

# Microlevel Judgments of Organizational Legitimacy: How Validity Cues and Categorical Fit Shape Evaluators' Propriety Beliefs

Julia Thaler<sup>a</sup> , Martin Sievert<sup>b,c</sup> , Sonia S. Siraz<sup>d</sup>  and Alexander Pinz<sup>e</sup>

<sup>a</sup>University of the Bundeswehr Munich, Germany; <sup>b</sup>Institute of Public Administration, Leiden University, Netherlands; <sup>c</sup>University of Mannheim Business School, Germany; <sup>d</sup>Emlyon Business School, France; <sup>e</sup>Technische Hochschule Mannheim, Germany

**ABSTRACT** This study advances research on organizational legitimacy by examining the microlevel mechanisms through which evaluators form propriety beliefs. Building on legitimacy-as-perception research, which posits that evaluators rely on validity cues to make judgments, we argue that individual evaluators draw on broader, more nuanced sets of information than previously acknowledged. Specifically, we theorize and show how distinct validity cues (authorization and endorsement) that coexist combine with evaluators' perceptions of an organization's categorical fit to shape propriety beliefs. Across two factorial survey experiments (n = 1866), perceived categorical fit emerges as the strongest and most consistent predictor of propriety beliefs. Validity cues shape propriety beliefs, but their effects are far from uniform. The findings also reveal that cue valence matters and that complex interplays of validity cues distinctly influence propriety beliefs. This research contributes to legitimacy literature, and more specifically to microlevel legitimacy by offering a granular perspective on how propriety beliefs get constructed from diverse informational cues. By introducing categorical fit as a novel explanatory mechanism, we extend existing theory and encourage further investigations of how it influences microlevel legitimacy perceptions and how various combinations of validity cues can shape evaluations of organizational legitimacy.

**Keywords:** categorical fit, evaluator judgments, factorial vignette experiment, organizational legitimacy, propriety beliefs, validity cues

*Address for reprints:* Julia Thaler, Department of Economics and Management, University of the Bundeswehr Munich, 85577 Neubiberg, Germany ([julia.thaler@unibw.de](mailto:julia.thaler@unibw.de)).

Julia Thaler, Martin Sievert, and Sonia S. Siraz contributed equally.

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## INTRODUCTION

Legitimacy is central to institutional theory and organizational research, as a concept to elucidate how organizations gain support and secure the resources essential for their growth and survival (Aldrich and Fiol, 1994; Suchman, 1995). Scholarly discourse in this domain increasingly addresses evaluators' microlevel perceptions, which arise from a complex framework of individual and collective judgments (e.g., Haack et al., 2021; Suddaby et al., 2017; Tost, 2011). Within this legitimacy-as-perception research stream, studies establish its multilevel nature: Propriety beliefs reflect evaluators' individual-level legitimacy judgment, and validity refers to collective-level legitimacy (e.g., Bitektine and Haack, 2015; Tost, 2011). Because legitimacy 'ultimately exists in the eye of the beholder' (Zimmerman and Zeitz, 2002, p. 416), it is critical to investigate propriety beliefs and how they develop through individual legitimacy judgments (Haack et al., 2021; van den Broek et al., 2023) as well as predict variation in them, due to the significant behavioral consequences of such beliefs, including greater or lesser support for organizations (Sievert et al., 2025; Siraz et al., 2023).

Validity thus operates at the collective level but also can permeate evaluators' cognition through validity cues and shape their propriety beliefs (Haack and Sieweke, 2018). Therefore, understanding the mechanisms of legitimacy judgments at the microlevel is essential, particularly how validity cues influence the formation of propriety beliefs. To advance this understanding, it is crucial to disentangle the effects of the two distinct types of validity cues: authorization and endorsement cues (Dornbusch and Scott, 1975; Johnson et al., 2006). We extend the contemporary research on validity cues and how they affect propriety beliefs by theorizing the relative relevance and interplays of authorization and endorsement, across their different valences (i.e., ambiguous and consistent cues). Determining more precisely how combinations of authorization and endorsement cues affect propriety beliefs can reveal how legitimacy gets conferred on organizations. For example, if we can determine whether evaluators who receive ambiguous cues respond more strongly to one cue rather than the other (e.g., endorsement versus authorization), such knowledge can guide organizational legitimation strategies to gain public or stakeholder trust, especially in complex or polarized environments. We further argue that simply accounting for the complexity of different validity cues does not reflect the full breadth of information that evaluators incorporate into their propriety beliefs.

Challenging the notion that evaluators draw primarily from validity cues (Haack et al., 2021; Haack and Sieweke, 2018; Jacqueminet and Durand, 2020), we propose a novel mechanism. Specifically, we theorize and empirically test how evaluators form microlevel legitimacy judgments by developing perceptions of categorical fit. This theoretical argument builds on social cognitive psychology research (Fiske and Neuberg, 1990). Perceived categorical fit refers to an individual perception of whether an organization's categorization aligns with an expected category. At the microlevel, evaluators maintain beliefs about various organizational categories, which influences their assessment of the organization's appropriateness, such as when European citizens generally expect public organizations to manage prison facilities. Evaluators make category-based judgments, influenced by available labels attached to organizations (e.g., 'public', 'private'), to establish

an initial categorization (Fiske and Neuberg, 1990; Yamauchi and Yu, 2008) and derive perceptions of the fit with expected categories (e.g., public services and managing prison facilities). These perceptions, whether of high or low categorical fit, then affect propriety beliefs.

To explore how validity cues and categorical fit affect propriety beliefs, we conducted two factorial survey experiments (Study 1  $n = 663$ ; Study 2  $n = 1203$ ) in Germany. Both studies refer to genuine public task settings, where public administrations typically evoke high(er) categorical fit, while private organizations evoke low(er) categorical fit: a public participation process in Study 1 and a COVID-19 testing and vaccination facility in Study 2. We leverage the findings to extend existing theoretical frameworks and clarify how validity cues and perceived categorical fit can shape external evaluators' propriety beliefs about an organization.

This more comprehensive perspective on propriety judgment formation advances organizational legitimacy literature in two key ways. First, we contribute to legitimacy-as-perception research (e.g., Bitektine and Haack, 2015; Haack et al., 2021; Siraz et al., 2023; Suddaby et al., 2017; Tost, 2011) by examining how validity cues of differing valence affect evaluators' propriety beliefs. This nuanced, theoretical, and empirical analysis of how such cues shape evaluators' propriety beliefs helps extend understanding of microlevel legitimacy formation (Jacqueminet and Durand, 2020; Sievert et al., 2025; Siraz et al., 2019; Tost, 2011). Across both studies, we corroborate our baseline prediction that positive validity cues lead to higher propriety judgments than do negative validity cues. Evaluators' legitimacy judgments incorporate primarily high and low endorsement cues; authorization cues emerge as less relevant than expected. In their interplay, negative authorization cues outweigh high endorsement cues, but positive authorization cues have no discernable effect on propriety beliefs. This challenges previous theorizing and suggests that evaluators view authorization cues as less critical (Dornbusch and Scott, 1975). Thus, presenting validity cues together seemingly does not significantly alter their effects on individual propriety beliefs. This suggests that evaluators might process the cues separately.

Second, we integrate legitimacy-as-perception with categorization concepts to elaborate on a cognitive, microlevel mechanism that shapes propriety beliefs about organizations, namely, perceived categorical fit based on available category labels and initial categorization of the organization (Bruner, 1957; Elsbach and Breitsohl, 2016; Fiske and Neuberg, 1990). We advance current theorizing by outlining how such fit influences evaluators' legitimacy judgments. Our focus on category- rather than feature- or property-based evaluations (Yamauchi and Yu, 2008) provides new theoretical insights into how evaluators form propriety beliefs. Empirically, we also show that evaluators rely on available category labels to assess organizational categorical fit, which underscores the significance of categorization for legitimacy judgments (Vergne and Wry, 2014) and also enables us to specify an important microlevel mechanism that explains how evaluators construct propriety beliefs in both the absence and presence of validity cues (Tost, 2011). By analyzing the category labels of different organizations, the empirical studies reveal a stable predictor of propriety beliefs. Category labels cannot be easily varied or managed by organizations, which may explain why they have generally been ignored in previous research on legitimacy

mechanisms (for an overview of legitimacy mechanisms, see Überbacher, 2014). Yet the results consistently corroborate our theorizing that perceived categorical fit can reduce evaluators' propriety beliefs.

In sum, we introduce perceived organizational categorical fit, as a previously unrecognized microlevel mechanism that critically influences propriety beliefs and thereby advance understanding of legitimacy judgments. As we show, categorical fit affects propriety beliefs beyond the effects of validity cues. Integrating validity cues with perceived categorical fit provides a richer account of how people form legitimacy judgments, offering value to scholars, organizations, and policy makers. This refined perspective also broadens the theoretical scope of legitimacy-as-perception, providing a solid grounding for continued research into the microfoundations of organizational legitimacy.

## **PROPRIETY BELIEF FORMATION AND THE ROLES OF VALIDITY CUES AND CATEGORICAL FIT**

Organizational legitimacy reflects the perceived appropriateness of an organization in a given institutional context within a social system of norms, values, and beliefs (Deephouse et al., 2017; Suchman, 1995). Scholarly discourse on organizational legitimacy encompasses three theoretical perspectives: as a property of a legitimacy subject; as a process (legitimation); and as a perception involving evaluators' opinions within a complex multilevel framework of individual and collective judgments (Suddaby et al., 2017). This study focuses on the third perspective, theorizing about evaluators' propriety beliefs.

