Are Third-Order Beliefs Widely Held?
An Empirical Examination of Third-Order Consensus*

Regan Smock
regan-smock@uiowa.edu
https://orcid.org/0000-0002-6339-0080

Freda B. Lynn
freda-lynn@uiowa.edu
https://orcid.org/0000-0001-5659-0298

Department of Sociology and Criminology
University of Iowa

MAY 14, 2026

WORD COUNT: ~8,900
(INCLUDES TEXT, FOOTNOTES, REFERENCES, TABLES, AND FIGURES)

*We are indebted to Cecilia Ridgeway, Yongren Shi, Michael Sauder, and participants of the 2025 Group Processes Conference for their insightful comments on this study or earlier versions of the project.

Are Third-Order Beliefs Widely Held?
An Empirical Examination of Third-Order Consensus

Abstract

Third-order beliefs —beliefs about what "most people" think— are theorized to facilitate coordination when they are widely shared among members of a collective. Yet little empirical research assesses the degree to which a collective's third-order beliefs actually exhibit consensus. We collect novel survey data on individuals' third-order beliefs related to a set of 18 work values, i.e., individual beliefs about what "most Americans" believe about what matters at work. While respondents' ratings of third-order importance converged for some work values (e.g., Supervision, Achievement), some values show significantly greater diversity in third-order inferences (e.g., Creativity, Mental Challenge). We theorize that third-order consensus indicates the presence of a cultural script about the work value in question. We found evidence for social scripts that overestimated (e.g., Income), underestimated (e.g., Growth), and accurately assessed (e.g., Security) ratings from a sample of first-order beliefs. Overall, our findings suggest that only some objects and ideas are associated with shared third-order scripts, while others remain contested or ambiguous. We conclude by discussing the implications of selective sharedness and directions for future research.

Are Third-Order Beliefs Widely Held?

An Empirical Examination of Third-Order Consensus

Introduction

Higher-order beliefs—an individual's perception of what "most people"[1] think—are theorized as critical to social order. This is because when higher-order beliefs are *shared*, such understandings become the common reference points that enable cooperation and coordination in everyday life (Chwe 2013; Ridgeway 2019). Known as third-order beliefs in sociology[2], such beliefs are central to research areas that grapple with individuals navigating self, other, and group, including symbolic interactionism (Blumer 1969; Cooley 1902; Mead 1934), the creation and maintenance of status hierarchies (Correll et al. 2017; Ridgeway and Erickson 2000), theories of culture and common sense (Bourdieu 1984), and processes of legitimation (Zelditch 2001). Pinker's (2025) recent book, *When Everyone Knows That Everyone Knows...,* connects higher-order thinking at the individual level with aggregate outcomes, such as financial bubbles, viral outrage online, and political revolutions (see also Thomas et al. 2014).

Critical to all the above branches of third-order research is that the potency of a third-order belief is directly related to its sharedness, or the extent that *most* believe something is true

[1] There is little empirical research on who or what population individuals imagine by the phrase "most people." Thus, when we refer to "most people" throughout this study, we do so recognizing that this oft-used phrase has no standard or uniform definition. One individual might interpret this phrase as a statistical summary of a specific population (e.g., all Americans in 2025) whereas another might think of "people like me" when invoking the language of "most people." In this study, we do not directly delve into how individuals define "most people" but we do measure the extent to which respondents agree or disagree on what "most people" *think* however they define "most people."

[2] In economics, political science, and certain branches of sociology, higher-order beliefs are also known as second-order beliefs (e.g. cite econ and political science studies). Mize (2024), for example, refers to generalized second-order beliefs as "what I assume most others think." Sociologists working in the status tradition, however, often make a distinction between two different types of higher-order beliefs: a second-order belief is what an individual thinks another specific individual believes (e.g., what I think my teacher believes) whereas a third-order belief is what an individual thinks most people believe (e.g., what I think the generalized other believes) (Ridgeway and Correll 2006).

of most people, regardless of what most people actually do or think (Chwe 2013; Johnson, Dowd, and Ridgeway 2006; Ridgeway and Correll 2006).[3] To illustrate, consider a workplace with 1,000 employees characterized by the following two facts:

(a) Only 10 percent of workers privately believe that a pay raise will increase their workplace satisfaction, yet somehow 90 percent of workers come to assume that "most workers" at their firm believe that money is happiness.

(b) Nearly all employees privately believe that scheduling flexibility and work-life balance is both dignifying and more important to workplace satisfaction than salary alone. Yet somehow, few workers know this about each other. Only 10 percent would guess that "most workers" at their firm care deeply about intangibles like work-life balance. Among the remaining 90 percent, there is no consensus as to how important flexibility and balance are to most people.

In this scenario, existing theories about third-order beliefs would predict that—because widely shared information about most people's salary preference enables coordination—management would implement a reward system based on financial incentives simply because there is already strong third-order consensus around the persuasiveness of material rewards (despite third-order consensus being inaccurate vis-à-vis what most workers privately believe). We argue, however, that the managers' decision is actually guided by two pieces of information: the presence of third-order agreement around the importance of money (i.e., most agree when they imagine what most people think) and the lack of third-order agreement around the importance of flexibility and balance (i.e., most either disagree or do not even know what to think about most people, despite the fact that most people privately agree that flexibility and

[3] Pinker (2025) argues that coordination specifically requires common knowledge, which is knowledge that is both shared and publicly discussed.

balance are paramount). We argue that management reckons that a material-based incentive structure is expected, normal, and low risk because there is no viable alternative that works for everyone.

This workplace scenario highlights three important points. First, we should not assume that third-order beliefs are necessarily consensual. The managerial team can move forward with a decision on what incentive structure to implement by relying on *both* third-order consensus—shared third-order beliefs about certain ideas (salary)—and dissensus—disorganized third-order beliefs about (potentially) competing ideas (flexibility and balance)—to reduce complexity around employee preferences. Put differently, selective third-order sharedness has simplified (albeit inaccurately) what it is that employees truly desire, which in this case enables managerial coordination. Second, like how peaks do not exist without valleys, it is the combination of third-order consensus and dissensus that defines a collective's culture. A likely reason why workers in the hypothetical organization above fail to see that everyone truly cares about flexibility and balance is that they already believe that everyone cares mostly about salary. Third, we know of no theories that can explain both the rise of third-order consensus around some ideas and the failure for consensus to arise around others.

These insights are the motivation for the present study, which proceeds as follows. First, we begin with a brief review of third-order sharedness but from the point of view of why researchers have overlooked situations in which third-order beliefs are not shared. We posit that little is known about when and why third-order beliefs *fail* to become shared in large part because researchers tend to discuss third-order beliefs as if they are usually consensual. Second, we propose a framework for characterizing third-order belief distributions with respect to accuracy and consensus. We define third-order accuracy as the extent to which the average third-

order belief aligns with the average first-order belief. We define third-order agreement or consensus as the extent to which a collective expresses the same third-order beliefs about a given object or idea. As we explain below, our discussion of third-order accuracy complements existing research on pluralistic ignorance, and our study of third-order agreement parallels an emerging line of research on first-order consensus at the intersection of the sociology of culture and social psychology.[4] Taken together, we propose that third-order belief distributions can exhibit one of three profiles: (1) shared and accurate, (2) shared but inaccurate, and (3) not shared, in which case (in)accuracy, we argue, is no longer meaningful.

Third, we conduct an empirical study of third-order agreement and accuracy based on novel survey data. Most existing studies of third-order beliefs ask empirical questions unrelated to third-order belief consensus (only accuracy) (e.g., Glavin and Schieman 2025; Mildenberger and Tingley 2019). The one study we know of that does look at spread of reported third-order beliefs (Coibion et al. 2021) only does so for one object, precluding investigation of how third-order belief distributions can vary. Thus, to study *variation* in third-order belief distributions, we generated a new third-order belief dataset comprising a set of 18 objects. We choose to focus on work values as the empirical setting given that there is a large body of existing research outlining the dimensions of work life that generally matter to people from a first-order perspective (e.g., Gay 1971; Robinson and Betz 2008; Ros, Schwartz, and Surkiss 1999). Career counseling typically begins with helping individuals figure out what is truly important to them, so that career moves are aligned with "personal priorities".[5] Yet personal priorities do not emerge in a cultural

[4] The extent to which individuals in a collective share a set of first-order attitudes or values has been studied as consensus and dissensus (Hunzaker and Valentino 2019; Lynn and Ellerbach 2017; Lynn, Shi, and Kiley 2025), cultural coherence and diversity (Wood 2024), shared understandings (Goldberg 2011), and convergence and divergence (Mize 2024). We use the terms agreement, consensus, convergence, and sharedness interchangeably.
[5] https://news.stanford.edu/stories/2023/03/meaningful-work-kit-new-tool-help-make-career-choices

vacuum so, as a twist on this classic first-order exercise, we ask some respondents to evaluate the importance of work values from a standard first-order perspective ("How important is [*work value*] to you personally?") and we ask others to evaluate the same set of values from a third-order perspective: "How important is [*work value*] to most people in America?"

