

Predicting Value Change in New Communities

By

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**Abstract of Predicting Value Change in New Communities, by W. Ryan Waite, ScM.,
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Moving to a new community can be one of the most personally transformative choices because of our communities' deep influence on us, and thus one of the most important to consider carefully. We've been shown to consistently underestimate how much our values will change in the future, but is this true when moving gives us a reason to expect change? Do we adjust our expectations for change based on the community we're entering, or how we frame our values? Across 2 studies, values framed in terms of action ("sacred values") change less than values framed in terms of consequences ("outcome values") and can be predicted more accurately, likely because of their greater personal importance and stronger community basis. College first-years change more over their first 5 months than upperclassmen and are less accurate at predicting how their values will change, likely because of their lack of exposure to the college community. First-years' political leaning becomes more similar to the upperclassmen over their first 5 months but not their values, perhaps because upperclassmen are not functionally in the first-years' community, although first-years' political leaning does not become closer to their friends'. An online sample of American adults reveals values to change as a result of changes to one's friend group but not one's city. Sacred values drive the correlation between changes to one's friend group and one's values, demonstrating their community basis. These findings indicate that exposure to a new, personally relevant community facilitates change to values, and that our expectations for value change hinge on familiarity with our community and how our values are framed.

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Introduction

Throughout our life we are shaped by our choices, people we talk to, information we learn, and the communities we belong to. We may take solace in the stability of our sense of self, but how stable really is it? Particularly when we undergo a major life transition like moving somewhere new, our values and priorities may shift in unpredictable ways. How good are we at predicting how our values will change when we move to a new community? And are the effects different based on whether values are framed in terms of action (“sacred values”) or consequences (“outcome values”)? By comparing sacred and outcome framings of the same values, we can see what properties of values are intrinsic to the wording rather than the topic, and by understanding the ways in which expectations for self-change depart from reality, we can make decisions better aligned with our future selves.

From a normative standpoint, how should we make major life decisions like taking a job or moving somewhere new? Some philosophers have contended that standards of rational decision-making may not apply in the realm of transformative experience, because by making the decision we become different people with different knowledge, abilities, and preferences (Paul, 2014). For instance, I may not want to become a parent because I’m committed to an exciting and free lifestyle, but by becoming a parent I may end up preferring a tamer and more stable life and be happier than ever (Callard, 2018). Likewise, I may not want to move to the Deep South because the people I would be around and the activities I would get up to are not what I’m used to, but perhaps by living there I would become more similar to them and actually enjoy my experience more than my current life. How could I know this beforehand? Intuitively, I can make an educated guess about who I’ll become, because I can form expectations based on factors like who I am currently (assuming I won’t completely change in the new environment)

and others' testimony (Villiger, 2023). Because I can form expectations with some basis, I can make major life decisions with some degree of confidence despite the dubious applicability of rational decision-making standards.

In order to make decisions about the future, we must have some means of predicting how we'll think and feel in the future. We typically do this through mental simulation; by imagining a future scenario and observing the emotions provoked in us, we can gauge how we might feel if the scenario came to pass. However, mental simulations are overly simplistic, are based on incomplete information and lack context (Gilbert & Wilson, 2007), and temporally or psychologically distant events tend to be represented in terms of a few abstract features (Trope & Liberman, 2003). We fail to think what else might affect us in the future (Hahn et al., 2011; Wilson et al., 2000), making us overestimate the intensity and duration of our emotional reactions (Wilson & Gilbert, 2013). This "impact bias" is further accentuated by the difficulty of imagining being in a different emotional state and an underestimation of our ability to rationalize and acclimatize ourselves to bad things that befall us (Hahn et al., 2011; Wilson & Gilbert, 2003). Accordingly, when we think of all the other things that will be happening in our future lives, we realize that we will be distracted from the focal event and thus expect our affective response to be shorter (Wilson et al., 2000).

By using mental simulation to approximate future responses we ignore the possibility that we will change by the time we make the future decision. Even when prompted to consider how we'll change in the future, we consistently underestimate how different our personality, preferences, and core values will be (Quoidbach et al., 2013). It is as if we view ourselves as having changed throughout our lives up until the present but recently achieving our final form. This "end of history illusion" is true even when accounting for the fact that older people change

less, and influences decisions about our future self in meaningful ways, like making people willing to spend more money to see their current favorite band perform in 10 years than they would to see their favorite band from 10 years ago perform now (Quoidbach et al., 2013). The end of history illusion is mediated by overconfidence in how well one knows oneself and a tendency to view one's past self negatively to preserve a narrative of self-growth. Cultural differences in these factors make the end of history illusion stronger for Americans than Japanese (Haas & Omura, 2022). We may also feel our current values to be admirable and not want them to change, and the difficulty of imagining how we'll change may make us judge it to be less likely (Quoidbach et al., 2013).

Previous research on the end of history illusion largely ignores the particular situations of change that arise when we go through a major life transition like moving to a new community. If we expect to move somewhere new, our expectations for personal change could be based on differences between us and our new community. Changing our social surroundings certainly changes us; for instance, migration causes people to adopt the political values of the country they move to (Chauvet et al., 2016; Lönnqvist et al., 2011). Even changes of the culture within one's country can systematically change one's values (Çileli, 2000; Kuzmanović et al., 1995).

The importance of major life events in driving change in values and personality is contested. Bardi and colleagues contend that value change is primarily driven by major life events, finding that the decrease in value change over the lifespan is largely due to fewer life-changing events happening later in adulthood (Bardi et al., 2009). Milfont and colleagues say that values tend to change slowly over time, due to psychological and biological maturation separate from major life events (Milfont et al., 2016). Some studies have found self-attitudes not to change much in early adulthood, which could be because the major life events we experience

at this stage of life are socially prescribed and help solidify our self-concepts rather than changing them, although empirical evidence for this interpretation is sparse (Demo, 1992).

Value changes resulting from a variety of major life events have been studied, like migration (Lönngqvist et al., 2011), cultural upheaval (Kuzmanović et al., 1995), high school (Hofmann-Towfigh, 2007), and cancer diagnosis (Greszta & Siemińska, 2011), but the transition to college serves as a prototypical major life change (Bardi et al., 2009). College is the first experience many people have with moving away from family, and the young age of students and social immersion of campus life make it a prime time for personal growth. Studies have shown conflicting effects of college in students' political opinions, with some finding students to become more conservative (Mendelberg et al., 2017), more liberal (Newcomb, 1943), more polarized (Wang et al., 2020), or not demonstrate any aggregate change (Strother et al., 2021). Most of these studies do not report the dominant political sentiment of the campus in question, but the common theme may be that students are drawn to the average political sentiment at their school (Newcomb, 1943). However, large communities like colleges tend to influence people through smaller groups, which exert their influence by controlling social rewards and establishing norms (Newcomb, 1962). Thus, socially embedded students may be affected more (Newcomb, 1943; cf. Lindskog et al., 2025), and political ideology may be particularly affected by close connections like one's roommate (Strother et al., 2021; cf. Wang et al., 2020).

Looking at change in college more broadly, students' attitudes toward social issues don't converge over time (Lindskog et al., 2025). Like online communities where people group based on who is similar to them (Cinelli et al., 2021), college students' personalities affect the friendships they make (Newcomb, 1962) but friendships don't seem to affect their personalities (Asendorpf & Wilpers, 1998). Additionally, aspirations seem to remain relatively stable over the

course of college (Colby et al., 2025). Taken together, previous research offers a mixed portrait about possible effects of one's community on one's self-concept over the course of college.