Understanding the factors that drive legitimacy judgments is essential, because individual behavioral patterns significantly affect organizations (Siraz et al., 2023; Suddaby et al., 2017). For example, low propriety beliefs may result in the withdrawal of support or resources, to the detriment of the organization (Haack et al., 2021; van den Broek et al., 2023). Legitimacy-as-perception research reflects increasing focus on institutional microfoundations (Felin et al., 2015) and conceptualizations of legitimacy as judgments made by individual and collective actors (Bitektine and Haack, 2015; Tost, 2011). This approach has led to the development of a multi-level theory, encompassing micro and macro levels. The mechanisms involved at each analytical level have attracted increasing scholarly attention (e.g., Finch et al., 2015; Jahn et al., 2020; van den Broek et al., 2023). Validity refers to collective or macrolevel legitimacy judgments, spanning a spectrum from legitimacy to illegitimacy (Siraz et al., 2023). Evaluators' propriety judgments thus might incorporate macrolevel validity, through validity cues (Haack and Sieweke, 2018; Jacqueminet and Durand, 2020). Beyond the awareness that validity cues can shape individual judgments, further research is required to determine the extent to which different types of validity cues, specifically authorization and endorsement cues, affect propriety judgment formation (Jacqueminet and Durand, 2020).

Legitimacy-as-perception research suggests that evaluators integrate an organization's actions, behaviors, and characteristics to form their propriety beliefs

(Siraz et al., 2023; Suddaby et al., 2017). However, existing literature tends to emphasize collective factors at macro and meso levels to explore how validity cues shape propriety beliefs. Offering a novel perspective, we propose an overlooked but central mechanism that might contribute to evaluators' legitimacy judgments: perceived categorical fit. This perception arises from evaluators' initial categorization of an organization, on the basis of category labels (Fiske and Neuberg, 1990). It is individually constructed, according to the category labels assigned to organizations (e.g., public or private). Although management research details both similarities (e.g., Bozeman, 1987) and distinctions (e.g., Kelman, 2007; Perry and Rainey, 1988) of public and private organizations, these stable category labels reflect enduring categories. When engaging in an initial categorization, evaluators assess whether the organization's assigned category label fits their own expectations of the category that should be associated with the provision of its services. Figure 1 illustrates the resulting research model, including the hypothesized relationships between authorization and endorsement validity cues, perceived categorical fit, and propriety beliefs.

## HYPOTHESES DEVELOPMENT

### The Effects of Different Validity Cues on Propriety Beliefs

Validity reflects a macrolevel orientation toward a legitimacy subject, in our case, an organization (Dornbusch and Scott, 1975; Tost, 2011). It represents collective-level legitimacy and indicates collective approval (Bitektine and Haack, 2015; Siraz et al., 2023). Early empirical work noted that validity informs propriety beliefs (Thomas et al., 1986; Walker et al., 1988; Zelditch and Walker, 1984). For example, Thomas et al. (1986, p. 381) show that validity exerts a direct effect on propriety beliefs and demonstrate that in hierarchical work organizations, 'the validity of a practice has a direct negative effect on attempts at mobilizing collective action to change it' (see also Walker et al.,

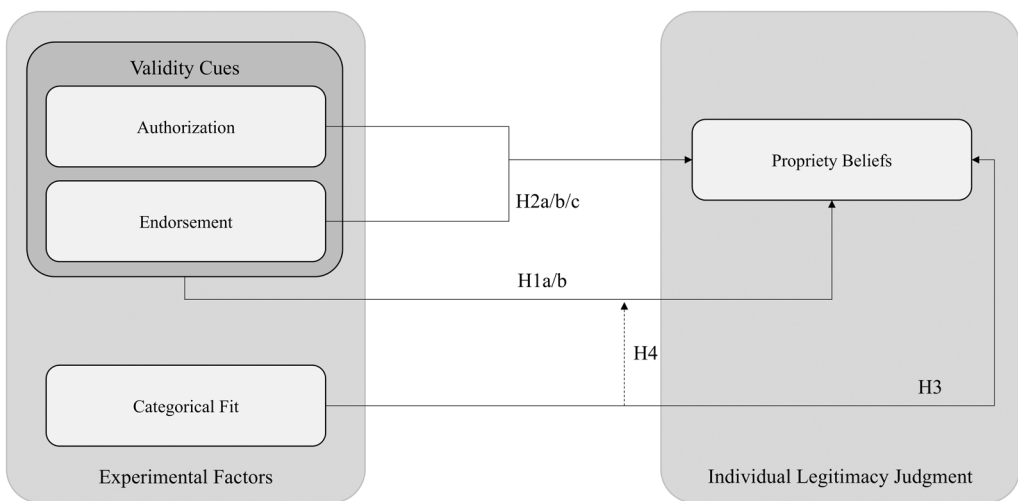


Figure 1. Research model

1988). These studies offer important insights into the relationship between validity and propriety, though their focus remains largely confined to internal social structures of organizations, without offering broader theoretical implications. We seek to extend the theoretical framework to examine how validity cues shape propriety beliefs across diverse settings, including civil society and external organizational evaluators, and thus offer a more comprehensive understanding of propriety judgment formation.

While these earlier studies suggest that validity directly affects propriety, they fail to specify *how* it does so. Conceptualized as ‘the objectified part of legitimacy’, validity likely enters individual cognition through cues (Haack and Sieweke, 2018, p. 491), such that validity cues are instrumental to propriety belief formation; evaluators cannot make inferences from collective-level validity without them (Bitektine and Haack, 2015; Jacqueminet and Durand, 2020; Tost, 2011). In essence, validity cues reflect prevailing collective validity and inform evaluators about the extent to which an organization is perceived as legitimate at the macrolevel.

Dornbusch and Scott (1975) distinguish two main types of validity cues: authorization and endorsement. Authorization indicates support from actors occupying higher positions within an organization, such as managers, or authorities in society, such as governments, laws, or experts in a particular issue. Endorsement cues instead reflect support from peers and subordinates (Johnson et al., 2006). Both types of cues can signal positive or negative validity (e.g., positive versus negative authorization, such as criticisms issued by authorities; high versus low endorsement). Each type may operate independently of individual propriety beliefs. Both authorization and endorsement thus represent external sources of collective support for a legitimacy subject rather than private individual consent (propriety) (Dornbusch and Scott, 1975; Johnson and Ford, 1996; Thomas et al., 1986). While the cues can coexist, they are not necessarily aligned with one another. Yet, most studies focus on single validity cues or assume congruence among them, overlooking the potential interactions across different cue types and valences. Thus, to advance legitimacy research, we explore how different validity cues, authorization, and endorsement, affect propriety judgments across different valences.<sup>[1]</sup> In turn, we can provide a more nuanced view of how legitimacy judgments form in complex environments, in which evaluators encounter multiple cues simultaneously.

Empirical evidence underscores that each type of validity cue matters. In their influential study, Thomas et al. (1986) found that authorization of the existing social order shapes propriety beliefs and subsequent behavior in ways that reduce the likelihood of collective action mobilization against inequitable structures. In addition, van den Broek et al. (2023) note that endorsement by social media peers affects propriety formation, though they do not gauge this influence while simultaneously accounting for authorization. Few studies examine the influence of authorization and endorsement simultaneously. Johnson et al. (2016) offer an important exception, in that they manipulate authorization and endorsement in the same experimental study. However, their study was not designed to compare the effects of the cues, nor to investigate their interaction. Understanding the simultaneous effects of both validity cues on propriety is crucial though, because it better reflects real-world legitimacy decision-making, where evaluators encounter multiple, often ambiguous, cues. Focusing on a single cue or examining them sequentially oversimplifies the true complexity and may lead to

erroneous conclusions about how legitimacy judgments are formed, maintained, or changed over time. Analyzing the interplay of different cue types and their valence provides a more accurate understanding of how judgments form, as well as which cues dominate in complex situations.

Our theorizing clarifies how combinations of positive and negative authorization cues, alongside high and low endorsement cues, impact propriety judgments. Building on sociological research, we begin with a baseline hypothesis that validity cues strongly shape evaluators' propriety judgments (Thomas et al., 1986). Whether in the form of authorization or endorsement, validity cues signal alignment with institutionalized norms and values of the broader environment and thus should influence judgments of appropriateness (Bitektine and Haack, 2015; Johnson et al., 2006). Validity cues can enhance an evaluator's sense that the cues are what ought to be right, which thereby increases their acceptance. When evaluators perceive positive validity cues, they tend to make more favorable judgments about propriety; the opposite holds for negative cues. Positive cues, such as favorable views from relevant authorities or peers about the legitimacy subject, enhance perceptions of propriety, whereas negative cues diminish them. Additionally, drawing from the state of unknown legitimacy, validity can remain unknown (Siraz et al., 2023), so including cues with neutral valence also is essential to capture the effects of undecidedness, ambiguity, or uncertainty on the formation of propriety beliefs. Evaluators often encounter ambiguous or inconclusive information (Siraz et al., 2023). Therefore, cues with neutral valence that can account for such situations should offer more nuanced understanding of how ambiguity influences judgments and how positive or negative cues, relative to neutral ones, affect decisions. Accordingly, we hypothesize:

*Hypothesis 1a:* Positive validity cues lead to higher propriety beliefs compared with negative validity cues.

*Hypothesis 1b:* Positive validity cues lead to higher propriety beliefs compared with neutral validity cues while negative validity cues lead to lower propriety beliefs compared with neutral validity cues.

### **Comparative and Interactive Effects of Authority and Endorsement on Propriety Beliefs**

Our previous hypotheses examined the validity cues independently. Yet, understanding the combined effects of multiple validity cues when they are simultaneously present is essential. Authorization reflects top-down hierarchical support, and endorsement signals bottom-up broad support from peers (Johnson et al., 2006). When these cues align, they may reinforce each other's influence on propriety beliefs, producing effects beyond their isolated contributions. In terms of *gestalt* psychology, where the whole is greater than the sum of its parts, the two cues together might signal mutual reinforcement (Garnett, 1943). Such a perspective is important for examining how the cues might amplify or diminish each other's effect, especially in cases of ambiguous signals. For example, if negative authorization combines with high endorsement, will the effect on propriety beliefs be

comparable to a scenario with positive authorization and low endorsement? Specific research relating to the weight of each type of validity cue on propriety is lacking, leaving it unclear which cue (authorization or endorsement) exerts a stronger influence on propriety beliefs.