Our empirical analysis has two parts. The first explores which work values conform to which type of third-order belief distribution. The second explores one potential mechanism that could explain why third-order beliefs may appear unshared: competing scripts based on status. Finally, in the discussion and conclusion, we address how our study of selective sharedness in third-order beliefs serves as a launchpad for further inquiry into why third-order consensus materializes for some objects and ideas but not others.

Consensus versus Dissensus when Imagining Most People

The cornerstone of symbolic interactionism is the recognition that individuals cannot navigate social life without some conceptualization of the generalized other—an imagined actor who represents most people. Mize (2025), for example writes: "As symbolic interactionists have said for nearly one hundred years, we all are affected by society and recognize its norms and beliefs—even if we do not personally agree with them" (p. 282). In this framework, the generalized other represents what "everyone knows everyone knows" (Berger and Luckmann 1966).

This raises an important empirical question: to what extent do people actually imagine the generalized other in the same way? Does my version of what everyone knows match your version of what everyone knows? To illustrate, consider three individuals and their beliefs about most people: if all three individuals believe that most people believe that an Ivy League degree is

superior to all other degree types (and that any degree is better than no degree), then the group exhibits perfect consensus in how they imagine the generalized other (regardless of what A, B, and C privately think about the value of post-secondary degrees). That they converge in their third-order beliefs on Ivy League superiority suggests the circulation of a clear cultural script on which degrees are valuable. Third-order sharedness thus reflects and reproduces existing norms, stereotypes, and cultural directives about "good" and "bad" schooling outcomes.

In stark contrast, what if person A thinks most people think that an Ivy League credential is more valuable than a degree from a public university, person B thinks most people do not see a difference between the two types, and person C thinks that most people view college as a waste of time and money? In this scenario A, B, and C fail to converge when imagining what most people think, which implies the absence of strong norms or societal-level expectations about college degrees and why or how they matter.

To date, however, there are few empirical studies documenting the extent to which collectives exhibit consensus versus dissensus when they are asked to imagine what most people think. We argue that there are two reasons why third-order dissensus has been overlooked. First, existing research on third-order beliefs are generally designed to spotlight situations in which third-order beliefs are indeed shared, inadvertently giving the impression that all third-order beliefs are shared. Broad social theories about social order being maintained through widely shared beliefs (Durkheim 1912), or what "everyone knows everyone knows" (Berger and Luckmann 1966; Garfinkel 1967), selectively focus, by design, on widely held beliefs and not those that are unshared. Similarly, scholars working in the status characteristics tradition posit that there are widely shared cultural beliefs about markers that confer competence (Ridgeway and Erickson 2000), such as gender, race, and education. Thus, for good reason, the empirical

focus is on widely shared beliefs that are routinely used to coordinate interaction in the United States (Ridgeway 2019) and not objects and ideas (e.g., the concept of "untouchability" in India's caste system) that are unlikely to structure interaction among Americans.

In sum, past theory has highlighted situations in which third-order beliefs are indeed widely shared, and as a result, existing research is simply not designed to consider when and why third-order beliefs are not shared. We contend that considering the absence of sharedness could be theoretically as valuable as considering cases of sharedness. While shared third-order beliefs directly enable coordination, coordination also depends on the absence of viable alternatives: social objects that lack shared third-order content cannot function as focal points, thereby amplifying the influence of those that are shared.

A second reason that third-order dissensus has been overlooked is that the majority of researchers who actually measure third-order beliefs are primarily interested in tracking the accuracy of third-order beliefs—that is, the average difference between personal beliefs and third-order beliefs. For example, Mize (2024) studies the gap between the average first-order belief and the average third-order belief about warmth and competence stereotypes, finding that respondents assume "others hold more negative stereotypes than they actually do" (p. 2). Bursztyn, González, and Yanagizawa-Drott (2020) measure beliefs about women's rights in Saudi Arabia, finding that, on average, married men underestimate the support among their peers for wives working outside of the home. Other studies have highlighted notable gaps between first- and third-order beliefs in in how college students perceive drinking norms (Prentice and Miller 1993), in how adults perceive what most people think about climate change (Mildenberger and Tingley 2019), and in how economic agents perceive the inflation expectations of most other agents (Coibion et al. 2021).

The gap between first- and third-order average beliefs is central to the long-standing research tradition around pluralistic ignorance, which is defined as a phenomenon where individuals in a group privately reject a belief, norm, or behavior, but incorrectly assume that most others accept it (Katz and Allport 1931; see Miller 2023 for a 100-year review of social psychological studies of pluralistic ignorance). For example, college students may converge in their beliefs about what most students think regarding alcohol—believing that most peers favor drinking—when in reality the majority abstain. In this case, there is convergence in third-order beliefs, but the content of that convergence is a *mis*perception.

Pluralistic ignorance research typically focuses on the origins of misperceptions and their impact on subsequent behavior (Bursztyn et al. 2020; O'Gorman 1975; Willer, Kuwabara, and Macy 2009). Inaccurate third-order perceptions could be the result, for example, of egocentric bias, where participants answer questions about what most people believe by imputing their own beliefs and adjusting accordingly (Ross, Greene, and House 1977). In other cases, inaccurate third-order convergence could result from selective disclosure of information (Cowan 2014; Kitts 2003; Noelle-Neumann 1974), network structure effects such as the majority illusion (Lerman, Yan, and Wu 2016, see also Grow, Flache, and Wittek 2017), or endorsement from third-party authorities (Sauder 2006).

We contend, however, that researchers have over-emphasized the misperception component of pluralistic ignorance and under-emphasized the pluralistic or convergence aspect of the phenomenon. Namely, we argue that if third-order convergence exists, only then does it make sense to further examine the extent to which third-order belief distributions accurately summarize their first-order counterparts. However, if third-order sharedness does not exist,

accuracy should be moot. When third-order beliefs vary widely, their central tendency no longer reflects a collective belief *per se* but is an artifact of averaging diverse views.

Figure 1 illustrates this argument. For a hypothetical belief X, Figure 1a captures the distribution of responses to the question: "How important is X to you personally?" For simplicity, let's say that 1a is the true, first-order distribution of responses of the entire population of Americans, which we will refer to hereafter as the "baseline" or "truth" about X. The "center" of this first-order distribution thus represents what most Americans actually think. Figures 1b-d are stylized boxplots of three possible third-order belief distributions, elicited from the question: "How important do you think X is to most people?" Again, for simplicity, let's assume that Figures 1b-d capture the responses of all Americans reporting on what they think most Americans believe. In all four panels of Figure 1, the dashed line represents the median response, and the box and whiskers capture the spread of responses. A compressed box with short whiskers represents high consensus, whereas an elongated box represents the lack of consensus.

[Figure 1 HERE]

Shared and Accurate. As noted above, what "everyone knows everyone knows" (Berger and Luckmann 1966; Garfinkel 1967) is considered central to the maintenance of social order. In this perspective, it is presumed that there is no expected gap between first- and third-order perceptions. For example, if individuals perceive that most people prefer chocolate ice cream, and most people's personal belief is truly that chocolate ice cream is the best, this situation exhibits third-order consensus (everyone thinks everyone likes chocolate), first-order consensus (everyone actually likes chocolate), and third-order accuracy (a match between what everyone thinks everyone likes and what everyone actually likes). Figure 1b depicts this scenario: the

third-order boxplot is highly compressed, showing that individuals' perceptions of what most people think are highly shared. Further, the "true" population median in 1a is accurately reproduced in 1b's third-order projections. This is a case where there is a shared representation of what most people believe, and it matches the true underlying beliefs of most people.

Shared and Inaccurate. Figure 1c shows a stylized third-order distribution that exhibits consensus but is not aligned with the true population median. This scenario is implied in the literature on pluralistic ignorance, but we note that previous measurement of pluralistic ignorance focuses only on misalignment in the central tendency component. Figure 1c captures how pluralistic ignorance should be measured with respect to convergence and inaccuracy together at the same time.

No shared understanding. In sharp contrast to 1c, Figure 1d shows a scenario in which there is technically misalignment in the median, but only because there is a notable lack of third-order consensus. The third-order belief distribution in Figure 1d corresponds to a scenario in which people's assessments of what most people think are highly variable, suggesting the absence of a cultural script. We speculate that a lack of third-order consensus could be connected to several phenomena. First, the absence of third-order consensus around some belief could indicate the lack of consensus in the first order. If underlying first-order beliefs are highly diverse, individuals might draw conclusions about what most people think based on local standards, creating vast heterogeneity in third-order beliefs. Second, it is possible that people fail to converge because there is a lack of centralized guidance on what most people think. Comedians and other cultural producers are expert, for example, at picking up elements of life that are in fact shared before most people realize that they are shared. So, for the elements of life that cultural producers have mined extensively (e.g., the lives of ER doctors), we are likely to

have many cultural scripts at the ready. However, for unmined elements, the absence of cultural scripts could lead to third-order emptiness. In this situation, if you ask respondents what most people think, they might randomly guess, leading to wildly different answers. Third, there could be lack of consensus about a third-order belief because there are competing scripts about this belief. In this case, because pockets of people have different imaginations of most people, this creates a third-order belief distribution that lacks consensus as a whole. Whatever the reason, the point here is that accuracy is moot in the case of Figure 1d. Without a shared understanding, the center of third-order distribution may or may not line up with the center of the first-order distribution, but in either case, there is no meaningful interpretation of alignment or misalignment. Both would be accidental byproducts of diversity in third-order beliefs.