Change in values may be a popular and effective metric for quantifying change to the self, but values are far from monolithic. A fundamental distinction in how we conceptualize values is whether they focus on actions or consequences. Values that focus on action are referred to as "sacred" or "protected" values; they concern what to do (Sloman, 2025). Sacred values are cognitively processed as rules rather than cost-benefit tradeoffs (Berns et al., 2012) because they are non-negotiable (Baron & Spranca, 1997; Martel et al., 2021; Sheikh et al., 2012); a vegetarian does not eat meat, no matter how tasty it looks. Tradeoffs between sacred values and material benefits are taboo (Tetlock, 2003) and seeing violations of sacred values elicits feelings of anger, disgust, and outrage (Lichtenstein et al., 2007). Sacred values form the basis for cultural narratives and signal the communities we are a part of, and are thus foundational for our social identities (Sloman, 2025).

Most situations relevant to sacred values can also be framed in terms of consequences. Although some scenarios may lend themselves more to consequentialist or sacred value framings, they are ultimately framings. Outcome-based values are still values, because one must decide what outcomes are the most worthwhile (Sloman, 2025). This distinction prevails in the study of moral judgment in the form of deontology and utilitarianism (Gawronski & Beer, 2016).

Thinking of values in terms of actions or consequences produces meaningful differences in behavior. A sacred value frame makes people care more about political issues, even to the point of thinking issues are too important for normal politics, which increases intentions to participate in the discourse (Marietta, 2008) but makes it harder to resolve disputes (Ginges & Atran, 2013). If communities form around competing sacred values, both groups can polarize, as

can be seen in the United States with Republican and Democratic attitudes toward COVID vaccines (Sloman, 2025).

Attitudes that are more personally important are more stable over time (Krosnick, 1988), but even when controlling for importance, attitudes are more stable if they have a stronger moral basis (Luttrell & Togans, 2021). Since sacred values entail moral obligation (Baron & Spranca, 1997), we may expect them to be more resilient to change than if values are framed in terms of outcomes. Indeed, the few studies measuring change in sacred values show their sacredness to be quite stable over the span of a few months (Hamid et al., 2019), whereas outcome framing may make us more open to change. But at the same time, sacred values' basis in our communities (Martel et al., 2021; Sloman, 2025) should mean that changes to our communities are particularly influential for our sacred values. Thus, major life changes involving exposure to a new community may result in greater changes to sacred than outcome-framed values. However, the comparative change of sacred and outcome-framed values has not previously been studied, nor has changes to sacred values during major life transitions.

The current study aims to investigate how incoming college students' expectations for how their values will change over their first few months map onto reality, with a focus on differences caused by framing values in terms of action (i.e. sacred values) vs. consequences (i.e. outcome values). In line with the end of history illusion (Quoidbach et al., 2013), students' values are hypothesized to change more than they expect. Incoming college students are expected to change more than upperclassmen who are already immersed in the college environment. Although the personal importance (Krosnick, 1988) and moral basis (Luttrell & Togans, 2021) of sacred values mean that they are hypothesized to change less than outcome values, the community basis of sacred values (Sloman, 2025) may mean sacred values change

more than outcome values for incoming students. Because large communities influence people through smaller groups (Newcomb, 1962), the political leaning of first-years is expected to get closer to their friends' political leaning, and indicators of small group involvement like how socially embedded a student is or how much they talk about politics with people from college are expected to moderate value change. These trends are also expected to hold for a more general sample of adults moving to new communities.

Study 1: Transition to College

Study 1 investigates how students' values change over the span of a few months and how changes map onto students' expectations, comparing students who are entering college to students already embedded in their college community. By comparing these groups we can gain insight into how communities shape our values and how well calibrated our intuitions are, particularly for sacred values which are held close to our self-concept and fundamentally based on our community affiliations.

Methods

Participants.

1044 participants were recruited for Study 1, partially through canvassing on Brown University's campus and partially through an email blast to a list of all first-years provided by the College. Only participants who completed the first survey were sent followup emails to complete the second survey. 88 participants were excluded for being sophomores, 27 were excluded for being less than 18 years old, 476 were excluded for not finishing the first survey (244 of whom did not answer any questions about their values), and 172 were excluded for not completing the

second survey, resulting in a final sample of 281 participants (141 men, 123 women, 13 non-binary; 18-24 years; $M = 18.64$; $SD = 1.19$.) All students who completed each survey were entered into a lottery to win one of four \$25 Visa gift cards. All participants were at least 18 years old and were either a first-year or an upper-class undergraduate at Brown University. The Brown University Institutional Review Board approved the experimental procedures and all participants completed a consent form before each survey.

General Methods and Procedure.

Participants completed two surveys, one in the first couple weeks after moving in for the fall semester and one roughly 5 months later ($M = 5$ months, 3 days). The first survey was the same for all participants and the second survey was the same for all participants, although the order of the value statements (and whether the outcome values or sacred values were presented first) were randomized for each participant.

Survey 1 asked participants about demographic information, their political leaning and their home region's political leaning, and 8 political and social issues under sacred and outcome value framings. The wordings of each value statement can be found in Figure 1. All responses to value statements were on 7-point Likert scales ranging from "strongly disagree" to "strongly agree." Responses to both political leaning questions were on 7-point Likert scales ranging from "extremely conservative" to "extremely liberal."

Half of participants responded to the sacred values first and half of participants responded to the outcome values first. The order of questions within each block was randomized for each participant. After responding to all statements based on their current opinions, participants were

presented with all the same statements again but asked to predict how they would respond in 5 months.

Issue	Sacred value framing	Outcome value framing
Environment/ pollution	It is important to reduce the release of greenhouse gases at all costs.	If a company pays enough taxes it should be allowed to release greenhouse gases.
Animal testing	No form of animal testing during drug development is acceptable.	Animal testing during drug development is acceptable when it is likely to result in breakthroughs that save human lives.
Abortion	Abortion is morally wrong in all circumstances.	Abortion should be allowed if giving birth would impair the parent's health, well-being, or life circumstances.
Concealed carry	The right to bear arms, including carrying concealed weapons, is a fundamental right that must not be compromised.	Concealed carry of weapons should only be permitted if evidence clearly shows it to increase public safety and reduce crime.
Transgender athletes	Every athlete has an absolute right to compete in alignment with their gender, even if it challenges traditional norms.	Trans athletes should only be allowed to compete if it can be done in a way that maintains fair competition and integrity of women's sports.
Socialism	A society based on collective ownership and true equality is a moral imperative that must not be sacrificed for market efficiency.	Socialist policies should only be implemented if they produce better living circumstances and mitigate poverty but don't harm personal freedom or economic growth.
Immigration	All people, including illegal immigrants, have an inalienable right to a fair trial and due process of law.	Illegal immigrants' right to a fair trial may be limited or expedited if it lowers costs or improves national security.
Israel military action	Israel has an absolute right to use military force if attacked by terrorists, no matter the cost.	Israel should only use military force when attacked by terrorists if this can be shown to improve safety and reduce suffering.

Figure 1. Wordings of sacred and outcome framings of each value statement.

Roughly 5 months after recruiting for the first survey ($M = 4$ months, 30 days), all participants who completed the first survey were sent an email asking them to complete survey 2, with followup emails 4 days and 11 days later. On average, participants completed survey 2 5 months and 3 days after survey 1. Survey 2 presented participants with the same set of sacred and outcome value statements as survey 1. First, participants responded with their current agreement for all statements, and then responded with how much they remembered agreeing with all statements in the first survey. Participants finally answered questions about their political leaning, connection and similarity with their friends, and how much they talk about politics. The flow of the two surveys can be seen in Figure 2. A preregistration for survey 2 can be found at osf.io/qksvg.