Dornbusch, Scott, and colleagues (Dornbusch and Scott, 1975; Scott et al., 1967) emphasize that authorization cues are pivotal for traditional organizations, because formal positions of authority within an organization yield top-down authorization and formal control through hierarchical sanctions and rewards. Authorization carries the institutional power of its source, especially in traditional organizational forms or social structures that grant authorities the monopoly of organized constraint (Bitektine and Haack, 2015; Dornbusch and Scott, 1975; Weber, 1968), we would anticipate a greater effect of external authorization on external evaluators' propriety beliefs about general business organizations or those that offer public services. Authorities have tended to achieve greater source credibility due to their specialized expertise and perceived objectivity, even outside traditional structures or archetypical organizations (Hovland et al., 1953; Tormala and Petty, 2004).

However, growing social polarization has precipitated a 'crisis of expertise', leading many evaluators to rely more on peer endorsements than on traditional authorities (Eyal, 2019; Siraz et al., 2023). In a multinational organization, Jacqueminet and Durand (2020) find that peers' endorsement has a stronger effect on practice implementation than does authorization. Outside typical hierarchical organizations and in broader society, the effect of peer endorsement similarly may be more influential for propriety formation, especially in the digital social media age (e.g., Haack et al., 2021; van den Broek et al., 2023). The extent to which authorization or endorsement affects propriety in turn affects the degree of support that organizations receive from different evaluators and informs about their propensity to adopt public policies, potential social movements, or institutional change. Thus, for example, it may be possible to use this knowledge to predict how many citizens would agree to use medical facilities for vaccinations or preventative screenings when they benefit from high support from authorities but more versus less support from peers. Such insights could inform organizations' legitimation strategies, communications with evaluators, and potential institutional changes. As prior literature reveals, both positive authorization and high endorsement cues may lead to higher propriety judgments, but negative authorization and low endorsement reduce them. In reality, multiple cues coexist, so the relative strength of combinations of authorization and endorsement has yet to be empirically validated. To resolve these questions, and in line with a theoretical grounding in *gestalt* psychology (Garnett, 1943), we offer:

*Hypothesis 2a\_1:* When both authorization and endorsement cues are positive, their combined effect on propriety beliefs is stronger than either cue alone (multiplicative effect).

*Hypothesis 2a\_2:* When both authorization and endorsement cues are negative, their combined effect results in lower propriety beliefs than either cue alone (depleting effect).

While theory suggests both authorization and endorsement may have relatively stronger impacts depending on context-specific norms, such as those within organizations, in broader society or polarized contexts, the existing theoretical development on the combined effects of validity cues does not yet accommodate such contextual variability (Johns, 2006, 2017). To reflect this potential variation, we formulate the following competing hypotheses:

*Hypothesis 2b\_1:* Authorization cues have a stronger impact on propriety beliefs than endorsement cues, such that positive authorization results in higher propriety beliefs than positive endorsement, and negative authorization results in lower propriety beliefs than negative endorsement.

*Hypothesis 2b\_2:* Endorsement cues have a stronger impact on propriety beliefs than authorization cues, such that positive endorsement results in higher propriety beliefs than positive authorization, and negative endorsement results in lower propriety beliefs than negative authorization.

When evaluators encounter ambiguous cues simultaneously (e.g., positively and negatively valenced cues), they may experience heightened uncertainty about the subject's validity, potentially leading to lower propriety evaluations compared with scenarios with consistent cues. This expectation aligns with insights from cognitive dissonance theory and ambiguity aversion (Ellsberg, 1961; Festinger, 1957; Harmon-Jones et al., 2022). When evaluators receive ambiguous information, they experience psychological discomfort, which they are motivated to resolve by downplaying or discounting one of the pieces of information. This response is likely when individuals perceive positive authorization but low endorsement or vice versa. In the context of validity cues, evaluators likely respond more favorably to clear, consistent signals (e.g., well-defined positive or negative cues from authorities or peers) than to ambiguous cues. Ambiguous cues might include neutral signals or a mix of positive and negative signals. Evaluators tend to avoid or discount cues that seem inconsistent or vague, to reduce the discomfort associated with decision-making under uncertainty. In addition, negative perceptions tend to be stickier than positive perceptions, a phenomenon termed the 'negativity effect' (Baumeister et al., 2001). Research on memory and recall shows that negative emotions, events, and feedback enhance memory retention for specific negative details (Kensinger and Schacter, 2006). This propensity may be an adaptive mechanism to better remember potentially harmful situations, which could explain why negative experiences feel more impactful and enduring (Kensinger and Schacter, 2006). The persistence of this bias has significant implications for decision-making, learning, and social dynamics. It also leads us to predict that negative validity cues outweigh positive and neutral cues, regardless of whether they stem from endorsement or authorization.

*Hypothesis 2c:* When a positive and a negative validity cue are presented together, the negative cue outweighs the positive cue, leading to lower propriety beliefs than neutral cues.

## Perceived Categorical Fit Shapes Propriety Beliefs

Since evaluators' propriety beliefs about legitimacy subjects, such as organizations, are grounded in complex, underlying sociocognitive mechanisms (Bitektine and Haack, 2015; Suddaby et al., 2017), we suggest that validity cues might serve as predictors within a broader judgment heuristic. Previous research on organizational legitimacy emphasizes the relevance of categorization for legitimacy judgments (for an overview, see Vergne and Wry, 2014; see also Aldrich and Fiol, 1994; Zimmerman and Zeitz, 2002), yet the specific mechanisms behind this process often remain unexamined. With our theorizing, we aim to enhance the understanding of propriety beliefs by demonstrating how categorization determines evaluators' judgment formation. At the microlevel, we explain individual judgment formation by incorporating arguments from social psychology, and specifically impression formation (Fiske and Neuberg, 1990), which is often conceptualized as cognitive categorization (Elsbach and Breitsohl, 2016). Individuals initially categorize subjects on the basis of readily available category labels (Fiske and Neuberg, 1990; Yamauchi and Yu, 2008). Accessible categories guide individual perceptions (Bruner, 1957) and can preempt further feature- or attribute-oriented microlevel reflections (Fiske and Neuberg, 1990; Hayes and Newell, 2009; Yamauchi and Yu, 2008; for a cognitive psychological approach to categorization, see Rosch, 1978; Rosch and Mervis, 1975).

As we have indicated, category labels act as salient cues that form the basis for evaluators' initial categorization of an organization (Elsbach and Breitsohl, 2016; Fiske and Neuberg, 1990). Beyond theories on spillover effects between organizations and broader industry or market categories (e.g., Li et al., 2023), we argue that the initial categorization, as a form of category-based cognition, ultimately shapes perceptions of categorical fit. This perceived categorical fit likely feeds into evaluators' legitimacy judgments and, thus, affects propriety beliefs.

Drawing on social psychology literature (Cohen and Lefebvre, 2005; Fiske and Neuberg, 1990), we suggest that evaluators' propriety beliefs reflect the perceived categorical fit of the organization they encounter. Evaluators might favor organizations with high categorical fit because such organizations seem more likely to fulfill the expected functions. For example, when assessing an organization providing vaccination facilities, evaluators might perceive higher categorical fit for public organizations (see also von Achenbach, 2023). Thus, the perception of a high categorical fit for public organizations should result in favorable propriety beliefs. Conversely, evaluators might hold lower propriety beliefs about organizations with low categorical fit, such as private companies offering vaccinations. Accordingly, we hypothesize:

*Hypothesis 3:* Evaluators exhibit more positive propriety beliefs about organizations with higher perceived categorical fit.

## The Interaction Effects of Validity Cues and Categorical Fit on Propriety Beliefs

Unless they are acting as experts, individual evaluators typically lack comprehensive information and thus must assess organizations intuitively, drawing on cues from their institutional

environment (Haack et al., 2014). As we argued for Hypothesis 3, the perceived categorical fit of an organization is likely to be an important determinant of evaluators' propriety judgments. Building on these theoretical foundations, we propose that cognitive processes incorporating perceptions of categorical fit should be complemented by the influence of validity cues on evaluators' propriety judgments (Bitektine and Haack, 2015; Dornbusch and Scott, 1975; Thomas et al., 1986; van den Broek et al., 2023). Cues linked to categorical fit and validity cues coexist in the evaluative process and affect evaluators' propriety beliefs, so we predict that individual evaluators jointly assess perceived categorical fit and validity cues to form their propriety beliefs. That is, we argue that perceived categorical fit and validity cues interact.

According to social psychology literature, categorization affects the cognitive processing of available information, including, in our case, endorsement and authorization validity cues (Fiske and Neuberg, 1990). Following arguments from early legitimacy-as-perception research (Tost, 2011), we expect greater relevance of validity cues in the case of low categorical fit. Building on social psychology concepts (e.g., Kahneman and Frederick, 2002), Tost (2011) proposes that evaluators seek to preserve cognitive energy when they form propriety beliefs. When appraising a legitimacy subject, they likely prefer effortlessly applicable heuristics, such as categorical fit. In turn, evaluators should be less prone to revert to validity cues if 'the entity that is the target of judgment conforms to cultural expectations' (Tost, 2011, p. 696). Because perceived categorical fit reflects whether evaluators perceive that the organization conforms to an expected category, this fit alignment should determine whether and to what degree they include validity cues. Specifically, higher perceived categorical fit might make validity cues less relevant, whereas lower categorical fit likely necessitates greater reliance on these cues. Thus, we hypothesize:

*Hypothesis 4:* For organizations with a lower, rather than higher, categorical fit, validity cues exert a stronger impact on propriety beliefs.