Present Study

Given the lack of previous research on the interplay between accuracy and sharedness in third-order distributions, we conduct a new type of empirical examination of third-order belief distributions. Choosing the empirical setting of 18 work values, we first describe variability in the form of third-order belief distributions: to what extent do our 18 third-order belief distributions resemble Figure 1b, 1c, or 1d? Second, we explore one potential mechanism (competing scripts based on status groupings) that could be driving third-order disagreement.

Data and Methods

Rating the perceived importance of work value is a commonly prescribed exercise for individuals navigating careers choices. Stanford University, for example, recently launched the

Meaningful Work Kit[6], an online tool that allows users to rank a large set of skills, core values, and desired workplace attributes in hopes of helping users better understand their personal goals and desires. Past research shows that individuals vary markedly in their personal priorities (i.e., first-order beliefs in terms of what is important for self) (Hansen and Leuty 2012; Ros et al. 1999). Focusing on 18 commonly studied work values adapted from Robinson and Betz (2008), we developed two versions of an otherwise identical survey about the perceived importance of specific aspects of work life. One version elicits personal, first-order beliefs of perceived importance via the question "How important is it to you personally…" and the other elicits third-order perceptions via the question "How important is it to most people in the United States…?" Response options ranged from 0=not at all important to 100=extremely important. All 18 items are listed in Table 1.

Respondents were recruited on April 23, 2025 on *Prolific*, an online research platform connecting researchers and participants shown to generate reliable data (Peer et al. 2017). Respondents took one of the two versions of the survey for a payment of $1.20 ($7.97/hr) for first order and $2.00 ($9.21/hr) for third. Participants were eligible to take the survey if currently living in the United States, identifying as native English speakers, and currently working a job or looking for work. In addition, to be eligible for the third-order survey, participants had to be between the ages of 25 and 44, the life course period when individuals are most likely to be job seeking and thinking about work values (Chow, Galambos, and Krahn 2017; Kalleberg and Marsden 2019). After dropping respondents who (1) did not finish the survey, (2) did not pass both attention checks, and (3) were not between the ages of 25 and 44 in the third-order condition, the analytic sample included 101 first-order and 188 third-order respondents. A

[6] https://mwk.stanford.edu/

descriptive summary of both samples is provided in Appendix A, which shows that both are skewed heavily towards those with college degrees compared to a nationally representative GSS sample from 2024 (panel C). The non-representativeness of these samples is discussed below with respect to each measure.

Key Measures

Third-order importance. We measure the central tendency of third-order beliefs by calculating the median for each work value from the third-order condition. The mode of the distribution would be unreliable with response options ranging from 0 to 100 in one-point increments. And we chose the median over the mean because most of the response distributions are left-skewed, which is expected given that the survey is built around items known to be important to most people (Robinson and Betz 2008). Overall, third-order belief importance is what our specific sample of respondents think most Americans think about the importance of a work value. Because our third-order sample is limited to adults between the ages of 24-44 who are employed (or looking for work) and largely college-educated, it is important to remember that third-order importance medians capture this particular group's understanding of "most Americans". In other words, what does this specific slice of the American population imagine when they think of most Americans?

Third-order sharedness. We operationalize the extent to which our third-order respondents exhibit consensus in their ratings using the variance of the belief distribution.[7] A

[7] Coibion et al. (2021) also use the standard deviation to measure third-order consensus. Their purpose, however, was to compare the spread of a third-order belief distribution to the spread of its first-order counterpart. We also note that Mize (2025) operationalizes consensus in third-order stereotypes with respect to subgroup mean responses. For example, to what extent do men versus women report the same third-order beliefs *on average*? When subgroup averages are statistically equivalent, Mize (2025) uses this as evidence that third-order beliefs are consensual. We follow Coibion et al. (2021) and measure agreement/disagreement directly with respect to variability in responses.

small variance (or its square root, the standard deviation) indicates that our respondents agree on what most Americans think whereas a large variance would suggest that respondents do not agree on what most Americans believe. We then test if standard deviations are statistically larger for some workplace values compared to others using Levene's test for variance equality. Once again, our third-order sample is not a nationally representative sample of Americans but rather one specific segment of the American population. Third-order sharedness in this study thus captures the extent to which this specific slice of the American population shares an understanding of most Americans.

Third-order accuracy. As noted above, the concept of pluralistic ignorance is based on the idea that a group of people can misperceive what most people actually think. In previous studies, accuracy has been operationalized as the difference between an estimate of what most people in the target population actually think (i.e., the first-order truth) and a group's average perception of what most people think (i.e., the average third-order guess). For example, Mildenberger and Tingley (2019) examined Americans' higher-order accuracy with respect to global warming. First, they asked a nationally representative sample of the US population to indicate if they personally agreed with the statement: "global warming is happening". The percentage who agreed served as their estimate of true population agreement. Next, they asked the same sample to guess what percentage of the U.S. population agrees that global warming is happening. They found that the average third-order guess significantly underestimates the true level of agreement. In other words, they find that most Americans (about 75%) personally agree that global warming is happening, yet, on average, Americans guess that roughly 55% of Americans agree (Mildenberger and Tingley 2019, p. 1290).

Following this framework, we calculate third-order accuracy as the difference between the first-order median and the third-order median for each work value. However, in our case, neither our first- nor third-order samples are nationally representative. As shown in Appendix A, our first-order sample (panel A) is diverse on several demographic dimensions (gender, race, urbanicity, and political affiliation), but it also includes a much larger share of employed and college-educated individuals in their prime working years (25-44) compared to the nationally representative GSS sample from 2024 (Table 1, panel C). For this reason, we interpret the medians of our first-order belief distributions as providing a reasonable estimate of "most Americans during early and middle adulthood who are employed and college-educated". In sum, third-order "accuracy" in the present study is technically this: the extent to which a sample of adults (between the ages of 25-44 who are mostly employed and college-educated) over- or under-estimate a work value's "true" importance, as measured by the private beliefs of a demographically similar sample. Given these caveats, our discussion of accuracy focuses on the analytical value of examining accuracy alongside sharedness when studying third-order belief distributions.

Analytic Plan

To map sharedness of third-order beliefs across work values, we begin by exploring variability in respondents' third-order beliefs about work values by sorting values into one of three types: shared and accurate, shared but inaccurate, and not shared. Next, to lay the groundwork for future explanations of why some third-order beliefs remain unshared, we explore whether competing scripts based on social position can explain why a third-order belief distribution exhibits dissensus. We use subjective status at work as one potential difference in social position

that could generate divergent third-order beliefs across subgroups. Subjective work status is an index of eight standardized items ($\alpha = 0.84$), all of which are described in Appendix B. Items include, for example, the extent to which respondents feel satisfied at work ("*All things considered, how satisfied are you with your work situation as a whole these days?* [0 = Completely dissatisfied; 10 = Completely satisfied] and if they feel respected in the context of work and occupations (e.g., "*When my family judges my work situation, I know they judge me favorably"* and "*I am respected by society because of my work and occupation."* [1 = Strongly disagree; 5 = Strongly agree].

Results

Table 1 provides descriptive statistics for the first- and third-order belief distributions of the 18 work values, sorted by descending third-order consensus (i.e., evidence of a shared social script). To illustrate differences in consensus among the 18 work values, Figure 2 shows results from pairwise Levene's tests for equality of variances.[8] Darker squares in the heatmap indicate that the two distributions have significantly different variances. For example, the third-order distribution around *Supervision* shows a significantly smaller spread than that around *Creativity* ($p = 0.000$). This suggests that respondents have (more of) a shared cultural script that most people care about having a boss who treats them well, whereas there is less of a clear script around the importance of trying out new ideas at work.

[Table 1 and Figure 2 HERE]

Next, guided by the three conceptual prototypes from Figure 1, we describe how third-order belief distributions do, in fact, take qualitatively different forms with respect to

[8] Results from f-tests are substantively similar. However, because many variables exhibit left-skewed distributions, Levene's test is preferred due to its robustness to non-normality.

convergence and accuracy. In the boxplots shown in Figures 3a-f, we choose six work values from the 18 that exemplify the three conceptual prototypes outlined above. Each boxplot captures the interquartile range and median of the third-order belief distribution. In Figures 3a-c, the first-order median is overlaid as a dashed line.