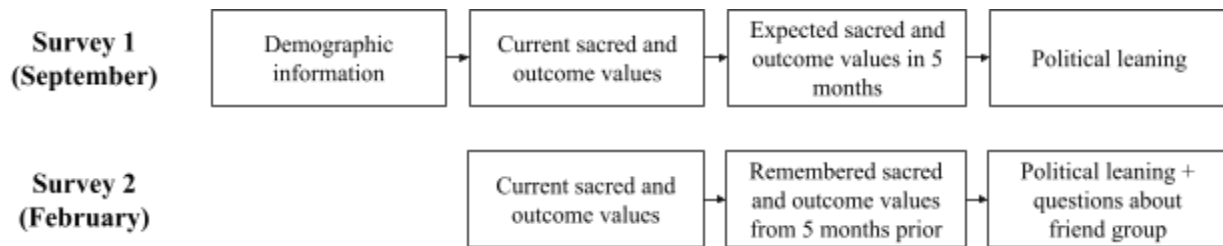


Figure 2. Flow of questions in survey 1 and survey 2 of study 1.

Data Processing.

Participants' responses to the first and second survey were matched using their email address and then anonymized. Likert scale responses were numerically coded with "strongly disagree" as 1 and "strongly agree" as 7. Responses to outcome value statements were reverse-coded because each outcome value statement was phrased as being an exception to the absolute posed by the corresponding sacred value statement. Political leaning statements were

coded with “extremely conservative” as 1 and “extremely liberal” as 7. Questions about how much participants talk about politics were coded with “less than monthly” as 1 and “several times a day” as 7, and similarity questions were coded with “strongly dissimilar” as 1 and “strongly similar” as 7. Responses from first-years to the question of how long they had been a part of their current friend group were excluded if they exceeded 7 months, which removed 7 observations; this question referred to participants’ college friend group and it was assumed first-year friend groups could not form more than a few weeks before orientation.

Historical political affiliation data of college students was also examined from the Brown Daily Herald’s Class of 2027, 2028, and 2029 First Year Polls, the Brown Daily Herald Fall 2025 Poll, and the Brown Opinion Project’s October 2021, March 2023, and March 2025 polls. The number of participants who gave each response was computed by multiplying the proportion who gave each response by the sample size for each survey.

Results and Discussion

How do changes in values between the two surveys compare for first-years and upperclassmen, and for sacred and outcome framings? A 2 (first-years, upperclassmen) x 2 (sacred value framing, outcome value framing) ANOVA was conducted for each of the three types of change measured: actual change, expected change, and perceived change. Figure 3 summarizes first-years’ and upperclassmen’s actual, expected, and perceived changes in sacred and outcome values.

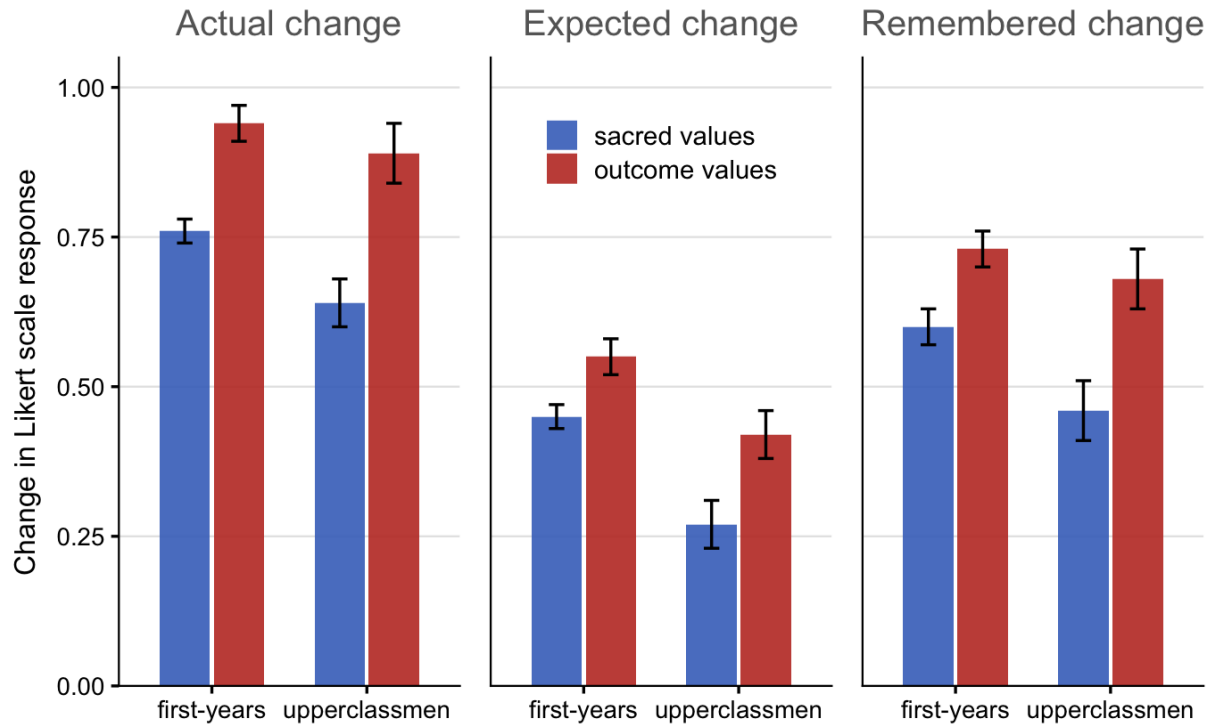


Figure 3. Average change in Likert scale response to value questions for sacred and outcome values and for first-years and upperclassmen. Error bars represent standard errors. Actual change measures the difference between participants' responses about current values in survey 1 vs. current values in survey 2, expected change measures the difference between participants' responses about current values in survey 1 vs. expected responses in survey 2, and perceived change measures the difference between participants' remembered responses from survey 1 vs. current values in survey 2.

First-years' responses to value questions changed more between the two surveys than did upperclassmen's responses ($F(1, 279) = 3.74, p = .05, \eta^2_p = .01$), which supports the hypothesis that entering a new community causes values to shift more than they would otherwise. The upperclassmen may have naturally changed slightly less than the first-years because they were

slightly older ($M = 20.6$ years old compared to 18.2), but the main difference between the groups is the fact that the upperclassmen already had years of exposure to their college community. The effect of first-years changing more than upperclassmen was mainly driven by sacred values; the amount that sacred values change was significantly greater for first-years than upperclassmen ($t(279) = 2.46, p = .014$, Cohen's $d = .37$) but the difference in how much outcome values changed for first-years and upperclassmen was not significant ($t(279) = .71, p = .48$, Cohen's $d = .11$). This appears to suggest that the level of sacred value change may be more impacted by moving to a new community than the level of outcome value change, but the interaction term in the ANOVA was not significant ($F(1, 279) = 1.07, p = .302, \eta^2_p = .002$). Collapsing across first-years and upperclassmen, outcome values changed more than sacred values ($F(1, 279) = 32.63, p < .001, \eta^2_p = .11$), supporting the hypothesis that sacred values should be more stable because they are more personally and morally important than outcome values.

