writing prompt [entity theory/incremental theory]

Now, think about other people that you know whose attitudes and opinions on various issues have [remained the same/changed a great deal] over time. In the space below, please carefully describe how the attitudes and opinions of other people that you know have [been consistent and stable/shifted greatly], and how [they have not changed them/their attitudes have been malleable] over the course of their life, even across different life experiences.

Stimuli in Study 5

Personality assessment endorsing entity theory of one’s own attitudes and incremental theory of others’ attitudes

You are generally well-liked by your peers, although in rare circumstances you find it difficult to get along with others. You want to be liked by your acquaintances, and you frequently adjust behaviors around them in order to leave a positive impression. You find that it is not too difficult to anticipate what those around you are thinking.

Your beliefs and convictions tend to stay stable over time despite your new life experiences, revealing the high solidity of your opinions. Indeed, many of the attitudes and opinions you currently hold are ones that you’ve held for most of your life, and you will likely continue to hold them for the rest of your life.

Although most people's attitudes and opinions are highly susceptible to influence and therefore very easy to change, your attitudes and opinions are firm and exhibit great stability over time.

According to our nationally representative database of people's personality assessments, the vast majority of people have very malleable attitudes, which are different from your attitudes, which tend to be very stable.

You frequently criticize yourself, and you tend to be aware of your own strengths and weaknesses. Consequently, you seek out ways to highlight your strengths and compensate for your weaknesses in front of others. Although you usually appear disciplined and self-controlled on the outside, people around you do not often perceive the times when you are especially worried or insecure. At times you wonder if you have fully used your potential or if there are opportunities you may be missing out on.

Personality assessment endorsing incremental theory of one’s own attitudes and entity theory of others’ attitudes

You are generally well-liked by your peers, although in rare circumstances you find it difficult to get along with others. You want to be liked by your acquaintances, and you frequently adjust behaviors around them in order to leave a positive impression. You find that it is not too difficult to anticipate what those around you are thinking.

Your beliefs and convictions tend to grow and develop over time as you acquire new life experiences, revealing the high potentiality of your opinions. Indeed, many of the attitudes and opinions you currently
hold are ones that you didn't hold in the past, and you will likely evolve your views as you progress through life. Although most people's attitudes and opinions are unresponsive to new information and therefore highly difficult to change, yours are malleable and exhibit great development over time.

According to our nationally representative database of people's personality assessments, the vast majority of people have inflexible attitudes, which are different from your attitudes, which tend to grow and mature over time.

You frequently criticize yourself, and you tend to be aware of your own strengths and weaknesses. Consequently, you seek out ways to highlight your strengths and compensate for your weaknesses in front of others. Although you usually appear disciplined and self-controlled on the outside, people around you do not often perceive the times when you are especially worried or insecure. At times you wonder if you have fully used your potential or if there are opportunities you may be missing out on.
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Figure 1. The effect of implicit theories on advocacy through perceived persuadability of others in Study 1.
Figure 2. The effect of implicit theories on advocacy through attitude certainty and perceived persuadability of others in Study 2.
Figure 3. Willingness to advocate as predicted by advocacy frame and implicit theory in Study 3.
Figure 4. Willingness to advocate as predicted by attentional focus and implicit theory in Study 4.