[Figure 3 HERE]

Prototype: Shared and Accurate

Figure 3a shows a third-order belief distribution with the signature of the "shared and accurate" prototype, which captures the intuition that "everyone thinks that everyone thinks". For *Security* (to what extent do most Americans think it is important "to know that [one's] position will last"), the third-order distribution exhibits a high degree of consensus (the standard deviation in responses is small). The first- and third-order medians (88 and 89, respectively) are statistically similar ($p=0.645$ for Wilcoxon rank sum test). In sum, third-order respondents have an *accurate* projection of the importance of job security as estimated by their first-order counterparts, and this projection is consensual (relative to the other 17 work values in our dataset). As shown in Table 1, the third-order *Security* distribution has the third smallest standard deviation of all 18 items (sd=17.0 on a 100-point scale). Other items that fit this pattern include third-order beliefs on *Work-Life Balance* ("…that [one] has time for leisure activities after work") and *Work Environment* ("…to work in a clean, warm, well-lit place"). Broadly, these results suggest that everyone knows that everyone cares about having job security, work-life balance, and "good" work conditions.

Prototype: Shared but Inaccurate

Figures 3b-c show the third-order distributions for *Income* ("…that [one's] salary is high compared to the American population") and *Growth* ("…to have opportunities to grow personally or professionally in [one's] role"). Relative to other work values, both distributions are exemplars of *shared but inaccurate.* For each item, third-order responses indicate a relatively shared image of what most Americans think, but this shared image is inaccurate compared with its respective first-order median. Specifically, Figure 3b shows that third-order *Income* beliefs are shared but statistically *over*estimate ($p = 0.005$) their actual first-order importance ($median_{3rd} = 81$ versus $median_{1st} = 73$). Respondents also overestimated the importance of *Achievement* ($p = 0.002$), suggesting distorted cultural scripts that inflate the importance of social and financial status in the United States.

In contrast, *Growth* (Figure 3c) exhibits a similarly high level of third-order consensus but *under*estimates ($p = 0.000$) how important growth is on average in the first-order survey ($median_{3rd} = 82$ versus $median_{1st} = 90$). Respondents also underestimated the extent to which their first-order counterparts cared about *Purpose* ($p = 0.000$), *Coworkers* ($p = 0.005$), *Supervision* ($p = 0.010$), and *Independence* ($p = 0.016$). These results suggest that people can also converge on what they think most people do *not* value. Broadly, both 3b and 3c are consistent with pluralistic ignorance, where a group has a shared but distorted view of what most people think.

Prototype: No Shared Understanding

Figures 3d-f display the third-order distributions for *Mental Challenge* ("…to always have new problems to solve"), *Creativity* ("…that [one] can try out new ideas), and *Diversity* ("…to be in a workplace that values and includes people from different backgrounds"), respectively. All three

third-order distributions exhibit *a lack of shared understanding*. Figure 2 shows that the variance of these three values is significantly larger ($p < 0.001$) than values that we categorize as "shared", such as *Achievement*, *Work Environment*, or *Coworkers*. We did not superimpose the first-order median in Figures 3d-f (or Figure 1c) because accuracy is not meaningful in the absence of sharedness. In contrast to Figures 3b and 3c which depict sharedness around inaccuracy, Figures 3d-f show a lack of sharedness that inadvertently creates inaccuracy.

In sum, the results for *Mental Challenge, Creativity,* and *Diversity* suggest that there is no dominant cultural script circulating about the importance of these work life components to most people. Other items with similarly large standard deviations include *Collaboration* ("…to work together with others as a team"), *Variety* ("…to have variety and do many different things at work"), and *Leadership* ("… to be a respected leader in your work organization").

The insight that some third-order beliefs are unshared raises the broad question of what social forces facilitate or hinder convergence. One possibility in terms of why third-order beliefs fail to converge is that different subgroups adhere to different scripts, which leads to a lack of global convergence. We next explore this idea with respect to one type of subgroup division: individuals with high subjective work status versus those with low subjective work status (see Appendix B for the construction of the measure). The high-status subgroup consists of respondents with a subjective work status score that is one standard deviation or more above the mean; the low-status subgroup includes those who are one standard deviation or more below the mean.

Of the six workplace values exhibiting a low degree of consensus, Figure 4a shows a third-order belief distribution characterized by subgroup division whereas Figure 4b shows one that cannot be explained by competing scripts. Figure 4a corresponds to *Leadership* ("…to be a

respected leader in [one's] work organization"), where the "All" boxplot summarizes the full sample and the "High" and "Low" boxplots show the high- and low-status subgroups, respectively. While high-status individuals have significantly higher median third-order importance than low-status counterparts for most values[9], *Leadership* stands out as a case where the two groups have especially divergent ideas of what most people think. For *Leadership*, the interquartile ranges of the two groups do not overlap (high status: Q1 = 75.2, Q3 = 100; low status: Q1 = 34, Q3 = 70), indicating complete separation in the middle 50% of responses. These results suggest that there may be competing cultural scripts based on status level around the importance of being a respected leader. That is, part of the reason why *Leadership* appears "unshared" at the aggregate level is due to combining two unaligned subgroup perspectives.

[Figure 4 HERE]

In contrast, the analogous boxplots for *Collaboration* in Figure 4b do not suggest the presence of competing scripts on the basis of subjective work status. While the IQRs for *Leadership* do not overlap at all between the two groups, nearly half (47.5%) of the high-status group's IQR for Collaboration overlaps with the low-status group's IQR. This suggests that the overall third-order divergence for *Collaboration* is not consistent with two subgroups having competing cultural scripts.

Discussion

Third-order beliefs are theorized as consequential when they are shared by many members of a collective (Johnson et al. 2006; Thomas et al. 2014). Sharedness facilitates coordination, such as

[9] Respondents with high subjective work status report higher medians ($p < 0.05$, Wilcoxon Rank Sum test) on nearly all work values compared to lower-status respondents, except for *Supervision*, *Security*, and *Work-life Balance*. This pattern may reflect the greater centrality of work in high-status individuals' identities, leading them to rate all aspects of work as more important.

when group members align decision-making around shared conceptions that most people think one group is more competent than another (Ridgeway 2000). Yet studies rarely examine the extent to which members of a collective actually share mental representations of most people's beliefs and instead tend to focus on situations in which third-order beliefs are indeed relatively consensual. We argue that third-order beliefs may or may not be shared and that identifying objects and ideas characterized by a lack of sharedness may be just as valuable as highlighting third-order beliefs that are widely shared. First, we posit that coordination is actually facilitated by both (1) strongly shared third-order beliefs about select ideas and (2) disorganized third-order beliefs about competitors. Second, we argue that observing shared and unshared third-order beliefs is a key first step towards future theorizing as to the mechanisms that produce third-order (dis)agreement.

Thus, the purpose of this study was to explore variation in the forms of third-order belief distributions. We began by proposing a framework for conceptualizing third-order belief distributions as shared and accurate, shared but inaccurate, and not shared at all. Next, we gathered data on 18 work values from the traditional first-order perspective (what is personally important) and also the third-order perspective (what do you think most Americans think). We found all three forms of third-order belief distributions emerge in our dataset, suggesting that some values possess a strong shared cultural script while others do not.

For example, respondents' third-order perceptions about *Security* ("…To know that [one's] position will last?") were shared and converged accurately around the median of the first-order sample. But for other values, the third-order beliefs were tightly shared yet either over- or under-estimated the importance per first-order beliefs, consistent with the phenomenon of pluralistic ignorance. For example, when respondents are asked to think in the third order, they

converge in their belief that *Income* ("…That [one's] salary is high compared to the American population?") is very important to Americans. Interestingly, however, respondents converged on a level of importance that overestimates how much income actually mattered to respondents in the first-order condition. In other words, most everyone in our sample believes that most Americans care more about having an above-average salary than Americans actually do.

Still, for other work values, respondents exhibited little agreement about what most people think. For example, we observed little third-order consensus about the importance of *Creativity* ("… that [one] can try out new ideas at work"). This was the case even though creativity in the first-order condition was above-average desirable and above-average shared. To better understand the significance of this finding, we return to the managerial scenario we described in the introduction. The lack of sharedness around creativity and the presence of sharedness around income suggests that even if many workers privately desire creative opportunities, managers will be more likely to make organizational decisions thinking that most employees desire salary and salary alone. Managers are unlikely to see their employees as a group that cares about creativity because there is no widely held stereotype about the importance of creativity (not because employees do not care about creativity). Selective sharedness around income, reinforced by lack of sharedness for creativity, streamlines decision-making by providing managers with a taken-for-granted focal point to orient collective decisions.

This leads us to the question of why and how some objects and ideas become shared symbols and the basis for stereotypes while others are plagued with third-order ambiguity. While a full exploration of reasons was beyond the scope of this study, we did examine one possible explanation for why global consensus fails to emerge with third-order beliefs. When two groups have shared but competing ideas about what most people think, this creates dissensus at the

aggregate level that can stymie the formation of simple black-and-white stereotypes. To this point, we found that respondents who see themselves as high- versus low-status at work possess competing scripts about the cultural importance of being a respected leader. Specifically, we found a high-status group that rallies around a self-justifying script ("most Americans think that [something I have] is very important") and a low-status group that rallies around a script that downplays their low status ("most Americans think that [something I don't have] is not that important").