Participants' expected value changes mirror the trends found in their actual changes; first-years expect their values to change more than upperclassmen do ($F(1, 279) = 11.01, p = .001, \eta^2_p = .04$), indicating that people likely take into account whether they will have new social surroundings when predicting how they'll change. Even when controlling for magnitude of value change, upperclassmen were significantly better at predicting their future responses ($F(1, 4491) = 10.10, p = .001, \eta^2_p = .002$), although even first-years' expectations of value changes correlate with how they actually change ($r(3600) = .28, p < .001$). Because the upperclassmen have spent years immersed in their college community, they have more refined expectations of how they will continue to change. Participants expected outcome values to change more than sacred values ($F(1, 279) = 18.85, p < .001, \eta^2_p = .06$), probably because they were less willing to believe values central to their self-concept could change. When controlling for magnitude of change,

participants were more accurate in predicting sacred value change than outcome value change ($F(1, 4491) = 10.15, p = .001, \eta^2_p = .002$), perhaps because sacred value change depends on changes to one's community, which is more predictable than the information we might encounter that may drive change to outcome values. The interaction between type of value and class year was not significant for the amount of expected change ($F(1, 279) = 1.02, p = .31, \eta^2_p = .004$) or for accuracy of expectations ($F(1, 4491) = .05, p = .82, \eta^2_p < .001$).

Differences in how much participants think they changed between the two surveys show the same trends as their actual and expected changes, although the difference between how much first-years and upperclassmen think they have changed is only marginally significant ($F(1, 279) = 2.82, p = .09, \eta^2_p = .01$). Like with how they actually changed, this class year effect is driven by perception of sacred value change; first-years perceived significantly more change to their sacred values than upperclassmen ($t(279) = 2.21, p = .03$, Cohen's $d = .33$) but the difference was not significant for outcome values ($t(279) = .74, p = .46$, Cohen's $d = .11$). Again, though, the ANOVA interaction term was not significant ($F(1, 279) = 1.82, p = .18, \eta^2_p = .006$). The direction of the results implies that people do notice that they change more when recently exposed to a new community, particularly in terms of sacred values, but the lack of significance makes it difficult to draw definite conclusions. Overall, participants did perceive less change to their sacred values than outcome values ($F(1, 279) = 27.25, p < .001, \eta^2_p = .09$), which reflects reality and may be accentuated by an unwillingness to admit that values central to one's self-concept could have changed.

Students' expectations and perceptions of value change accurately capture group and condition differences, with first-years expecting and perceiving more change than upperclassmen and outcome values expected and perceived to change more than outcome values, but

expectations and perceptions still systematically deviate from reality. Participants exhibit the end of history illusion, underestimating how much they will change ($t(280) = 17.52, p < .001$, Cohen's $d = 1.05$). Previous demonstrations of the end of history illusion have generally been cross-sectional (Haas & Omura, 2022; Quoidbach et al., 2013) and the only longitudinal test of the end of history illusion measured life satisfaction (Harris & Busseri, 2019), making this a novel finding. Participants also underestimate the amount they have changed ($t(280) = 7.48, p < .001$, Cohen's $d = .45$), so perhaps cross-sectional tests of the end of history illusion understate the true inaccuracy of our expectations for future change. Despite participants' underestimations of past change, they still perceived more change than they expected ($t(280) = 7.06, p < .001$, Cohen's $d = .42$). Thus, limitations to memory cannot explain our underestimations of future change; we have the cognitive tools available to realize we have changed more than expected. However, participants' recollections of their expectations were not measured, so perhaps we think our past predictions were accurate and this prevents us from seeing through the end of history illusion. This explanation fits with prior research showing our inability to learn from affective forecasting errors (Hahn et al., 2011).

Even though participants perceived more change to their values between the two surveys than they expected, participants' memory for past responses was just as inaccurate as their predictions of future responses ($t(280) = .87, p = .39$, Cohen's $d = .05$). In other words, the average difference between how participants remembered responding and actually responded to the first survey was around the same as the difference between how participants expected to respond and actually responded on the second survey. Hesitancy is therefore warranted when interpreting results of cross-sectional studies of value change, which often treat remembered values as true past values.

Students' expectations for how much they would change was sensitive to whether they were newly entering the college community, but the same was not true for the direction of value change. First-years' expected responses to value questions in the spring had them moving away from the upperclassmen's responses (sacred values: $t(224) = 2.71, p = .007$, Cohen's $d = .18$; outcome values: $t(224) = 2.26, p = .03$, Cohen's $d = .15$), which could be due to unfamiliarity with upperclassmen's views, but first-years' responses do actually become less similar to the upperclassmen's between the two surveys, although only for outcome values (sacred values: $t(224) = .38, p = .70$, Cohen's $d = .03$; outcome values: $t(224) = 3.48, p < .001$, Cohen's $d = .23$). First-years' general move away from the values of upperclassmen seems to contradict previous research that new members of a community adopt the community's values (Chauvet et al., 2016; Lönnqvist et al., 2011), but may be explained by first-years being primarily influenced by more specific communities that upperclassmen are not representative of. After all, influence in large communities like colleges tends to come from the people one directly interacts with (Newcomb, 1962), and first-years may not directly interact much with the upperclassmen.

The direction of first-years' change in political leaning, on the other hand, was in line with the broader college community. First-years become more liberal between survey 1 and survey 2 ($t(224) = 2.79, p = .003$, Cohen's $d = .19$), bringing their average political leaning closer but not all the way to the average upperclassman ($t(279) = 2.48, p = .01$, Cohen's $d = .37$). The political leaning of the upperclassmen themselves did not significantly change between the two surveys ($t(55) = .28, p = .39$, Cohen's $d = .04$), perhaps because they had already shifted to be like the broader college community. On a scale where 1=conservative, 2=moderate, 3=somewhat liberal, and 4=very liberal, historical political leaning data (Butts & Meyer, 2025; Dahlcamp & Levine, 2023) shows the current juniors to have had very similar political leanings a month

before starting college as did the current freshmen ($M = 3.01$ vs. 2.98 , $t(1256) = .52$, $p = .60$, Cohen's $d = .03$), and a similar gender difference in political leaning (former gender difference of current juniors: $M_{female} = 3.14$, $M_{male} = 2.80$, $t(596) = 4.78$, $p < .001$, Cohen's $d = .39$; gender difference of current freshmen: $M_{female} = 3.10$, $M_{male} = 2.80$, $t(658) = 4.46$, $p < .001$, Cohen's $d = .35$) with females more liberal than males. Class differences in political leaning seem to be due to differences in the amount of time spent at college, and thus may be caused by exposure to the college community. Males and females converged in their political leanings as upperclassmen ($t(47) = .16$, $p = .88$, Cohen's $d = .05$), but upperclassmen had similar variability in their political leanings as do first-years ($F(224,55) = 1.03$, $p = .93$). Spending time at college seems to shift students uniformly to be more liberal, rather than drawing everyone to the political midpoint of the community.

Perhaps students are instead drawn toward the value or political midpoint of more specific communities like clubs or friend groups; to find out, we must turn our attention to students' immediate social surroundings rather than focusing on the college's influence as a whole. First-years' political leaning did not significantly move toward their friends' political leaning ($t(224) = 1.11$, $p = .14$, Cohen's $d = .07$), but differences from friends' political leaning were quite small to begin with ($M = .68$), so there may not have been much room to grow closer. Interestingly, first-year values changed less if they were more socially embedded ($r(223) = .17$, $p = .01$), perhaps because first-years who are less similar to the broader community change more but still feel out of place. First-years who are more socially embedded do feel their friends' values to be more similar to their own ($r(223) = .38$, $p < .001$), but this is merely correlational and does not indicate change over time. Students' friends do not have a notable impact on their political leaning.

Overall, first-year college students display greater changes in their values over their first few months than upperclassmen over the same time period. Changing one's social surroundings by entering a new community, particularly one as immersive as college, leads to greater changes in one's values than one might experience otherwise. First-years are sensitive to the fact they're moving somewhere new when making predictions for how much their values will change (although are still susceptible to the end of history illusion), but lack of exposure to the college community means the upperclassmen are better calibrated in knowing the specifics of how they'll change. Both groups correctly predict that sacred values will change less than outcome values, even when the values are related to the same topics. The sacred value frame likely increases how personally important the topics feel (Marietta, 2008), making responses more resistant to change.