## DATA AND METHODS

We tested our hypotheses using two, large-scale, factorial vignette experiments, both preregistered to enhance the transparency and trustworthiness of our empirical findings (Aguinis et al., 2018; Nosek et al., 2018). The study designs adhere to best practices in legitimacy-as-perception research and carefully follow methodological recommendations (Aguinis and Bradley, 2014; van den Akker et al., 2023). Both experiments manipulate authorization and endorsement validity cues, as well as perceived categorical fit, by altering which organization is depicted in realistic vignettes. The research designs feature vignettes styled as newspaper articles set in two different empirical settings. Study 2 is a replication and extension of Study 1 using a different experimental setting and an extended research design (Tsang and Kwan, 1999). This approach is suitable for validating the empirical findings and ensuring that they hold in different vignette scenarios. In addition, the studies exhibit high statistical power, which is suitable for detecting small and medium effect sizes (Aguinis and Vandenberg, 2014). We chose factorial vignette designs for both studies, allowing

realistic simultaneous manipulations of the independent variables and ensuring that the German participants could relate to the settings. Both public participation (Study 1) and COVID-19 testing and vaccination (Study 2) feature the provision of core public services available to every German citizen. We employed experimental methods to isolate treatment effects and rule out confounding factors. While the empirical settings varied, both studies unquestionably related to genuine public tasks.

Study 1 features a scenario depicting a public participation process, often used to involve citizens in public decision-making (Quick and Bryson, 2016). Public organizations use participation processes in policy areas such as conversion management, energy transition, urban and regional planning, or participatory budgeting (Boyer et al., 2016; Wallmeier and Thaler, 2018). Although participation processes take various forms, 'public hearings are the most ubiquitous form of public participation' (Quick and Bryson, 2016, p. 5). These processes often are contracted out, such that a private organization takes responsibility for carrying out the public participation process. Based on our theorizing, public organizations should exhibit higher categorical fit in this setting, whereas private organizations should exhibit lower perceived categorical fit.

We implemented Study 2 to increase the generalizability of the empirical findings and ensure an even more detailed analysis of the theorized mechanisms. This approach follows best practice recommendations, suggesting the need to replicate and extend empirical studies (Honig et al., 2014; Tsang and Kwan, 1999). As such, Study 2 featured more fine-grained manipulations and was implemented in a different setting. The study applied vignettes featuring a COVID-19 testing and vaccination facility, which administered rapid and PCR testing and often offered vaccinations. At the height of the pandemic, many governments started implementing specialized facilities to respond to the pandemic, run by either public administrations or other organizations, such as private companies, resulting in variations of responsible organizations. This setting allowed for the inclusion of a private organization that specializes in health care, which might exhibit a higher perceived categorical fit than private organizations in general, which have no health care specialization.

Appendix A provides the full texts of the vignettes used in both studies. We designed the vignettes for Study 1 in line with existing guidelines for citizen participation processes at the municipal level. Similarly, the vignettes for the test and vaccination centre in Study 2 align with recent publications by a real expert network. To develop the vignettes, resembling newspaper articles, we used a collaborative approach within the author team and multiple rounds of pretesting with other researchers, student samples, and panel participants. To ensure authenticity, we pretested the vignettes and survey instruments using think-aloud techniques and written feedback. This procedure included multiple steps for both experiments. The pretests involved academics and regular participants, focusing on the suitability of the scenarios and the comprehensibility of the questionnaires. The initial pretests featured 10 academics and 31 students, followed by a pre-study with 381 business school students designed to assess the clarity, suitability, and effectiveness of the vignettes and manipulations. We implemented several changes following this pre-study. Studies 1 and 2 were developed consecutively.<sup>[2]</sup> Separate pretests were conducted with at least 10 academics and at least 100 panel participants.

## STUDY 1

### Procedure

In Study 1, the vignettes manipulate an authorization validity cue, an endorsement validity cue, and categorical fit, with a  $2 \times 2 \times 2$  between-subjects factorial design. To manipulate validity cues, participants received either a positive or a negative authorization cue, combined with either a high or a low endorsement cue. They also read information (i.e., category labels) about the organization responsible for carrying out the participation process, either a private or a public organization.

After a short introduction, participants gave informed consent. Next, we randomly divided them into eight vignette groups. The vignettes outlined details of the public participation process. Initially, each newspaper article featured an authorization validity cue, briefly referencing an independent public participation expert network. The articles presented either authorization (positive authorization) or criticism (negative authorization) of the responsible (public or private) organization. In addition, an endorsement validity cue indicated whether citizens agreed (high endorsement) or disagreed (low endorsement) about the appropriateness of the responsible organization. Finally, half the groups viewed a newspaper article that featured the city administration (i.e., high categorical fit); the other half read descriptions of a private company (i.e., low categorical fit) as the organization carrying out the process. Other than these manipulations, the vignettes were identical. After the participants read the vignettes, we asked them to indicate their propriety beliefs regarding the responsible organization. Following the manipulation and attention checks, the survey concluded with measures of control variables, such as work status, education, and participants' experience with public participation processes. We preregistered the design (Figure 2), sampling, and analysis plans and variables (<https://doi.org/10.17605/OSF.IO/NSUY8>).

### Measures

Because participants were German citizens, we surveyed them using translated items obtained through back-translation. Unless otherwise noted, we measured all items on 7-point Likert scales. Appendix B outlines the variables and items used in the questionnaire. Table I displays the descriptive statistics and correlations.

*Propriety beliefs.* We applied the validated measurement scale suggested by Alexiou and Wiggins (2019) to measure propriety beliefs. Before statistically analyzing the hypotheses, we conducted an exploratory factor analysis to validate the measurement scale and identified a two-factor solution. We retained the first factor in the analysis, because it best reflects individual propriety beliefs. The second factor did not adequately capture propriety beliefs; the items instead were geared toward the macrolevel concept of cognitive legitimacy. Unfortunately, serious conceptual problems arise from this approach. Cognitive legitimacy implies the absence of judgments, which does not align with the concept of propriety beliefs (Tost, 2011). Relative to the first factor (Cronbach's  $\alpha = 0.93$ ), it also exhibited lower internal consistency ( $\alpha = 0.73$ ). A confirmatory factor analysis (CFA) showed that the

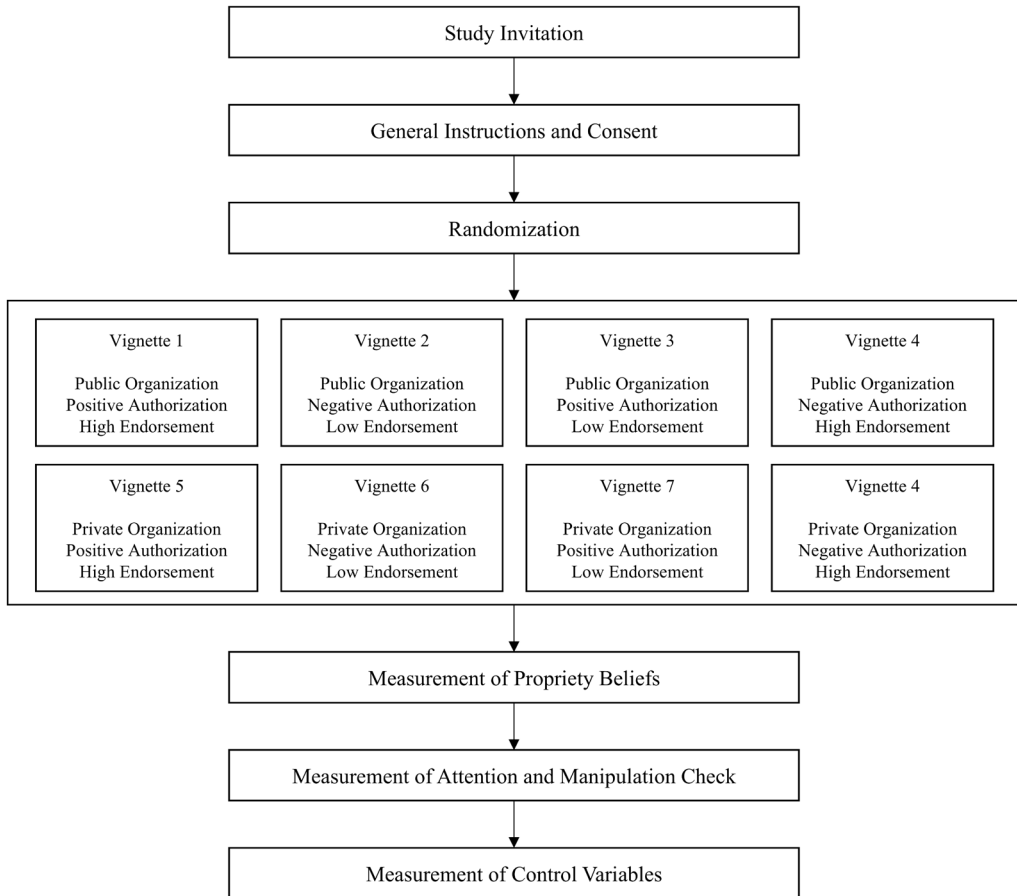


Figure 2. Research design (Study 1)

two-factor solution performed adequately ( $\chi(1) = 135.727$ ;  $p < 0.001$ , comparative fit index [CFI] = 0.947; Tucker-Lewis index [TLI] = 0.933; root mean square error of approximation [RMSEA] = 0.057; standardized root mean squared [SRMR] = 0.028). For the factor analyses we used the ‘promax’ rotation method (i.e., first step orthogonal ‘varimax’ rotation method; second step oblique rotation).