That said, in another case of dissensus, *Collaboration*, we were unable to identify an explanation for diversity in third-order beliefs. It could be that the lack of consensus is driven by competing scripts on dimensions we do not yet know about, such as occupational subcultures that prioritize unique work values. It could also be that first-order beliefs among most Americans are so diverse that it naturally resists becoming a stereotype or caricature around which widely held third-order beliefs emerge. Or perhaps there is not diversity in first-order beliefs per se but that everyone sees *Collaboration* as a more complex "object" that resists black-white simplification, which in turn leads to greater ambiguity on the third-order importance scale. Future research that can distinguish among these potential pathways will be the next step towards explaining why some symbols become widely shared focal points while others remain ambiguous.

Limitations

The current study has limitations, most notably that our measure of "accuracy" is based on a relatively small and nonrepresentative first-order sample of Americans. Moreover, even with a representative sample, this measure can be problematic: can the median truly capture what most

people think? Our primary aim is not to evaluate whether respondents correctly identified the beliefs of most Americans, but rather to highlight how apparent accuracy is shaped by the degree of sharedness in third-order inferences. Thus, while accuracy values should be interpreted cautiously, the patterns of sharedness in third-order beliefs remain informative. Because our sample is more homogeneous than the broader U.S. population, respondents likely converged more than a more diverse group would, making our measure a conservative estimate of the non-consensus present in third-order beliefs across society. It is also possible that the accuracy measure is skewed by a first-order social desirability bias from respondents underreporting the extent to which they truly desire having a high income or achieving at work.

Additionally, the categorization of a value that exhibits consensus in our study is based on its relative level of consensus in relation to other values in our dataset. Currently, there is no guidance on what standard deviation is small enough to be considered shared. Moreover, while our study is novel for comparing the level of consensus in third-order responses across 18 different work values, we acknowledge that the variability in third-order sharedness could be far more or less extreme in different empirical settings.

Conclusion

This study builds a foundation for future investigation of how third-order agreement occurs selectively, wherein only a narrow subset of objects and ideas will emerge as tightly shared understandings. Our findings suggest that there are limits to the amount of cultural information that can be collectively shared and used to facilitate coordination on a society-wide scale. Stinchcombe (1982) captured this problem of selective sharedness with a hypothetical coordination problem that hits close to home. In the following passage, Stinchcombe discusses a

large group of scholars using name badge information to form connections with new colleagues at a large convention (1982: p. 7):

> Imagine if our badges for the convention had our names, our institutions, and our favorite classic writer. So mine might read "Stinchcombe, University of Arizona, Max Weber." Suppose now, in a fit of preciousness, I write instead, "Stinchcombe, University of Arizona, Paul Veyne." He is right now the person I am most intellectually excited about, and embodies the same virtues as Max Weber. But 90-odd percent of the people I met would not know who I was talking about, so would not learn anything about the set of prejudices and intuitions to which I was declaring my loyalty… The problem here is that we really need simple guidelines to choose people we want to read and to talk to. There are *far too many things* written *for us to keep track of them all*, and no one would seriously propose to enter into serious dialogue with all 14,000 members of ASA.

This passage highlights that effective coordination is tied to the exclusivity of widely recognized symbols. Due to cognitive load issues, groups must develop "simple guidelines" (here, stick to three theorists) if they want to establish effective norms and rules for how to be a "good" member. However, convergence on Marx, Weber, and Durkheim means that Paul Veyne has little chance of gaining widespread recognition, no matter the quality of his work.

Similarly, returning to our work values data, the distribution of respondents' third-order beliefs tell us that there is (1) a circulating stereotype that Americans care a lot about salaries outpacing others and (2) third-order emptiness (i.e., no shared understandings—accurate or inaccurate) about workers and their desire to be creative or their desire to collaborate with others. This is unfortunate because our first-order data suggest that workers actually care more on average about creativity and collaboration than they do outpacing others salary-wise. Is third-order convergence around "keeping up with the Joneses" making it difficult for Americans see what most workers truly care about? Future research is needed to understand the causes and consequences of situations in which nobody seems to know what most people actually think.

References

Berger, Peter, and Thomas Luckmann. 1966. "The Social Construction of Reality." Pp. 110–22 in *Social theory re-wired*. Routledge.

Blumer, Herbert. 1969. *Symbolic Interactionism: Perspective and Method*. Univ of California Press.

Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgment of Taste*. Cambridge, Mass.: Harvard University Press.

Bursztyn, Leonardo, Alessandra L. González, and David Yanagizawa-Drott. 2020. "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia." *American Economic Review* 110(10):2997–3029.

Chow, Angela, Nancy L. Galambos, and Harvey J. Krahn. 2017. "Work Values during the Transition to Adulthood and Mid-Life Satisfaction: Cascading Effects across 25 Years." *International Journal of Behavioral Development* 41(1):105–14. doi:10.1177/0165025415608518.

Chwe, Michael Suk-Young. 2013. *Rational Ritual: Culture, Coordination, and Common Knowledge*. Princeton, N.J. ; Woodstock: Princeton University Press.

Coibion, Olivier, Yuriy Gorodnichenko, Saten Kumar, and Jane Ryngaert. 2021. "Do You Know That I Know That You Know…? Higher-Order Beliefs in Survey Data*." *The Quarterly Journal of Economics* 136(3):1387–1446. doi:10.1093/qje/qjab005.

Cooley, Charles Horton. 1902. *Human Nature and the Social Order*. New York: Routledge.

Correll, Shelley J., Cecilia L. Ridgeway, Ezra W. Zuckerman, Sharon Jank, Sara Jordan-Bloch, and Sandra Nakagawa. 2017. "It's the Conventional Thought That Counts: How Third-Order Inference Produces Status Advantage." *American Sociological Review* 82(2):297–327. doi:10.1177/0003122417691503.

Cowan, Sarah K. 2014. "Secrets and Misperceptions: The Creation of Self-Fulfilling Illusions." *Sociological Science* 1:466–92. doi:10.15195/v1.a26.

Dare to Lead Values. Retrieved February 4, 2026. https://brenebrown.com/resources/dare-to-lead-list-of-values/.

Durkheim, Émile. 1912. *The Elementary Forms of Religious Life*. Oxford World's Classics (Oxford University Press). Oxford ; New York: Oxford University Press.

Garfinkel, Harold. 1967. *Studies in Ethnomethodology.* Englewood Cliffs, N.J.: Prentice-Hall.

Gay, Evan G. 1971. "Manual for the Minnesota Importance Questionnaire." *Minnesota Studies in Vocational Rehabilitation*. https://psycnet-apa-org.proxy.lib.uiowa.edu/record/1972-09873-001.

Glavin, Paul, and Scott Schieman. 2025. “The Job Satisfaction Paradox: Pluralistic Ignorance and the Myth of the ‘Unhappy Worker.’” *Social Psychology Quarterly* 88(1):22–44. doi:10.1177/01902725241253252.

Goldberg, Amir. 2011. “Mapping Shared Understandings Using Relational Class Analysis: The Case of the Cultural Omnivore Reexamined.” *The American Journal of Sociology* 116(5):1397–1436. doi:10.1086/657976.

Grow, André, Andreas Flache, and Rafael P. M. Wittek. 2017. “Global Diversity and Local Consensus in Status Beliefs: The Role of Network Clustering and Resistance to Belief Change.” *Sociological Science* 4:611–40. doi:10.15195/v4.a25.

Hansen, Jo-Ida C., and Melanie E. Leuty. 2012. “Work Values Across Generations.” *Journal of Career Assessment* 20(1):34–52. doi:10.1177/1069072711417163.

Hunzaker, MB Fallin, and Lauren Valentino. 2019. “Mapping Cultural Schemas: From Theory to Method.” *American Sociological Review* 84(5):950–81. doi:10.1177/0003122419875638.

Johnson, Cathryn, Timothy J. Dowd, and Cecilia L. Ridgeway. 2006. “Legitimacy as a Social Process.” *Annual Review of Sociology* 32(1):53–78. doi:10.1146/annurev.soc.32.061604.123101.

Kalleberg, Arne L., and Peter V. Marsden. 2019. “Work Values in the United States: Age, Period, and Generational Differences.” *The ANNALS of the American Academy of Political and Social Science* 682(1):43–59. doi:10.1177/0002716218822291.

Katz, Daniel, and Floyd Henry Allport. 1931. *Students’ Attitudes: A Report of the Syracuse University Reaction Study*. Syracuse, N.Y.: The Craftsman Press, inc.

Kitts, James A. 2003. “Egocentric Bias or Information Management? Selective Disclosure and the Social Roots of Norm Misperception.” *Social Psychology Quarterly* 66(3):222–37. doi:10.2307/1519823.

Lerman, Kristina, Xiaoran Yan, and Xin-Zeng Wu. 2016. “The ‘Majority Illusion’ in Social Networks.” *PLOS ONE* 11(2):e0147617. doi:10.1371/journal.pone.0147617.