First-years' average political leaning moves toward the upperclassmen's average, but not their responses to value questions. Responses to outcome value questions even move away from upperclassmen's responses, which first-years strangely predict, although first-years' predicted sacred values are also further from the upperclassmen's average. Why might this be? First-years' expectations may have them moving away from the upperclassmen's average not because they actually expect to become less similar to the upperclassmen, but because they do not know what the broader community's values are. First-years' actual values may not approach the upperclassmen's average because there is not much contact between the two groups. Change in political leaning does not seem to be stimulated by first-years' friends; however, it is unknown whether this would also be the case for specific values. Perhaps students' political leanings are primarily affected by other groups. At most colleges, social life is largely separate from academic life (Newcomb, 1962), so if influence does not come from first-years' social

surroundings, they may mostly be affected by their peers in class. It could be argued that 5 months is not enough time for friends to influence political values, especially if first-years only develop a stable friend group later in the fall, but given the significant liberalization of the first-years in that time period, influence must come from somewhere in the college environment. Another option is that the college setting itself inspires change with its group living and relative autonomy, a lifestyle first-years may not be used to. Whatever the source of change in college, it can be better understood by examining value change when moving to a new community more generally.

Study 2: Transition to a New Region

Study 2 extends the scope of Study 1 to a broader sample of American adults, comparing adults who have recently moved to a new community with adults who have not and investigating expectations for value change when imagining moving to a new community. This cross-sectional comparison validates the use of the transition to college as a representative case of value change under circumstances of major life change, and also takes into account age effects and how expectations may differ depending on the type of community one imagines moving to.

Methods

Participants.

Participants in Study 2 ($N = 402$, 175 men, 220 women, 6 non-binary; 18-78 years; $M = 43.41$; $SD = 14.49$) were recruited through the Prolific website. The sample size was determined through a pre-registered power analysis with G*Power 3.1 (Faul et al., 2009) assuming a small to medium effect size (Cohen's $d = .35$) based on other studies of the psychological effects of

moving to a new community (Weifang et al., 2025). Only participants whose current country of residence was the United States were included.

General Methods and Procedure

A preregistration for Study 2 can be found at osf.io/bh4u3. Participants were divided into a “past change” group and a “future change” group; the survey flow for each group can be seen in Figure 4. After filling out demographic information and a consent form, participants in the past change group spent a minute writing about how they would spend a typical week 5 years ago to get them in the mindset of their past selves. They then rated their agreement to all the same sacred value and outcome value questions given to participants in Study 1 from the perspective of themselves from 5 years ago, and rated the political leaning of themselves and their home region 5 years ago and overall similarity of their home region and friend group 5 years ago compared to now. As a more objective measure of change, participants listed all social, religious, or work-related organizations they were a part of 5 years ago and now. Finally, participants rated their current agreement with the sacred and outcome value statements and answered questions about current political leaning, friends, and news consumption.

After filling out demographic information and a consent form, participants in the future change group rated their current agreement with all the sacred and outcome value statements and answered the same questions as the past change group about current political leaning, friends, and news consumption. Then, the future change participants were either asked to imagine moving to San Francisco, California, or Oklahoma City, Oklahoma for all questions related to the future; the city was randomly determined for each participant. After a comprehension check, participants spent a minute writing about how they might spend a typical week in 5 years to get

them in the mindset of their hypothetical future selves. They then predicted how they would respond to all the sacred and outcome value statements in 5 years if they were to move to the stated city, their expected political leaning of themselves and the stated city in 5 years, changes to their friend group, and the organizations they expected to be a part of now compared to in 5 years.

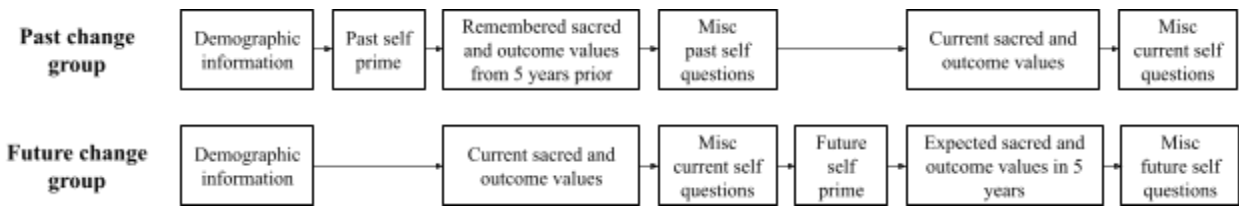


Figure 4. Flow of questions in study 2.

Data Processing.

Responses on Likert scales were coded the same way they were in Study 1. Average value change was calculated as the average magnitude difference in Likert scale responses for corresponding value questions 5 years ago to today (for participants in the past change group) or today to 5 years in the future (for participants in the future change group). Average value changes more than 3 standard deviations above the group mean were excluded, removing 3 observations from the past change group and 4 observations from the future change group.

Results and Discussion

Trends in value change between conditions and across ages can be seen in Figure 5. Controlling for age, participants expected less value change in the next 5 years than they reported experiencing in the past 5 years ($b = .12$, $SE = .04$, $t(392) = 2.75$, $p = .006$), replicating the end of

history illusion found for college students in Study 1. Notably, this includes past value change both for people who have and haven't recently moved, whereas all participants were asked to imagine moving in the future condition. If participants' expectations were perfectly calibrated, more change would have likely been expected for the future than for the past. Across conditions, older participants had less value change than younger participants ($b = -.004$, $SE = .001$, $t(392) = 2.90$, $p = .004$), replicating the findings of Quoidbach et al. (2013). Age was adjusted such that participants of age a who predicted future change were compared to participants of age $a + 5$ who reported past change, so both change values would be for the age interval a to $a + 5$. Collapsing across ages, a 2 (past change, future change) $\times$ 2 (sacred value framing, outcome value framing) ANOVA revealed that sacred values changed less than outcome values ($F(1, 400) = 16.22$, $p < .001$, $\eta^2_p = .04$), validating the findings from college students from Study 1. People still report more change in the past 5 years than they expect for the next 5 years ($F(1, 400) = 7.22$, $p = .008$, $\eta^2_p = .02$), but the difference people report between sacred and outcome value change is not significantly different between groups ($F(1, 400) = 1.08$, $p = .30$, $\eta^2_p = .003$).

Participants who had moved in the past 5 years did not report their values having changed more than participants who had not moved ($t(237) = .52$, $p = .30$, Cohen's $d = .07$) and participants who moved also did not significantly shift toward their new city's political leaning ($t(125) = .44$, $p = .33$, Cohen's $d = .04$), contradicting the findings from college students and bringing into question the importance of one's local community in shaping one's values. Two factors can account for the apparent lack of community effect: the tendency to move to a similar city and an independence of one's social group from one's city.