*Control variables.* Participants provided demographic information, including gender, age, employment status (employment sector or unemployment), and educational level. We also asked about their political orientation. Moreover, we measured public service motivation and public service practice (capturing prejudices against public organizations). Further items addressed prior experience with public participation processes and willingness to participate in future processes. We include these control variables primarily to test whether the randomization of participants succeeded (Mutz and Pemantle, 2015).

Table I. Descriptive statistics and correlations (Study 1)

	Mean	SD	1	2	3	4	5	6	7	8
(1) Propriety Beliefs (Factor 1)	4.899	1.110								
(2) Propriety Beliefs (Factor 2)	4.711	1.236	0.72**							
(3) Age	44.339	14.524	0.02	0.02						
(4) Gender	1.501	0.500	-0.09**	-0.11**	0.00					
(5) Political Orientation	3.743	1.169	0.04	0.04	0.07*	0.10**				
(6) Employment	4.674	3.709	-0.04	-0.06	0.22**	-0.05	-0.10**			
(7) Educational Level	7.247	1.945	0.02	0.06	0.03	-0.05	0.01	-0.06		
(8) Public Service Motivation	5.153	1.174	0.30**	0.24**	0.04	0.01	-0.10**	-0.03	0.11**	
(9) Public Service Practice	4.974	1.165	0.24**	0.21**	0.11**	0.06	0.20**	-0.11**	0.07*	0.25**

Note: All correlations are Pearson's  $r$ .

\* $p < 0.05$ ; \*\* $p < 0.01$ .

*Attention and manipulation checks.* To test for attentiveness, we asked participants to recall a central aspect of the survey vignettes. A manipulation check asked which organization was responsible for the participation processes. Two additional manipulation checks assessed the authorization and endorsement cues, asking participants to indicate their agreement with statements related to the behavior of the expert network (authorization) and the citizens (endorsement).

## Sample

A panel provider ('respondi') recruited participants from Germany. The survey was distributed to panel members aged 18 to 69 years. The initial sample consisted of 825 citizens. Prior to hypothesis testing and to increase the robustness of our inferences, we subjected our sample to an analysis of *careless responding* (Niessen et al., 2016). Careless responding 'occurs when survey participants fail to read or attend to item content, thus providing inaccurate responses' (Ward and Meade, 2018, p. 232), which reduces data quality in online surveys. Following recent recommendations, we applied the multivariate outlier analysis 'Mahalanobis distance' (Leiner, 2019; Meade and Craig, 2012) to identify participants whose response behavior to the propriety beliefs scale exhibits statistically unrealistic distances from the sample mean (Leiner, 2019). The main advantage is that Mahalanobis distance can detect different types of careless responding (Ward and Meade, 2023), such as extreme responses (e.g., always 7 on the Likert scale) but also the subtle use of scale midpoints (e.g., solely 3 and 4 on Likert scales). If participants engage in careless responding, their response patterns are flagged as statistically unlikely (high Mahalanobis distance values). We removed 162 participants who exhibited such response patterns,<sup>[3]</sup> leaving a

final sample of 663 participants who represent the general German population in terms of age and gender but deviate on some other demographic variables (Appendix C). This deviation does not affect the research outcomes though, because we focus on establishing causal treatment effects through randomization (Mullinix et al., 2015).

## Results

To ensure the integrity of our experimental design, we first verified two essential aspects: whether the randomization mechanism was successful and whether our vignettes effectively manipulated the independent variables of interest. To confirm that the experimental groups were statistically equivalent, we applied a  $\chi^2$  test for gender and analyses of variance (ANOVA) for age, work status, education, and political orientation. The results in Appendix C show that there were no statistically significant differences across the eight treatment groups, indicating successful randomization.

We applied ordinary least squares (OLS) regression models with manipulation checks as the dependent variable to confirm successful experimental manipulations. Table II indicates that participants identified the treatments accurately. The positive authorization validity cue resulted in perceptions of greater authorization ( $b = 2.69$ ;  $SE = 0.15$ ;  $p < 0.001$ ), and the high endorsement validity cue led to higher perceptions of endorsement by citizens ( $b = 3.04$ ;  $SE = 0.13$ ;  $p < 0.001$ ). Furthermore, coefficients show that participants correctly identified the private company ( $b = 0.76$ ;  $SE = 0.02$ ;  $p < 0.001$ ). Additional analyses of the differences across the eight experimental groups, using ANOVA and multiple comparison tests (Tukey HSD), confirm the manipulations' effectiveness.<sup>[4]</sup>

Table II. Manipulation check (Study 1)

	<i>Dependent variable</i>		
	<i>Private Organization</i>	<i>Authorization</i>	<i>Endorsement</i>
	(1)	(2)	(3)
Treatment: private organization	0.76*** (0.02)		
Treatment: positive authorization validity cue		2.69*** (0.15)	
Treatment: high endorsement validity cue			3.04*** (0.13)
Constant	0.01 (0.02)	3.19*** (0.11)	2.71*** (0.09)
Observations	663	663	663
R <sup>2</sup>	0.62	0.34	0.44
Adjusted R <sup>2</sup>	0.62	0.33	0.44
Residual Std. Error (df = 661)	0.30	1.89	1.72

Note: Unstandardized coefficients shown. The omitted treatments (e.g., public organization) serve as reference categories. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; standard errors in parentheses.

We tested hypotheses Hypothesis 1a, 2a\_1, 2a\_2, 2b\_1, 2b\_2, 3, and 4 using OLS regression models with propriety beliefs as the dependent variable (Table III) and the three treatment dummies as independent variables. Figures 3 and 4 showcase the visual results. Model 1 reports the average treatment effect (ATE) without covariates, relevant for Hypothesis 1a, 2b\_1, 2b\_2, and 3. Model 2 includes an interaction term for

Table III. OLS regression for propriety beliefs (Study 1) – robust sample

	<i>Dependent variable</i>		
	<i>Propriety Beliefs</i>		
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
Treatment: Private Organization	−0.23** (0.08)	−0.23** (0.08)	−0.25*** (0.07)
Treatment: Positive Authorization Validity Cue	0.49*** (0.08)	0.40*** (0.11)	0.40*** (0.10)
Treatment: High Endorsement Validity Cue	0.24** (0.08)	0.14 (0.11)	0.17 (0.11)
Age			−0.001 (0.003)
Male			−0.12 (0.07)
Political Orientation			0.03 (0.03)
Public Service Motivation			0.22*** (0.03)
Employment			0.01 (0.08)
Public Service Practice			0.18*** (0.03)
Authorization × Endorsement		0.19 (0.16)	0.13 (0.15)
Constant	4.77*** (0.08)	4.82*** (0.09)	2.75*** (0.27)
Observations	663	663	663
R <sup>2</sup>	0.08	0.08	0.20
Adjusted R <sup>2</sup>	0.08	0.08	0.19
Residual Std. Error	1.01 (df = 659)	1.01 (df = 658)	0.94 (df = 652)

*Note:* Unstandardized coefficients shown. The public organization serves as the reference category for the (1) private organization and (2) public organization. Comparison between the regression models showed the following changes in R<sup>2</sup> between the regression models: Model 1 → Model 2: p > 0.05, Model 2 → Model 3: p < 0.001.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; standard errors in parentheses.

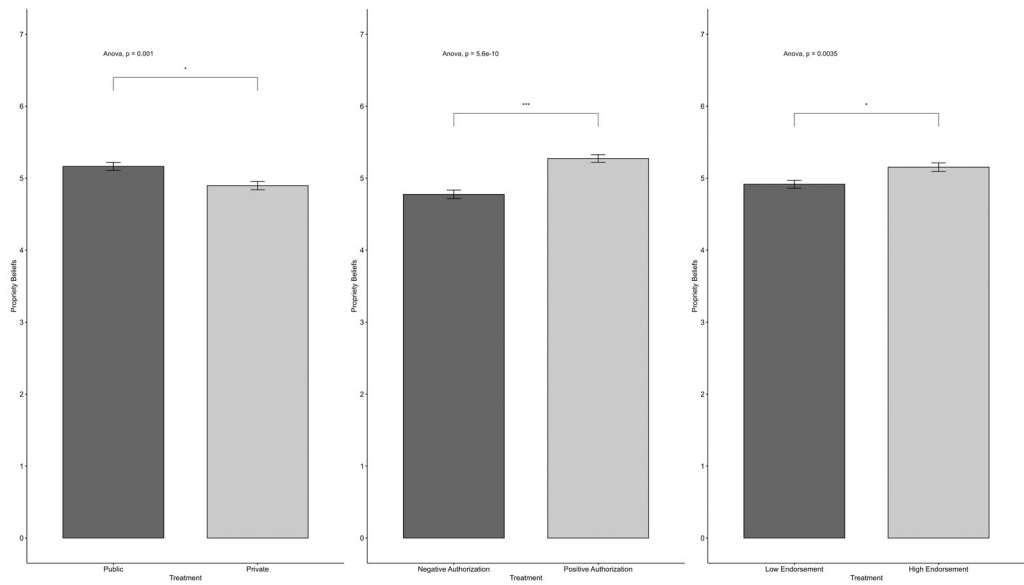


Figure 3. Graphical results for treatment factors (Study 1)

authorization and endorsement validity cues pertinent to Hypothesis 2a\_1 and 2a\_2. Model 3 incorporates the control variables. Consistent with best practice recommendations, we interpret the models without covariates for the primary and interaction effects (Moher et al., 2012; Schulz et al., 2010).