Lynn, Freda B., Yongren Shi, and Kevin Kiley. 2025. “Intersectional Group Agreement on the Occupational Order.” *Social Psychology Quarterly* 88(1):135–48. doi:10.1177/01902725241256378.

Mead, George Herbert. 1934. *Mind, Self & Society*. University of Chicago Press.

Meaningful Work Kit. Retrieved February 4, 2026. https://mwk.stanford.edu/sort_core_values.

Mildenberger, Matto, and Dustin Tingley. 2019. “Beliefs about Climate Beliefs: The Importance of Second-Order Opinions for Climate Politics.” *British Journal of Political Science* 49(4):1279–1307. doi:10.1017/S0007123417000321.

Miller, Dale T. 2023. “A Century of Pluralistic Ignorance: What We Have Learned about Its Origins, Forms, and Consequences.” *Frontiers in Social Psychology* 1:1260896.

Mize, Trenton D. 2024. “Divergence and Convergence across Presumed and Actual Stereotypes.” *Socius* 10:23780231241286873. doi:10.1177/23780231241286873.

Mize, Trenton D. 2025. “Competence Perceptions at the Intersection of Gender and Race-Ethnicity.” *Social Psychology Quarterly* 88(2):271–84. doi:10.1177/01902725241289875.

Noelle-Neumann, Elisabeth. 1974. “The Spiral of Silence a Theory of Public Opinion.” *Journal of Communication* 24(2):43–51. doi:10.1111/j.1460-2466.1974.tb00367.x.

O’Gorman, HUBERT J. 1975. “Pluralistic Ignorance and White Estimates of White Support for Racial Segregation.” *Public Opinion Quarterly* 39(3):313–30.

Peer, Eyal, Laura Brandimarte, Sonam Samat, and Alessandro Acquisti. 2017. “Beyond the Turk: Alternative Platforms for Crowdsourcing Behavioral Research.” *Journal of Experimental Social Psychology* 70:153–63. doi:10.1016/j.jesp.2017.01.006.

Pinker, Steven. 2025. *When Everyone Knows That Everyone Knows...: Common Knowledge and the Mysteries of Money, Power, and Everyday Life*. Scribner.

Prentice, Deborah A., and Dale T. Miller. 1993. “Pluralistic Ignorance and Alcohol Use on Campus: Some Consequences of Misperceiving the Social Norm.” *Journal of Personality and Social Psychology* 64(2):243–56. doi:10.1037/0022-3514.64.2.243.

Ridgeway, Cecilia L. 2000. “The Formation of Status Beliefs Improving Status Construction Theory.” *Advances in Group Processes* 77–102.

Ridgeway, Cecilia L. author. 2019. *Status: Why Is It Everywhere? Why Does It Matter?* New York, New York: The Russell Sage Foundation.

Ridgeway, Cecilia L., and Shelley J. Correll. 2006. “Consensus and the Creation of Status Beliefs.” *Social Forces* 85(1):431–53.

Ridgeway, Cecilia L., and Kristan Glasgow Erickson. 2000. “Creating and Spreading Status Beliefs.” *American Journal of Sociology* 106(3):579–615. doi:10.1086/318966.

Robinson, Carrie H., and Nancy E. Betz. 2008. “A Psychometric Evaluation of Super’s Work Values Inventory—Revised.” *Journal of Career Assessment* 16(4):456–73. doi:10.1177/1069072708318903.

Ros, Maria, Shalom H. Schwartz, and Shoshana Surkiss. 1999. “Basic Individual Values, Work Values, and the Meaning of Work.” *Applied Psychology: An International Review* 48(1):49–71.

Ross, Lee, David Greene, and Pamela House. 1977. “The ‘False Consensus Effect’: An Egocentric Bias in Social Perception and Attribution Processes.” *Journal of Experimental Social Psychology* 13(3):279–301. doi:10.1016/0022-1031(77)90049-X.

Sauder, Michael. 2006. “Third Parties and Status Position: How the Characteristics of Status Systems Matter.” *Theory and Society* 35(3):299–321. doi:10.1007/s11186-006-9005-x.

Stinchcombe, Arthur L. 1982. “Should Sociologists Forget Their Mothers and Fathers.” *The American Sociologist* 17(1):2–11.

Thomas, Kyle A., Peter DeScioli, Omar Sultan Haque, and Steven Pinker. 2014. “The Psychology of Coordination and Common Knowledge.” *Journal of Personality and Social Psychology* 107(4):657–76. doi:10.1037/a0037037.

Willer, Robb, Ko Kuwabara, and Michael W. Macy. 2009. “The False Enforcement of Unpopular Norms.” *American Journal of Sociology* 115(2):451–90. doi:10.1086/599250.

Wood, Michael Lee. 2024. “Measuring Cultural Diversity in Text with Word Counts.” *Social Psychology Quarterly* 87(3):205–26. doi:10.1177/01902725231194356.

Zelditch, Morris. 2001. “Processes of Legitimation: Recent Developments and New Directions.” *Social Psychology Quarterly* 64(1):4–17.

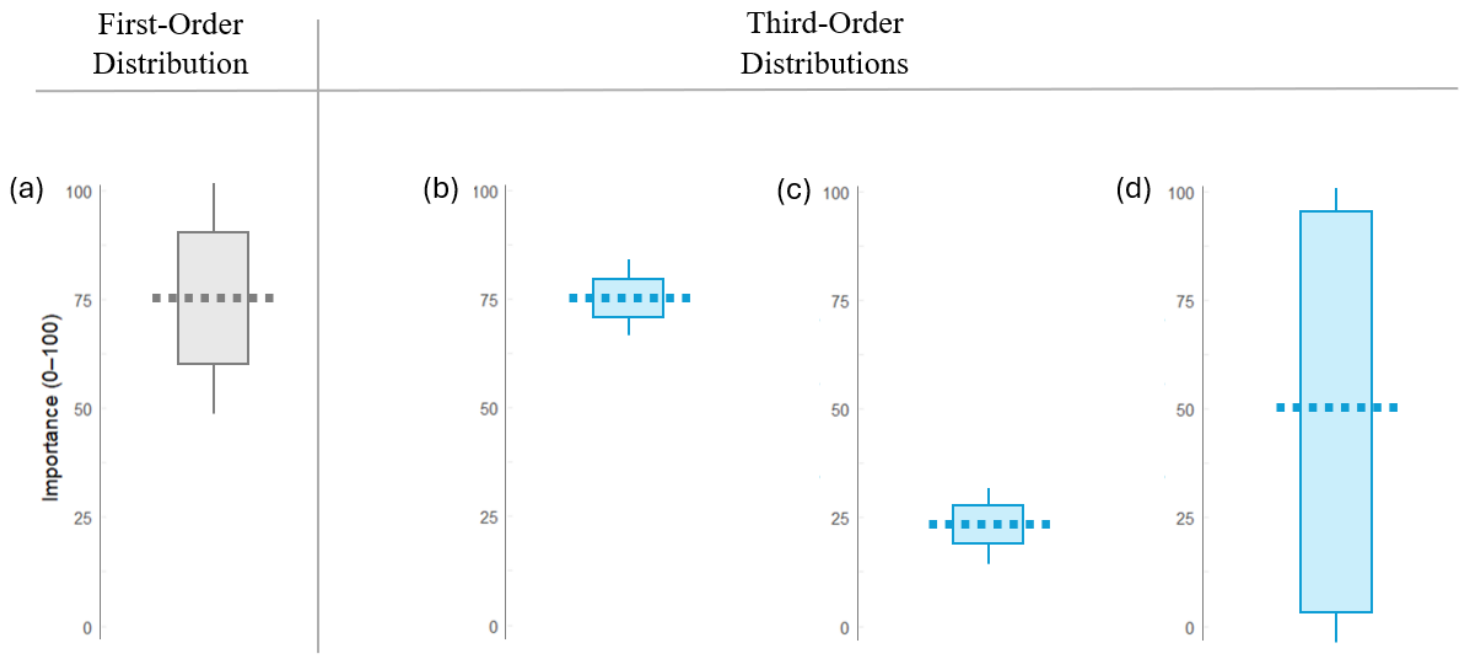

Figure 1. Stylized distributions of first- and third-order beliefs

Note: Panel 1a corresponds to a hypothetical distribution of first-order responses to "How important is X to you personally?" Panels 1b–d illustrate three possible third-order belief distributions elicited from the question, "How important do you think X is to most people?" The dashed line represents the median response, and the boxplots capture the spread of responses (box = interquartile range; whiskers = 1.5x IQR). Panel 1b depicts an accurate and shared projection of others' beliefs, panel 1c depicts an inaccurate but shared projection, and panel 1d depicts a third-order distribution that shows there is no shared understanding of what most people believe.