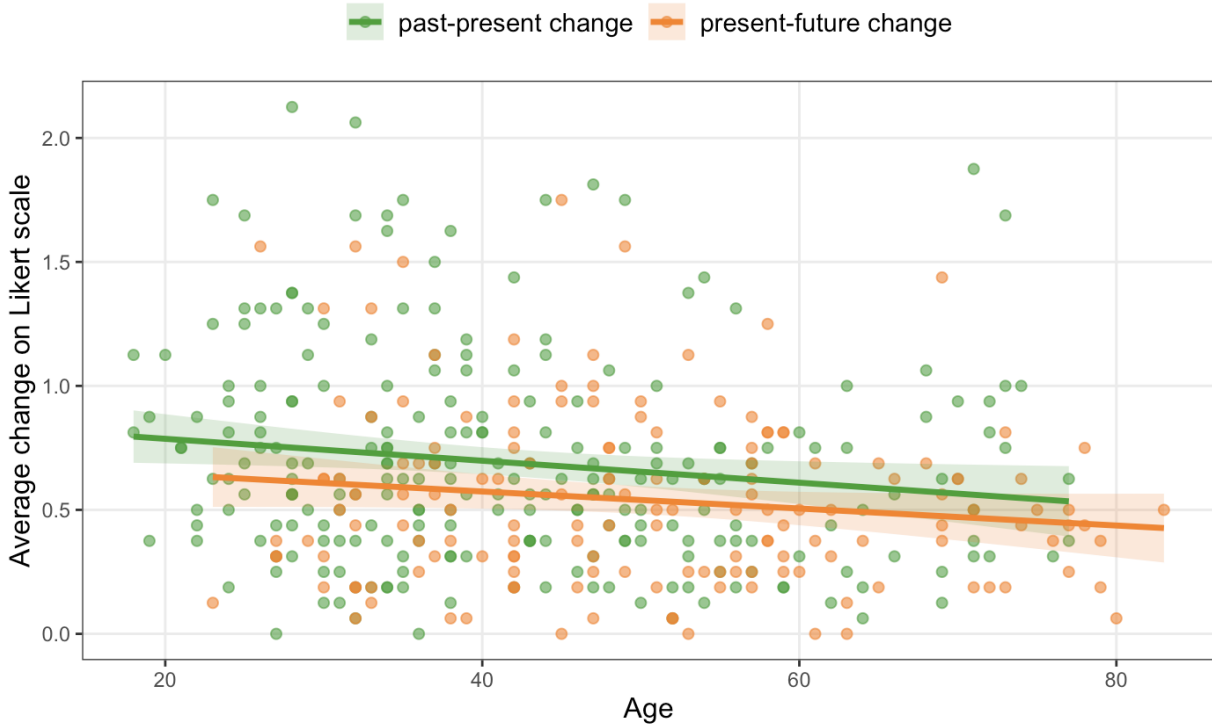


Figure 5. Average change in Likert scale response to value questions across ages and groups.

Age refers to the participant's age at the end of the interval; for participants asked about the past and present, this is their current age, and for participants asked about the present and future, this is their age in 5 years.

If someone moves, their new city is likely to have a similar culture as their old one. Participants of course felt that their city's political leaning had changed more if they moved than if they didn't ($t(240) = 4.35, p < .001$, Cohen's $d = .56$), but the cities I asked participants to imagine moving to (San Francisco or Oklahoma City) were less similar to participants' current cities than their previous cities ($t(147) = 2.62, p = .01$, Cohen's $d = .60$). Moving between relatively similar cities does not entail a radical shift of culture, so perhaps the small differences in value change between those who moved and didn't move are not surprising. Participants' values may have changed more if their city's political leaning changed more ($r(237) = .12, p =$

.07), hinting at a relation between city culture change and personal change, but this correlation only approaches significance.

Even if participants move to a city with a very different culture, they might not engage with that culture; when controlling for age, the change in participants' friend group over the past 5 years did not significantly depend on whether they had moved ($b = -.30$, $SE = .23$, $t(239) = 1.29$, $p = .20$). In the communication age, our social surroundings transcend physical location. When controlling for age, participants' values changed more if their friend group changed more, and this was true whether or not they had moved (moved: $b = -.06$, $SE = .02$, $t(123) = 2.80$, $p = .006$; hadn't moved: $b = -.06$, $SE = .03$, $t(123) = 2.52$, $p = .01$). This trend is driven by sacred values; sacred value change has a significantly stronger correlation with friend group change than outcome value change (sacred: $r(240) = .32$; outcome: $r(240) = .12$; $z = 3.31$, $p < .001$), and when both sacred value change and outcome value change are included in a model, only sacred value change significantly predicts friend group change (sacred: $b = -1.08$, $SE = .22$, $t(240) = 4.99$, $p < .001$; outcome: $b = .23$, $SE = .24$, $t(240) = .94$, $p = .35$). Our sacred values are still shaped by our friends, but our friends do not depend on where we live.

Even when participants interact with members of their new city, those members may not reflect the city's broader culture. Cities have a wide diversity of people and subcultures, and homophily may mean that wherever one moves one will find similar others to associate with. People's reasons for moving may accentuate a homophily effect; moving for a job means one will be interacting with employees who likely have similar interests, and moving for family means one will be interacting with relations who likely share one's culture. This could also explain why the amount participants talk about politics in their new city does not affect their political leaning; they probably just talk politics with people who have similar views as them.

Unlike the past, when asked to imagine moving in the future, participants expect to shift toward their new city's political leaning ($t(159) = 4.29, p < .001$, Cohen's $d = .34$). This could be partially because (as previously mentioned) the cities participants were asked to imagine moving to were more politically different from them than the cities participants actually moved to in the past. General city culture could also play a larger role in participants' estimation of future change because all they have to base their expectations on is the city itself. They have no context of why they might be moving there or the specific people they may meet, so the best assumption is that they will be interacting with average citizens of the city. Participants were still not particularly sensitive to their future city's political leaning; they did not think their shift toward a future city's political leaning would be stronger if the city was very different from them ($r(154) = .05, p = .26$). In other words, participants adjusted the direction of their expected political leaning change based on their future city but not the extent of their expected change.

Organization membership serves as a more objective measure of change. When asked to imagine moving to a new city and when controlling for age, participants expect to retain membership in a higher proportion of organizations over the next 5 years than participants report retaining over the past 5 years ($b = -.10, SE = .04, t(299) = 2.25, p = .03$), another kind of end of history illusion. Participants who moved in the past 5 years experienced more turnover in the organizations they were a part of ($b = -.16, SE = .05, t(179) = 2.97, p = .003$), but that did not make them predict more future turnover than people who hadn't moved in the past 5 years ($b = -.01, SE = .09, t(117) = .12, p = .91$). Like with affective forecasting (Hahn et al., 2011), experience doesn't help when predicting changes in community affiliation.

Since organizations are communities more politically aligned with participants than their city ($t(241) = 8.09, p < .001$, Cohen's $d = .52$) and participants interact with them more directly,

they are a prime contender for affecting value change even when one's city does not. However, participants who reported greater turnover in the organizations they have been a part of in the past 5 years did not report greater change to their values in that time ($r(177) = .05, p = .48$). Some organizations may be more ideologically influential than others, like a church compared to a youth soccer group, but on the whole they seem not to be. Perhaps participants are not socially close to fellow organization members, or perhaps participants remain friends with organization members even after leaving the organization. Either way, they do not provide a link between one's changes in values and changes in location.

General Discussion

Two studies provide converging evidence for the stability of sacred values compared to outcome values: college students and American adults predict and report that their level of agreement with value statements changes more when phrased in terms of outcomes rather than action, and outcome values do change more than sacred values over the course of 5 months for college students. Because the topics used for the sacred and outcome value statements were the same, differences in how responses to them changed over time must have been due to the phrasing rather than the topics' inherent importance or cultural relevance. Framing a value in terms of action and absolutes makes it feel more important (Marietta, 2008) and involve moral obligation (Baron & Spranca, 1997), and these are qualities that promote stability of attitudes over time (Krosnick, 1988; Luttrell & Trogans, 2021). Sacred values' deep community basis (Sloman, 2025) may have caused sacred value change to be more sensitive to changes in one's friend group, as shown in Study 2, but this is qualified by the lack of significant interaction in

Study 1 between whether a student was entering the college community and how much their sacred values changed compared to outcome values.