The positive authorization validity cue prompts more positive propriety beliefs ( $b = 0.49$ ;  $SE = 0.08$ ;  $p < 0.001$ ), in support of Hypothesis 1a. For the endorsement validity cue, we also find a positive direct effect ( $b = 0.24$ ;  $SE = 0.08$ ;  $p < 0.01$ ), in further support for Hypothesis 1a (Figure 3). Although Model 2 reveals a positive coefficient for the interaction between authorization and endorsement cues, this effect is not statistically significant ( $b = 0.19$ ;  $SE = 0.16$ ;  $p > 0.05$ ). Thus, Study 1 does not provide initial evidence for an interaction between the validity cues, corresponding to Hypothesis 2a\_1 and 2a\_2. The authorization validity cue exerts a more profound effect on propriety beliefs, in support of Hypothesis 2b\_1. In addition to validity cues, we consider the relevance of categorical fit for individual propriety beliefs. In both Models 1 and 2, the presence of low categorical fit organizations (private company), compared with high categorical fit organizations (public administration), significantly reduces propriety beliefs ( $b = -0.23$ ;  $SE = 0.08$ ;  $p < 0.01$ ), in support of Hypothesis 3. Finally, the visualized results in Figure 4 suggest that the hypothesized effects of validity cues do not differ significantly depending on the categorical fit. Thus, H4 is not supported; we only observe a minimal difference in the effect slopes when comparing them for private and public organizations.

## Summary

Study 1 examines the role of authorization and endorsement validity cues in shaping propriety judgments. We expected that low perceived categorical fit would negatively affect evaluators' propriety beliefs. Our results yield three main insights. First, the

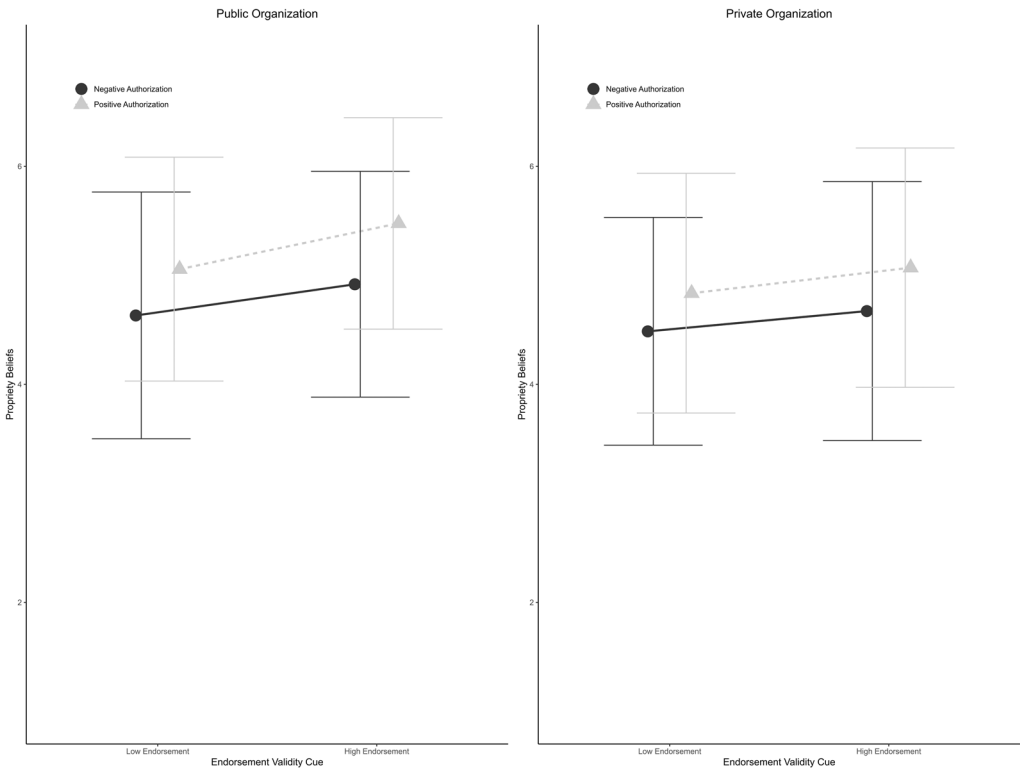


Figure 4. Visualization factorial design factors (Study 1)

findings confirm that a positive authorization cue results in higher propriety beliefs, as does a high endorsement cue (supporting Hypothesis 1a), though with a smaller effect size (supporting Hypothesis 2b\_1). These results underscore the importance of validity cues to the formation of propriety beliefs. Notably, the ATE of the authorization validity cue even exceeds the penalty for low categorical fit. Evaluators’ judgments thus seem to depend significantly on factors that organizations can strategically leverage.

Second, private companies evoked lower propriety beliefs in the public participation setting (supporting Hypothesis 3). The result reveals the relevance of evaluators’ initial categorization of an organization. Although the private company conducted the same procedures as public organizations, participants expressed lower propriety beliefs. This finding emphasizes that evaluators’ propriety beliefs reflect perceived categorical fit. As hypothesized, organizations with higher categorical fit (public administration) induced higher propriety beliefs. Participants observed that the organization fit an expected category and perceived high categorical fit; this initial categorization leads to more favorable propriety beliefs.

Third, our findings indicate a non-significant interaction effect of the two validity cues (Hypothesis 2a\_1 and 2a\_2). Although we observe a positive direction of the interaction, consistent with our theorizing, the lack of statistical significance suggests the need for

further investigation. Overall, the statistical power of our research is considerably high, especially for the main effects (exceeding 90 per cent power). Our theorizing also extends to a finer-grained analysis, including potentially small interaction effects.

However, Hypothesis 1b, 2c, and 4 require a more elaborate research design and a higher statistical power for the interaction terms, prompting Study 2 as an additional empirical study to adequately examine the remaining hypotheses. It builds on more fine-grained arguments about the dynamics between validity cues and categorical fit. Combining the need for a more elaborate design and at least upholding the high statistical power, we conducted a large-scale replication and extension. As outlined below, the design allowed the manipulation of the factors with more treatments while ensuring higher statistical power. For a comprehensive summary of the results, see Table IX.

## STUDY 2

### Procedure

We conducted Study 2 with an extended  $3 \times 3 \times 3$  factorial design. We added a neutral manipulation for authorization and endorsement validity cues, complemented by an additional organization (private health care company) that theoretically should be situated between high and low categorical fit. The neutral manipulations indicated that no information was yet available on authorization and endorsement, effectively representing an unknown state for these cues. The survey procedure resembled Study 1; participants were randomized into 27 groups. The vignettes present a newspaper article about COVID-19 testing and vaccination preparations in a fictitious city. The manipulations for the authorization and endorsement validity cues were adapted to align with the new empirical setting, though the overall interventions remain consistent with those in Study 1. The article specified which organization (public administration, private company, or private health care company) was responsible for establishing a COVID-19 testing and vaccination facility. We preregistered the design plan (Figure 5), sampling plan, variables, and analysis plan (<https://doi.org/10.17605/OSF.IO/G84DK>).

### Measures

To ensure comparability between the studies, we retained most of the items from Study 1. Some items required alterations to fit the new empirical setting (e.g., attention check). Appendix B details the variables and items used in the questionnaire. Table IV displays descriptive statistics and correlations.

*Propriety beliefs.* We kept the validated item scale (Alexiou and Wiggins, 2019) and the first factor that adequately captures propriety beliefs. The CFA showed that the two-factor solution for individual propriety beliefs performed well ( $\chi(1) = 227.872$ ;  $p < 0.001$ , CFI = 0.957; TLI = 0.944; RMSEA = 0.060; SRMR = 0.018). We used the ‘promax’ rotation method (i.e., first step orthogonal ‘varimax’ rotation method; second step oblique rotation) for our CFA.

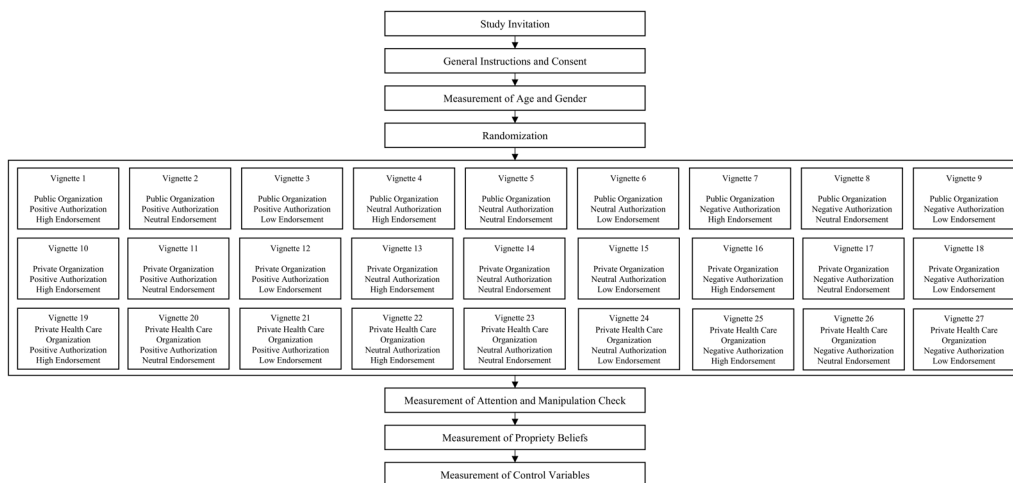


Figure 5. Research design (Study 2)

Table IV. Descriptive statistics and correlations (Study 2)

	Mean	SD	1	2	3	4	5	6	7	8
(1) Propriety Beliefs (Factor 1)	4.470	1.399								
(2) Propriety Beliefs (Factor 2)	4.459	1.467	0.85**							
(3) Age	45.469	14.183	-0.01	-0.02						
(4) Gender	1.500	0.500	0.01	0.00	-0.01					
(5) Political Orientation	3.917	1.072	-0.04	-0.05*	0.00	0.04				
(6) Employment	4.359	3.721	-0.05*	-0.06*	0.26**	-0.13**	-0.10**			
(7) Educational Level	7.179	2.005	0.04	0.04	0.02	-0.01	0.01	-0.10**		
(8) Public Service Motivation	4.890	1.264	0.43**	0.42**	0.05*	0.00	-0.10**	0.02	0.08**	
(9) Public Service Practice	4.838	1.175	0.33**	0.28**	0.10**	0.07**	0.17**	-0.07**	0.07*	0.20**

Note: All correlations are Pearson's *r*.