Source: Authors

Table 1. Descriptive summary of workplace values

		First Order Importance	First Order Agreement	Third Order Importance	Third Order Agreement
Value	**Question**††	**Median**	**SD**	**Median**	**SD**
Supervision *	To have a boss who treats [one] well?	95.0	13.9	89.5	15.5
Work Environment *	To work in a good place (clean, warm, well lit, etc.)?	92.0	18.1	89.5	15.9
Security *	To know that [one's] position will last?	88.0	20.1	89.0	17.0
Growth **	To have opportunities to grow personally or professionally in [one's] role?	90.0	23.0	82.0	17.3
Coworkers *	To have good interactions with [one's] fellow workers?	82.0	18.9	77.0	17.9
Achievement **	To be seen as highly successful in [one's] career?	78.0	27.3	80.0	18.2
Work-Life Balance **	That [one] has time for leisure activities after work?	83.0	19.5	80.0	19.0
Purpose **	To feel that [one's] work is meaningful or purposeful?	91.0	19.2	80.0	19.1
Independence *	That [one] can make decisions on [one's] own?	84.0	21.2	80.0	19.3
Income **	That [one's] salary is high compared to the American population?	73.0	27.3	81.0	19.4
Prestige **	To have a job that others look up to or admire?	78.0	29.4	77.5	21.0
Variety **	To have variety and do many different things at work?	80.0	21.5	65.0	22.4
Creativity *	That [one] can try out new ideas?	84.0	20.1	70.0	22.9
Collaboration **	To work together with others as a team?	82.0	25.6	68.5	22.9
Leadership **	To be a respected leader in [one's] work organization?	83.0	27.7	73.0	23.0
Diversity **	To be in a workplace that values and includes people from different backgrounds?	85.0	26.0	67.5	23.3
Power **	To hold a position of authority where others report to [one] or follow [one's] direction?	65.0	28.7	65.0	23.4
Mental Challenge *	To always have new problems to solve?	70.0	26.7	50.0	25.3

Note: First order importance and agreement summarize respondents (n=101) in the "for you personally" condition whereas the third order columns summarize respondents (n=188) making inferences about "most people in the United States." In place of [one] or [one's] is you/your/yours in the first-order survey and they/them/theirs in the third-order survey. * indicates that the question wording was taken verbatim from Robinson and Betz (2008). ** indicates that the item was adapted from Robinson and Betz (2008) or other sources (Dare to Lead Values; Meaningful Work Kit).
Source: Authors

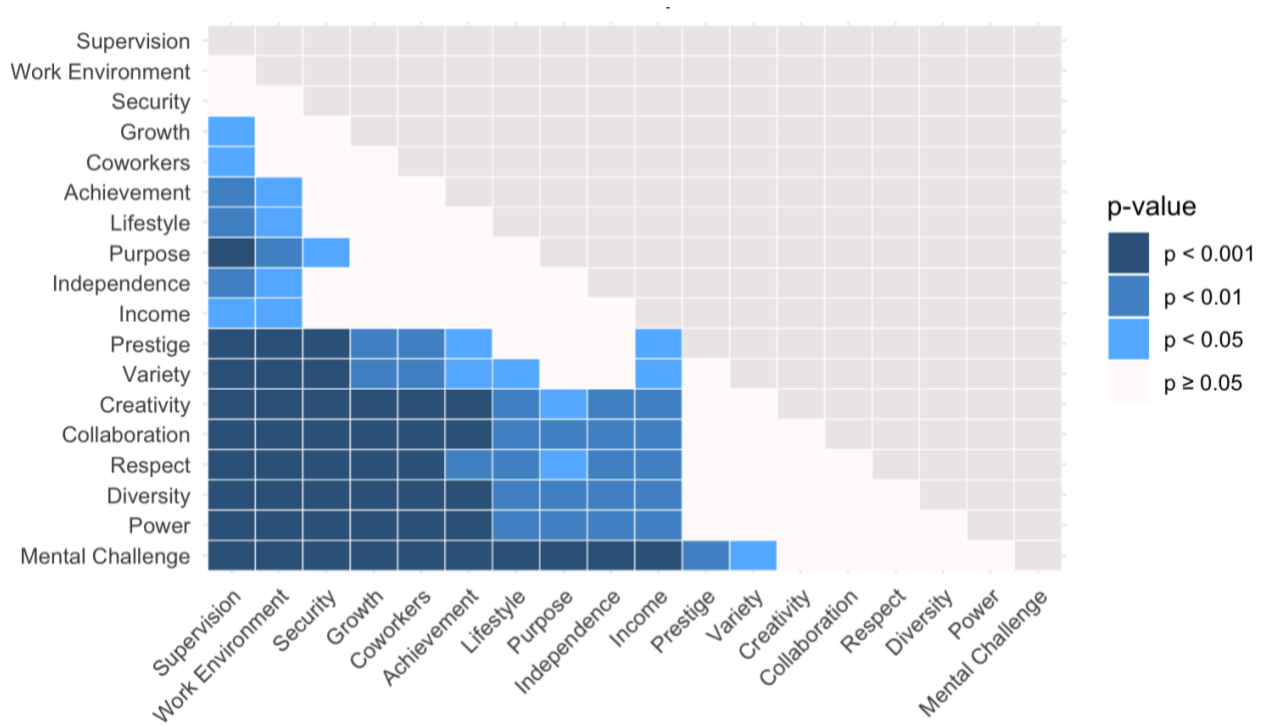

Figure 2. Heatmap of pairwise Levene's tests for equality of variance for third-order beliefs

Note: Axes are ordered by ascending third-order standard deviations. Darker cells indicate that two distributions have statistically significant differences in variances ($p < 0.001$, $p < 0.01$, $p < 0.05$), whereas unshaded cells indicate no significant difference ($p \geq 0.05$). For example, the third-order distribution of Growth has a larger variance than that for Supervision, and this difference is statistically significant ($p<.05$).

Source: Authors

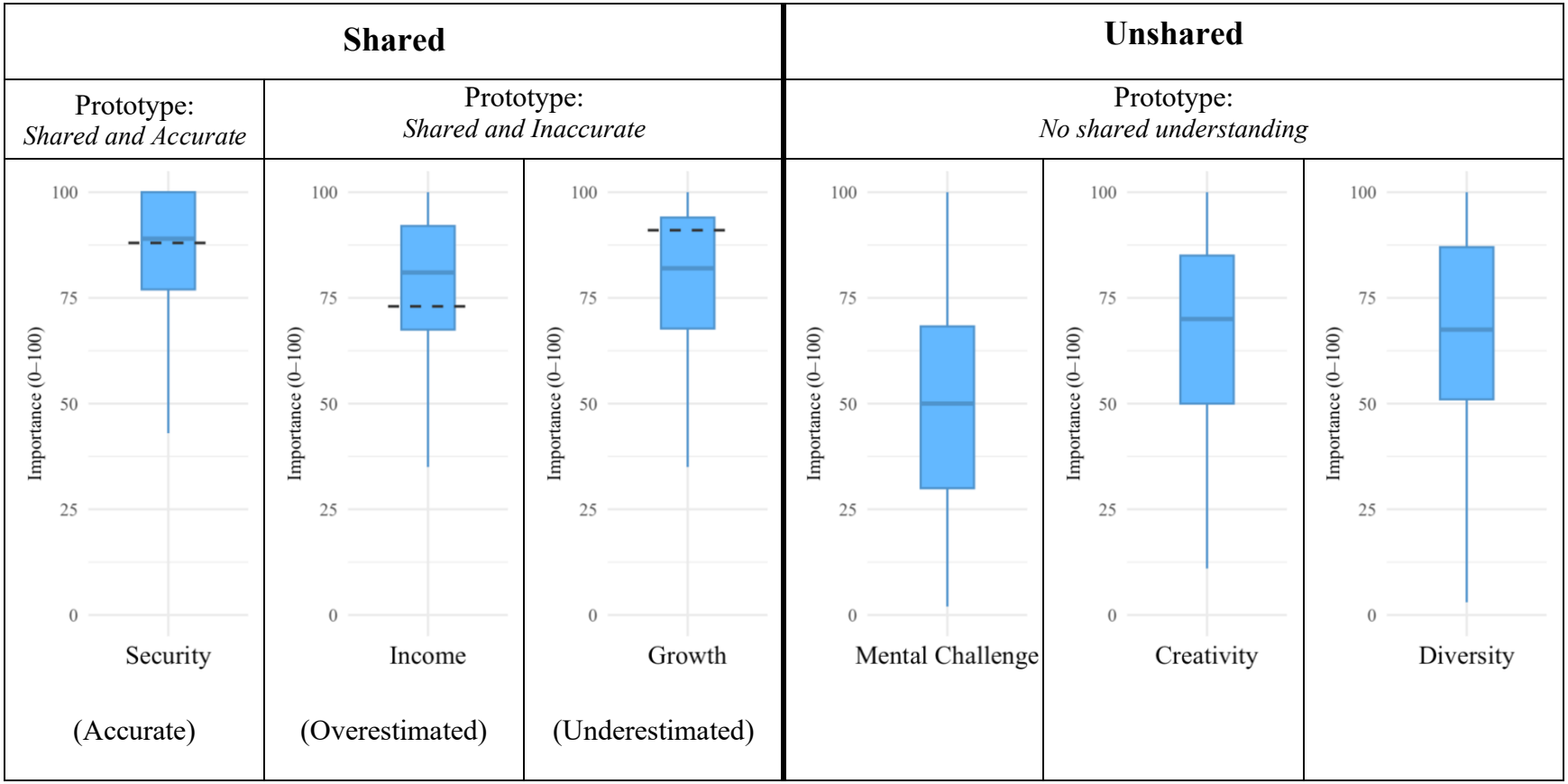

Figure 3. Boxplots of relatively shared versus unshared third-order beliefs.