Consequences play no role in sacred values but are the focus of outcome values, so information about consequences should be much more influential for changing one's stance on outcome values than sacred values. Reliance on information may help explain why change to outcome values was more difficult for college students to predict than change to sacred values; although the information one encounters partially comes from one's college community, it can also come from less predictable sources like scientific breakthroughs or world events. Communities' general attitudes can often be known even before one enters the community, making change in sacred values easier to predict. More refined knowledge about a community and its influences helps calibrate expectations for how values will change, as shown by college upperclassmen having more accurate expectations for change than first-years for both sacred and outcome values.

Regardless of the type of value or embeddedness in the community, the end of history illusion limited the accuracy of expectations. In all comparisons made between expected future change and remembered or actual past change, including changes to values and organizations, participants underestimated future change. Study 2 showed this was true even when accounting for the fact that older people change less. Likely causes for the illusion are the feeling that we know ourselves well (Haas & Omura, 2022), and that our values are admirable (Quoidbach et al., 2013), making us unwilling to believe that we could change. Study 1 demonstrated that when we have a concrete reason to expect change such as when entering a new community, we adjust our expectations and predict more change, but not enough more to be accurate. Because study 1 also measured actual value change, it eliminated the possibility that the end of history illusion for

values is due to an overestimation of past change; in fact, college students even underestimated past change, remembering their past selves as being more similar to their current selves than they were. We also do not seem to be able to use past change to guide our expectations, as evidenced by participants in study 2 not calibrating their expectations for future organization membership change depending on whether they had moved, even though moving made a difference in the past. However, participants were asked about their memory of change, not their memory of their expectations. It is possible that hindsight bias made participants in study 1 think their predictions for value change *were* realistic, making the benefit of adjusting future expectations not consciously apparent.

Effects of entering a new community on values were mixed. First-years' values changed more than upperclassmen's values in study 1; part of this may have been due to the first-years being younger, but the difference in age is small and study 2 shows values change similarly at ages 18 and 21. The main difference between groups is that first-years are new to college whereas upperclassmen have already spent 2-3 years in college. Thus, introduction to the college community seems to stimulate change in values. But what or who in the community causes change? First-years' average political leaning becomes more similar to the upperclassmen over their first 5 months, but sacred values do not, and responses to outcome value statements even become less similar to the upperclassmen's responses. Upperclassmen may have little influence on first-years values because the first-years do not often interact with the upperclassmen, which would fit with previous research that members of large communities are typically shaped by the people with whom they directly interact (Newcomb, 1962). This explanation would also fit with participants in study 2 not being significantly shaped by their city as a whole.

However, although changes to the sacred values of participants in study 2 were associated with changes to their friend group, the political leaning of college first-years in study 1 was not shaped by their friends' political leaning. Perhaps variability in friend group effects between the studies are due to differences in measures; for instance, friends may influence sacred values but not political leaning because friends tend to have quite similar political leanings to begin with. Also, the correlation between changes to sacred values and changes to one's friend group does not necessarily mean changes to one's friend group lead to sacred value changes. The opposite chain of causality could also occur; change to sacred values could cause one to seek new friends, but the change to sacred values would still have to come from somewhere. Future studies could survey participants at several time points to determine if friend group changes precede sacred value changes or vice versa.

Surveying participants at several time points would also clarify how much variability in responses is due to true change rather than situational or random factors. The current design allows for comparisons of change, but change in the most stable group (i.e. upperclassmen's sacred values in study 1) could be entirely due to random error. With more time points, we could learn how much of the change between two time points is consistent with a broader trend. The first time point could even be before entering college, to see whether students change in anticipation of their college community.

Future studies should also delve deeper into what aspects of a community cause value change. Social network analyses could be used to determine how friends affect each others' values, rather than relying on political leaning as a proxy. Participants could be asked what guides their expectations for change; perceived influences might not always be real, but would

likely hold some explanatory value given that participants were above chance in their value change predictions.

The perceived influences on value change for people with accurate predictions could be used to develop interventions to improve predictions. Other possible interventions include talking to a member already embedded in the community in order to shift to a mindset of past change or taking a third person view to decrease the salience of one's current values, potentially reducing the end of history illusion.

Overall, across two studies, outcome values change more than sacred values and participants underestimate future change. Upperclassmen used to their college community change less and are more accurate in their predictions for how they'll change than first-years new to the community. First-years' political leaning does not get closer to their friends' over their first 5 months, but it gets closer to the average upperclassman. Values do not change more for American adults who move to a new city, but sacred values do if their friend group has changed more. Exposure to a new, personally relevant community facilitates change to values, and our expectations for value change hinge on familiarity with our community and how our values are framed.

References

- Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology*, 74(6), 1531–1544.
<https://doi.org/10.1037/0022-3514.74.6.1531>

- Bardi, A., Lee, J. A., Hofmann-Towfigh, N., & Soutar, G. (2009). The structure of intraindividual value change. *Journal of Personality and Social Psychology*, 97(5), 913–929. <https://doi.org/10.1037/a0016617>
- Baron, J., & Spranca, M. (1997). Protected Values. *Organizational Behavior and Human Decision Processes*, 70(1), 1–16. <https://doi.org/10.1006/obhd.1997.2690>
- Berns, G. S., Bell, E., Capra, C. M., Prietula, M. J., Moore, S., Anderson, B., Ginges, J., & Atran, S. (2012). The price of your soul: Neural evidence for the non-utilitarian representation of sacred values. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 367(1589), 754–762. <https://doi.org/10.1098/rstb.2011.0262>
- Butts, K., & Meyer, C. (2025). *Class of 2029 First-Year Poll* [Dataset]. <https://www.browndailyherald.com/article/2025/09/brown-first-year-poll-class-2029>
- Callard, A. (2018). Aspiration. In H. LaFollette (Ed.), *The International Encyclopedia of Ethics* (1st ed., pp. 1–7). Wiley. <https://doi.org/10.1002/9781444367072.wbiee849>
- Chauvet, L., Gubert, F., & Mesplé-Somps, S. (2016). Do migrants adopt new political attitudes from abroad? Evidence using a multi-sited exit-poll survey during the 2013 Malian elections. *Comparative Migration Studies*, 4(1), 19. <https://doi.org/10.1186/s40878-016-0033-z>
- Çileli, M. (2000). Change in Value Orientations of Turkish Youth From 1989 to 1995. *The Journal of Psychology*, 134(3), 297–305. <https://doi.org/10.1080/00223980009600869>
- Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences*, 118(9), e2023301118. <https://doi.org/10.1073/pnas.2023301118>

- Colby, A., Le, N. Q., & Malin, H. (2025). Enduring aspirations and moral learning: A longitudinal study of U.S. College students. *Journal of Moral Education*, 54(2), 297–319. <https://doi.org/10.1080/03057240.2023.2268300>
- Dahlcamp, O., & Levine, S. (2023). *Class of 2027 First-Year Poll* [Dataset]. <https://projects.browndailyherald.com/2023/09/01/fyp/first-year-poll/>
- Demo, D. H. (1992). The Self-Concept Over Time: Research Issues and Directions. *Annual Review of Sociology*, 18(1), 303–326. <https://doi.org/10.1146/annurev.so.18.080192.001511>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Gawronski, B., & Beer, J. S. (2016). What makes moral dilemma judgments “utilitarian” or “deontological”? *Social Neuroscience*, 1–7. <https://doi.org/10.1080/17470919.2016.1248787>
- Gilbert, D. T., & Wilson, T. D. (2007). Prospection: Experiencing the Future. *Science*, 317(5843), 1351–1354. <https://doi.org/10.1126/science.1144161>
- Ginges, J., & Atran, S. (2013). Sacred Values and Cultural Conflict. In M. J. Gelfand, C. Chiu, & Y. Hong (Eds.), *Advances in Culture and Psychology* (pp. 273–301). Oxford University Press. <https://doi.org/10.1093/acprof:osobl/9780199336715.003.0006>
- Greszta, E., & Siemińska, M. J. (2011). Patient-Perceived Changes in the System of Values After Cancer Diagnosis. *Journal of Clinical Psychology in Medical Settings*, 18(1), 55–64. <https://doi.org/10.1007/s10880-011-9221-z>