\**p* < 0.05; \*\**p* < 0.01.

*Control variables.* In addition to the control variables in Study 1, we asked participants about their prior experience with (1) COVID-19 testing and (2) COVID-19 vaccination facilities. Furthermore, we asked them about their willingness to use such a facility in the future.

*Attention and manipulation checks.* While the manipulation check was not altered, we changed the items for the attention check to fit the COVID-19 related empirical setting.

## Sample

We collaborated with the same panel provider, which distributed survey invitations to German panel members aged between 18 and 69 years. Using anonymous codes, the provider blocked Study 1 participants. The initial sample of 1501 citizens already excluded participants who failed the attention check. Following the data quality procedures in Study 1, we applied the Mahalanobis distance to identify and exclude 298 participants due to careless responding, resulting in a final sample of 1203 participants. This sample is representative of the German population by age and gender (Appendix C).

## Results

Appendix C highlights successful randomization: the 27 groups were statistically equivalent for most control variables. Five OLS regression models address the manipulation checks. Table V indicates that participants successfully identified our treatments. The manipulations of the positive authorization and high endorsement validity cues resulted in increased perceptions of authorization ( $b = 1.91$ ;  $SE = 0.13$ ;  $p < 0.001$ ) and endorsement by citizens ( $b = 2.27$ ;  $SE = 0.13$ ;  $p < 0.001$ ). The manipulations of the negative authorization and low endorsement validity cues resulted in lower perceptions of authorization ( $b = -1.28$ ;  $SE = 0.14$ ;  $p < 0.001$ ) and endorsement ( $b = -0.96$ ;  $SE = 0.13$ ;  $p < 0.001$ ). Regarding the manipulation of categorical fit, the coefficients indicate how the treatment affected the outcome variables, relative to the reference category (private health care organization); they suggest that participants correctly identified the organizations (public  $b = 0.82$ ;  $SE = 0.02$ ;  $p < 0.001$ ; private  $b = 0.42$ ;  $SE = 0.03$ ;  $p < 0.001$ ), as further confirmed by the negative coefficients for the public organization (private  $b = -0.26$ ;  $SE = 0.03$ ;  $p < 0.001$ ; private health care  $b = -0.53$ ;  $SE = 0.03$ ;  $p < 0.001$ ). Additional analyses of the differences across the 27 experimental groups using ANOVA and multiple comparison tests (Tukey HSD) further confirmed the manipulation effectiveness.<sup>[5]</sup>

Table VI outlines the OLS regression models. Model 1 indicates that both authorization ( $b = 0.26$ ;  $SE = 0.05$ ;  $p < 0.001$ ) and endorsement ( $b = 0.22$ ;  $SE = 0.05$ ;  $p < 0.001$ ) validity cues positively affect propriety beliefs, in support of Hypothesis 1a. Model 2 reveals a positive coefficient for the interaction between authorization and endorsement cues. This effect resembles the one from Study 1, but it is statistically significant here ( $b = 0.12$ ;  $SE = 0.06$ ;  $p < 0.05$ ). Model 1 indicates that both private and health care organizations prompt significantly lower propriety beliefs (health care  $b = -0.75$ ;  $SE = 0.10$ ;  $p < 0.001$ ; private  $b = -0.70$ ;  $SE = 0.10$ ;  $p < 0.001$ ), compared with public organizations. These findings are consistent across all regression models, in strong support of Hypothesis 3 and in line with Study 1.

The design of Study 2 also supports more nuanced hypothesis testing. Table VII provides models that include separate coefficients for positive/high and negative/low validity cues, with the neutral manipulation as the reference group (Figures 6 and 7 illustrate these results). The models separate out whether and to what extent the positive or negative authorization and high or low endorsement cues drive outcomes. We organize the regression models on the combinations of different validity cues. For example, Model 1 accounts for the positive authorization and high endorsement cue, and Model

Table V. Manipulation check (Study 2)

	<i>Dependent variable</i>						
	<i>Public Organization</i>	<i>Private Organization</i>	<i>Private Healthcare Organization</i>	<i>Authorization</i>		<i>Endorsement</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treatment: Private Organization	-0.01 (0.02)	0.42*** (0.03)	-0.41*** (0.03)				
Treatment: Public Organization	0.82*** (0.02)	-0.26*** (0.03)	-0.53*** (0.03)				
Treatment: Positive Authorization Validity Cue				1.91*** (0.13)			
Treatment: Negative Authorization Validity Cue					-1.28*** (0.14)		
Treatment: High Endorsement Validity Cue						2.27*** (0.13)	
Treatment: Low Endorsement Validity Cue							-0.96*** (0.13)
Constant	0.10*** (0.01)	0.28*** (0.02)	0.57*** (0.02)	3.94*** (0.09)	3.94*** (0.10)	3.23*** (0.09)	3.23*** (0.09)
Observations	1203	1203	1203	818	778	806	803
R <sup>2</sup>	0.65	0.36	0.27	0.22	0.09	0.27	0.06
Adjusted R <sup>2</sup>	0.65	0.36	0.27	0.22	0.09	0.27	0.06
Residual Std. Error	0.28 (df = 1200)	0.38 (df = 1200)	0.38 (df = 1200)	1.81 (df = 816)	2.01 (df = 776)	1.86 (df = 804)	1.83 (df = 801)

Note: Unstandardized coefficients shown. The private healthcare organization serves as the reference category for the (1) private organization and (2) public organization.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; standard errors in parentheses.

2 reflects negative authorization and low endorsement. We also provide a simpler regression model, which includes direct combinations of validity cues. Table VIII presents these models, including the regression coefficients for different combinations of cues (ambiguous and consistent cues).

The results in Table VII reveal that the positive authorization cue does not significantly affect propriety beliefs (Model 1: b = 0.19; SE = 0.13; p > 0.05), nor does the negative authorization cue (Model 2: b = -0.16; SE = 0.13; p > 0.05). In contrast, the high endorsement cue positively affects propriety beliefs (Model 1: b = 0.36; SE = 0.13; p < 0.01), while the low endorsement cue negatively affects them (Model 2: b = -0.27; SE = 0.13; p < 0.05). These more fine-grained results partially support Hypothesis 1b (for endorsement validity cues). In addition, the findings indicate that the endorsement

Table VI. OLS regressions for propriety beliefs (Study 2) – robust sample

	<i>Dependent variable</i>		
	<i>Propriety Beliefs</i>		
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
Treatment: Private Healthcare Organization	−0.75*** (0.10)	−0.76*** (0.10)	−0.63*** (0.08)
Treatment: Private Organization	−0.70*** (0.10)	−0.69*** (0.10)	−0.57*** (0.08)
Treatment: Authorization Validity Cue	0.26*** (0.05)	0.26*** (0.05)	0.20*** (0.04)
Treatment: Endorsement Validity Cue	0.22*** (0.05)	0.22*** (0.05)	0.19*** (0.04)
Age			−0.004 (0.002)
Male			−0.08 (0.07)
Political Orientation			−0.06 (0.03)
Public Service Motivation			0.44*** (0.03)
Employment			0.07 (0.07)
Public Service Practice			0.32*** (0.03)
Authorization × Endorsement Validity Cue		0.12* (0.06)	0.07 (0.05)
Constant	5.04*** (0.07)	5.04*** (0.07)	1.59*** (0.25)
Observations	1203	1203	1203
R <sup>2</sup>	0.09	0.10	0.35
Adjusted R <sup>2</sup>	0.09	0.09	0.34
Residual Std. Error	1.36 (df = 1198)	1.36 (df = 1197)	1.16 (df = 1191)

*Note:* Unstandardized coefficients shown. The omitted treatments (e.g., public organization) serve as reference categories. Comparison between the regression models showed the following changes in R<sup>2</sup> between the regression models: Model 1 → Model 2: p < 0.05, Model 2 → Model 3: p < 0.001.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; standard errors in parentheses.

validity cues exhibit much stronger effects than authorization cues, lending support to Hypothesis 2b<sub>2</sub>. The findings shed more light on the interaction of the two validity cues too: the cue interaction reveals that only high endorsement combined with negative authorization yields a significant negative effect (b = −0.43; SE = 0.17; p < 0.05).