Note: When third-order belief distributions exhibit agreement (a-c), we further classified as (a) **Accurate**, where the third-order median does not differ statistically from the first-order median (dashed line); (b) **Overestimated**, where the third-order median is statistically higher than the first-order median; or (c) **Underestimated**, where the third-order median is statistically lower than the first-order median. For third-order belief distributions with a high degree of variability, we do not overlay the first-order median because the concept of accuracy is not meaningful when third-order beliefs are not shared.

Source: Authors

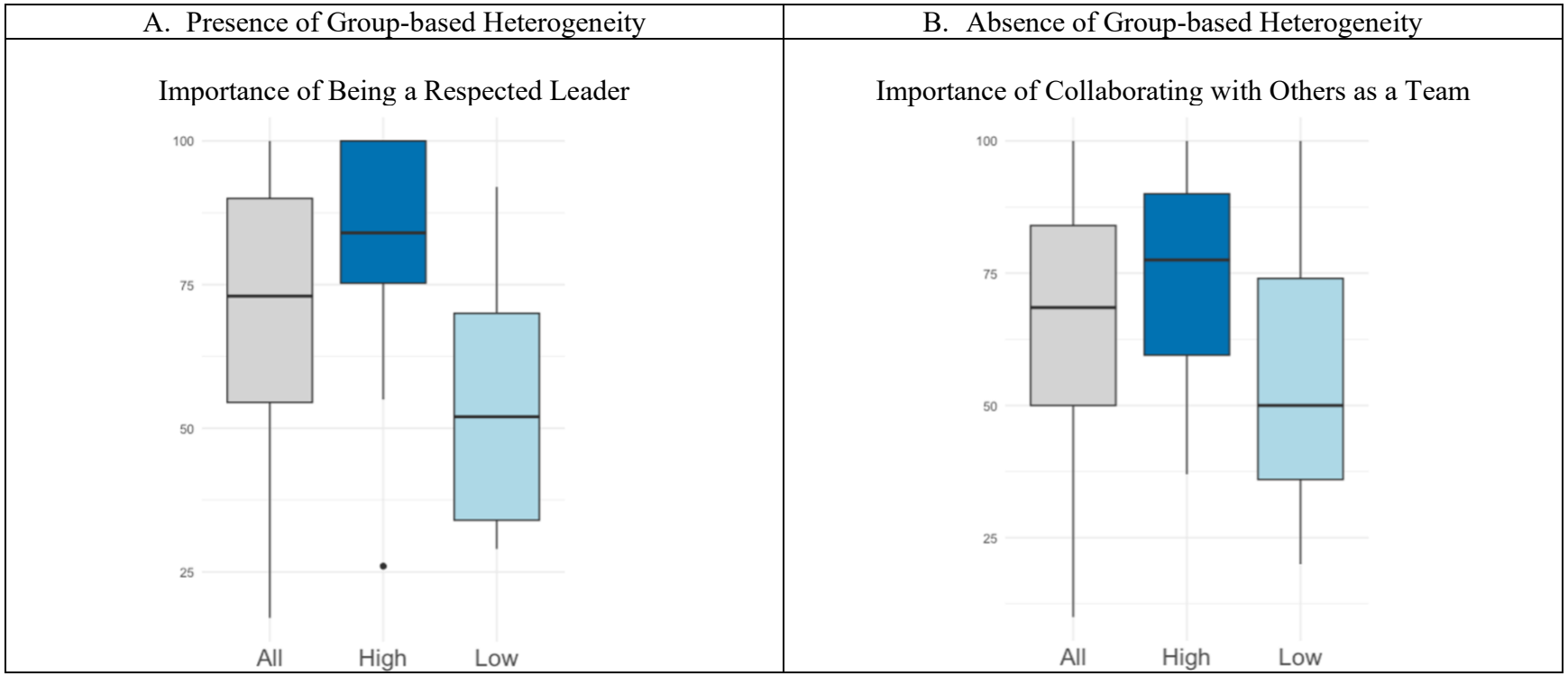

Figure 4. Disaggregating Unshared Third-Order Beliefs—Two Examples

Note: The "All" boxplot summarizes the third-order belief distribution for all respondents. The "High" boxplot depicts the third-order belief distribution of only those respondents who score at least one standard deviation above the mean on subjective work status. Conversely, the "Low" boxplot shows the third-order distribution of those who are at least one standard deviation below the mean.

Source: Authors

Appendix A. Descriptive Summary of Survey Samples Compared to the 2024 GSS

	First Order	Third Order	GSS 2024
	n = 101	n = 188	n = 3290
Gender			
Man	52%	53%	44.6%
Woman	48%	47%	55.4%
Another gender, please specify		0.5%	
Age			
18 - 24	5.9%		7.3%
25 - 34	40%	54%	15.9%
35 - 44	25%	46%	18.4%
45 - 54	17%		14.8%
55 - 64	8.9%		17.3%
65 - 74	2.0%		17.2%
75 - 84	2.0%		7.3%
Education			
Less than high school	1.0%		9.3%
High school graduate (or GED)	5.9%	6.4%	45.6%
Some college coursework but no undergraduate degree	8.9%	9.6%	
Associate's degree	2.0%	7.4%	9%
Bachelor's degree	41%	42%	21.8%
Master's degree (example: MA, MBA, MFA)	35%	30%	14.3%*
Doctoral degree (example: PhD, JD, MD)	6.9%	4.3%	
Race			
American Indian or Alaska Native	2.0%	0.5%	
Asian	3.0%	3.2%	
Black/African American	28%	24%	17.6%
White	64%	68%	70.3%
White, American Indian or Alaska Native		0.5%	
White, Asian		1.1%	
White, Black/African American	1.0%	0.5%	
Other	2.0%	2.7%	12.1%
Hispanic	4.0%	8.0%	14.2%
Urbanicity			
Urban	34%	39%	35.6%
Suburban	51%	47%	48.1%
Rural	15%	13%	16.3%
Employment			
Employed full time	82%	73%	44%
Employed part time	12%	25%	2.7%
Unemployed looking for work		1.6%	5.1%
Unemployed not looking for work		0.5%	

	First Order	Third Order	GSS 2024
	n = 101	n = 188	n = 3290
Keeping house	1.0%		8.9%
Retired	4.0%		24.1%
Other	1.0%		3.4%
Political Affiliation			
Strong Democrat	21%	19%	16.3%
Not strong Democrat	13%	11%	11.4%
Independent, near Democrat	5.0%	7.4%	10.4%
Independent	9.9%	10%	25.4%
Independent, near Republican	5.0%	3.7%	8.4%
Not strong Republican	15%	15%	11.6%
Strong Republican	31%	34%	14.1%
Other party		0.5%	2.5%
Don't know	1.0%		

Notes:
[a] "Graduate degree"

Source: Authors

Appendix B. Construction of Subjective Work Status Measure

Subjective work status is an index of eight standardized items (Cronbach's $\alpha = 0.840$). The eight items are listed below.

Item 1: *Think of this ladder as representing where people stand in their communities. People define community in different ways; please define it in whatever way is most meaningful to you. At the top of the ladder are people who have the highest standing in their community. At the bottom are the people who have the lowest standing in their community. Use the slider to signify the rung that best represents where you think you stand at this time in your life relative to other people in your community.* (1 = lowest standing; 9 = highest standing)

Item 2: *All things considered, how satisfied are you with your work situation as a whole these days?* (0 = Completely dissatisfied; 10 = Completely satisfied)

Item 3: *Please indicate your level of agreement with the following statement*: *I don't feel the value of what I do for work is recognized by others.* (1 = Strongly agree; 5 = Strongly disagree)

Item 4: *Please indicate your level of agreement with the following statement: Some people look down on me because of my social position, job situation, or income.* (1 = Strongly agree; 5 = Strongly disagree)

Item 5: *Please indicate your level of agreement with the following statement: I am very concerned that I won't be able to achieve my career goals*. (1 = Strongly agree; 5 = Strongly disagree)

Item 6: *Please indicate your level of agreement with the following statement: When my family judges my work situation, I know they judge me favorably.* (1 = Strongly disagree; 5 = Strongly agree)

Item 7: *Please indicate your level of agreement with the following statement: When I judge my achievements in my work life, I judge myself favorably.* (1 = Strongly disagree; 5 = Strongly agree)

Item 8: *Please indicate your level of agreement with the following statement: I am respected by society because of my work and occupation. (*1 = Strongly disagree; 5 = Strongly agree)