- Haas, B. W., & Omura, K. (2022). Cultural Differences in Susceptibility to the End of History Illusion. *Personality and Social Psychology Bulletin*, 48(9), 1331–1348.
<https://doi.org/10.1177/01461672211036873>
- Hahn, C., Ndiaye, D., Wilson, T., & Gilbert, D. (2011). *Affective Forecasting* (pp. 9780199828340–0003) [Dataset]. <https://doi.org/10.1093/obo/9780199828340-0003>
- Hamid, N., Pretus, C., Atran, S., Crockett, M. J., Ginges, J., Sheikh, H., Tobeña, A., Carmona, S., Gómez, A., Davis, R., & Vilarroya, O. (2019). Neuroimaging ‘will to fight’ for sacred values: An empirical case study with supporters of an Al Qaeda associate. *Royal Society Open Science*, 6(6), 181585. <https://doi.org/10.1098/rsos.181585>
- Harris, H., & Busseri, M. A. (2019). Is there an ‘end of history illusion’ for life satisfaction? Evidence from a three-wave longitudinal study. *Journal of Research in Personality*, 83, 103869. <https://doi.org/10.1016/j.jrp.2019.103869>
- Hofmann-Towfigh, N. (2007). Do students’ values change in different types of schools? *Journal of Moral Education*, 36(4), 453–473. <https://doi.org/10.1080/03057240701688010>
- Krosnick, J. A. (1988). Attitude importance and attitude change. *Journal of Experimental Social Psychology*, 24(3), 240–255. [https://doi.org/10.1016/0022-1031\(88\)90038-8](https://doi.org/10.1016/0022-1031(88)90038-8)
- Kuzmanović, B., Popadić, D., & Havelka, N. (1995). Social changes and changes of values. *Psihologija*, 28, 7–26.
- Lichtenstein, S., Gregory, R., & Irwin, J. (2007). What’s bad is easy: Taboo values, affect, and cognition. *Judgment and Decision Making*, 2(3), 169–188.
<https://doi.org/10.1017/S1930297500000838>

- Lindskog, H., Gustafsson, N., & Voytiv, S. (2025). Does Peer Socialization Within Cohorts Foster Political Attitudes? A Longitudinal Study of Elite Business Students. *Political Behavior*, 47(2), 893–914. <https://doi.org/10.1007/s11109-024-09978-y>
- Lönnqvist, J.-E., Jasinskaja-Lahti, I., & Verkasalo, M. (2011). Personal Values Before and After Migration: A Longitudinal Case Study on Value Change in Ingrian–Finnish Migrants. *Social Psychological and Personality Science*, 2(6), 584–591. <https://doi.org/10.1177/1948550611402362>
- Luttrell, A., & Togans, L. J. (2021). The Stability of Moralized Attitudes Over Time. *Personality and Social Psychology Bulletin*, 47(4), 551–564. <https://doi.org/10.1177/0146167220935737>
- Marietta, M. (2008). From My Cold, Dead Hands: Democratic Consequences of Sacred Rhetoric. *The Journal of Politics*, 70(3), 767–779. <https://doi.org/10.1017/S0022381608080742>
- Martel, F. A., Buhrmester, M., Gómez, A., Vázquez, A., & Swann, W. B. (2021). Why True Believers Make the Ultimate Sacrifice: Sacred Values, Moral Convictions, or Identity Fusion? *Frontiers in Psychology*, 12, 779120. <https://doi.org/10.3389/fpsyg.2021.779120>
- Mendelberg, T., McCabe, K. T., & Thal, A. (2017). College Socialization and the Economic Views of Affluent Americans. *American Journal of Political Science*, 61(3), 606–623. <https://doi.org/10.1111/ajps.12265>
- Milfont, T. L., Milojev, P., & Sibley, C. G. (2016). Values Stability and Change in Adulthood: A 3-Year Longitudinal Study of Rank-Order Stability and Mean-Level Differences. *Personality and Social Psychology Bulletin*, 42(5), 572–588. <https://doi.org/10.1177/0146167216639245>

- Newcomb, T. M. (1943). *Personality and Social Change: Attitude and Social Formation in a Student Community*. Dryden.
- Newcomb, T. M. (1962). Student Peer-Group Influence. In N. Sanford (Ed.), *The American college: A psychological and social interpretation of the higher learning*. (pp. 469–488). John Wiley & Sons Inc. <https://doi.org/10.1037/11181-013>
- Paul, L. A. (2014). *Transformative Experience*. Oxford University Press.
<https://doi.org/10.1093/acprof:oso/9780198717959.001.0001>
- Quoidbach, J., Gilbert, D. T., & Wilson, T. D. (2013). The End of History Illusion. *Science*, 339(6115), 96–98. <https://doi.org/10.1126/science.1229294>
- Sheikh, H., Ginges, J., Coman, A., & Atran, S. (2012). Religion, group threat and sacred values. *Judgment and Decision Making*, 7(2), 110–118.
<https://doi.org/10.1017/S1930297500002965>
- Sloman, S. (2025). *The cost of conviction: How our deepest values lead us astray*. The MIT Press. <https://doi.org/10.7551/mitpress/15359.001.0001>
- Strother, L., Piston, S., Golberstein, E., Gollust, S. E., & Eisenberg, D. (2021). College roommates have a modest but significant influence on each other's political ideology. *Proceedings of the National Academy of Sciences*, 118(2), e2015514117.
<https://doi.org/10.1073/pnas.2015514117>
- Tetlock, P. E. (2003). Thinking the unthinkable: Sacred values and taboo cognitions. *Trends in Cognitive Sciences*, 7(7), 320–324. [https://doi.org/10.1016/S1364-6613\(03\)00135-9](https://doi.org/10.1016/S1364-6613(03)00135-9)
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, 110(3), 403–421.
<https://doi.org/10.1037/0033-295X.110.3.403>

- Villiger, D. (2023). Rational transformative decision-making. *Synthese*, 201(3), 87.
<https://doi.org/10.1007/s11229-023-04075-9>
- Wang, C., Lizardo, O., & Hachen, D. S. (2020). Neither influence nor selection: Examining co-evolution of political orientation and social networks in the NetSense and NetHealth studies. *PloS One*, 15(5), e0233458. <https://doi.org/10.1371/journal.pone.0233458>
- Weifang, S., Majie, D., & Na, Z. (2025). The mediating effect of community identity and the moderating effect of social comparison in the relationship between residential mobility and sense of meaning in life. *Frontiers in Psychology*, 16, 1501060.
<https://doi.org/10.3389/fpsyg.2025.1501060>
- Wilson, T. D., & Gilbert, D. T. (2003). Affective Forecasting. In *Advances in Experimental Social Psychology* (Vol. 35, pp. 345–411). Elsevier.
[https://doi.org/10.1016/S0065-2601\(03\)01006-2](https://doi.org/10.1016/S0065-2601(03)01006-2)
- Wilson, T. D., & Gilbert, D. T. (2013). The impact bias is alive and well. *Journal of Personality and Social Psychology*, 105(5), 740–748. <https://doi.org/10.1037/a0032662>
- Wilson, T. D., Wheatley, T., Meyers, J. M., Gilbert, D. T., & Axsom, D. (2000). Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 78(5), 821–836. <https://doi.org/10.1037/0022-3514.78.5.821>