Table VII. OLS regression for propriety beliefs (Study 2) – separate coefficients

	<i>Dependent variable</i>			
	<i>Propriety Beliefs</i>			
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
Healthcare Organization	−0.52*** (0.11)	−0.64*** (0.11)	−0.60*** (0.11)	−0.64*** (0.11)
Private Organization	−0.43*** (0.11)	−0.64*** (0.11)	−0.48*** (0.12)	−0.59*** (0.11)
Positive Authorization Validity Cue	0.19 (0.13)		0.18 (0.13)	
High Endorsement Validity Cue	0.36** (0.13)			0.33** (0.12)
Negative Authorization Validity Cue		−0.16 (0.13)		−0.13 (0.12)
Low Endorsement Validity Cue		−0.27* (0.13)	−0.27* (0.13)	
Age	0.0003 (0.003)	−0.002 (0.003)	−0.003 (0.003)	−0.01* (0.003)
Male	−0.07 (0.09)	0.05 (0.09)	0.01 (0.09)	0.03 (0.09)
Political Orientation	−0.06 (0.04)	−0.05 (0.05)	−0.04 (0.04)	−0.05 (0.04)
Public Service Motivation	0.35*** (0.04)	0.37*** (0.04)	0.34*** (0.04)	0.43*** (0.04)
Employment	0.07 (0.10)	0.12 (0.10)	0.14 (0.10)	0.04 (0.09)
Public Service Practice	0.35*** (0.04)	0.25*** (0.04)	0.30*** (0.04)	0.31*** (0.04)
Positive Authorization × High Endorsement	−0.30 (0.18)			
Negative Authorization × Low Endorsement		0.16 (0.18)		
Positive Authorization × Low Endorsement			−0.06 (0.19)	
Negative Authorization × High Endorsement				−0.43* (0.17)
Constant	1.64*** (0.34)	2.09*** (0.34)	1.96*** (0.35)	1.86*** (0.33)

(Continues)

Table VII. (Continued)

	<i>Dependent variable</i>			
	<i>Propriety Beliefs</i>			
	(1)	(2)	(3)	(4)
Observations	664	667	661	654
R <sup>2</sup>	0.28	0.26	0.25	0.37
Adjusted R <sup>2</sup>	0.27	0.25	0.24	0.36
Residual Std. Error	1.15 (df = 652)	1.16 (df = 655)	1.20 (df = 649)	1.11 (df = 642)

Note: Unstandardized coefficients shown. The omitted treatments (e.g., public organization) serve as reference categories. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; standard errors in parentheses.

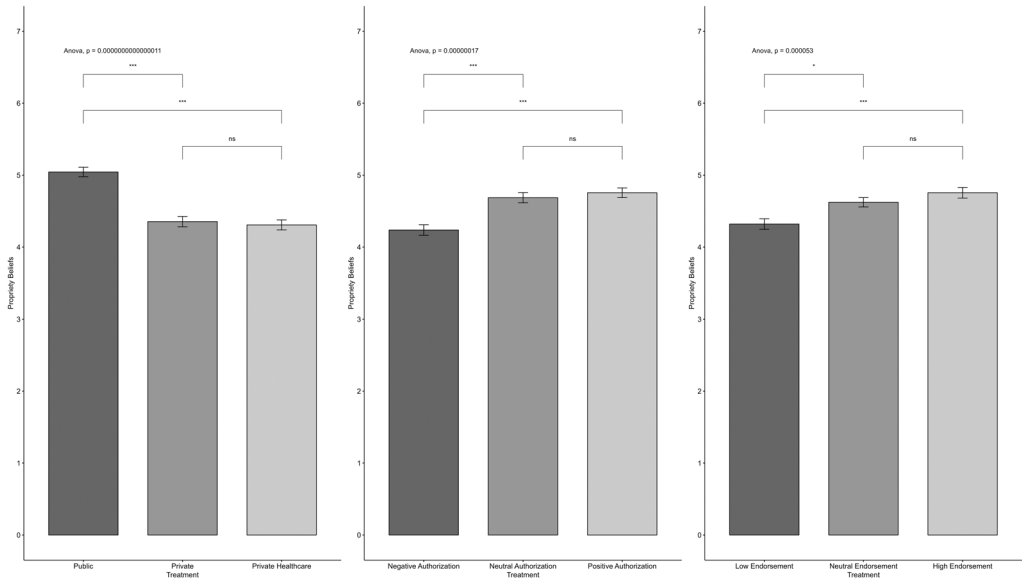


Figure 6. Graphical results for treatment factors (Study 2)

We do not find empirical support for Hypothesis 2a\_1. When modelled using an interaction term, the combined effect of positive authorization ( $b = 0.19$ ,  $SE = 0.13$ ,  $p > 0.05$ ) and high endorsement ( $b = 0.36$ ,  $SE = 0.11$ ,  $p < 0.01$ ) is weaker ( $b = -0.30$ ,  $SE = 0.18$ ,  $p > 0.05$ ) than the sum of their individual effects (and the interaction effect is not statistically significant). A similar pattern emerges for Hypothesis 2a\_2. The interaction between negative authorization and low endorsement yields a positive coefficient ( $b = 0.16$ ,  $SE = 0.18$ ,  $p > 0.05$ ), despite both main effects being negative. The combined influence of negative cues thus appears less detrimental than their additive effects would imply. Again, the interaction effect is not statistically significant. Taken together, these findings indicate that authorization and endorsement cues do not reinforce each other in either direction, so we cannot offer support for Hypothesis 2a\_1 or 2a\_2.

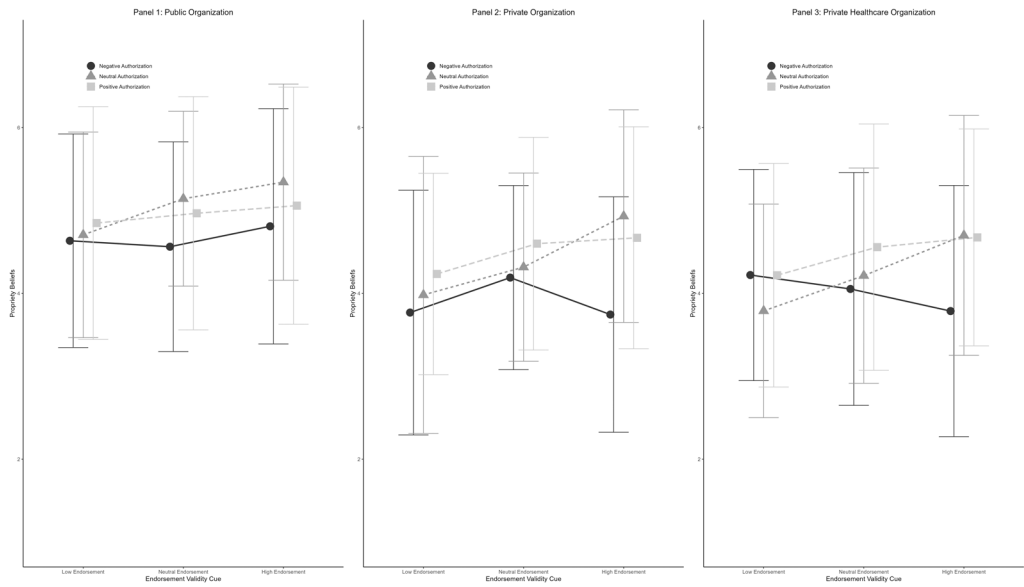


Figure 7. Visualization factorial design factors (Study 2)

Table VIII outlines the refined analysis of the interplay of endorsement and authorization cue combinations. In the regression model, the combination of validity cues matters significantly. In comparison with solely neutral validity cues, some ambiguous cue combinations exert significant effects on propriety beliefs. Positive or negative authorization, when combined with a neutral endorsement cue, indicates no statistically significant effect, but high and low endorsement cues exhibit significant effects when paired with neutral authorization (high endorsement:  $b = 0.52$ ;  $SE = 0.17$ ;  $p < 0.01$ ; low endorsement:  $b = -0.39$ ;  $SE = 0.17$ ;  $p < 0.05$ ). In line with our theorizing in Hypothesis 2c, the effects appear driven by negative validity cues. We also note a divergence, stemming from the combined validity cues. In particular, negative authorization combined with high endorsement leads to a statistically significant and negative effect ( $b = -0.50$ ;  $SE = 0.17$ ;  $p < 0.01$ ). That is, negative authorization outweighs endorsement in this combination. On the contrary, the combination of positive authorization and low endorsement does not exhibit a statistically significant effect but still indicates a negative coefficient, leading to partial support of Hypothesis 2c ( $b = -0.13$ ;  $SE = 0.17$ ;  $p > 0.05$ ). Here, the cues seem to cancel each other out. Consistent negative cues decrease propriety beliefs significantly ( $b = -0.45$ ;  $SE = 0.17$ ;  $p < 0.01$ ), while consistent positive cues show no significant difference from the neutral control condition ( $b = 0.31$ ;  $SE = 0.15$ ;  $p > 0.05$ ). Overall, we can identify a pattern: Endorsement cues drive propriety beliefs if present in an ambiguous set of cues, unless negative authorization cues are present.

Finally, we inspect the visualizations to assess Hypothesis 4. Figure 7 indicates that perceived categorical fit does not significantly affect how evaluators incorporate validity cues. Unfortunately, we observe only minimal differences in the effect slopes when comparing

Table VIII. OLS regression for propriety beliefs (Study 2) – validity cue combinations

	<i>Dependent variable</i>
	<i>Propriety Beliefs</i>
Ambiguous Validity Cues (A↑ E→)	0.19 (0.16)
Ambiguous Validity Cues (A↓ E→)	-0.28 (0.17)
Ambiguous Validity Cues (A→ E↑)	0.52** (0.17)
Ambiguous Validity Cues (A→ E↓)	-0.39* (0.17)
Ambiguous Validity Cues (A↑ E↓)	-0.13 (0.17)
Ambiguous Validity Cues (A↓ E↑)	-0.50** (0.17)
Consistent Negative Validity Cues	-0.45** (0.17)
Consistent Positive Validity Cues	0.31 (0.16)
Low Categorical Fit	-0.72*** (0.08)
Constant	5.12*** (0.13)
Observations	1203
R <sup>2</sup>	0.11
Adjusted R <sup>2</sup>	0.11
Residual Std. Error	1.35 (df = 1193)

*Note:* Unstandardized coefficients shown. The omitted treatments serve as reference categories (e.g., groups with solely neutral validity cues). → = neutral, ↓ = negative/low, ↑ = positive/high.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; standard errors in parentheses.

them across low and high categorical fit organizations (both private and private health care). As such, we cannot infer that either authorization or endorsement cues exhibit stronger effects in the case of a low categorical fit and thus cannot offer support for Hypothesis 4.

## Summary

With Study 2, we aim to generalize and extend the findings from Study 1 by updating the empirical setting and refining the experimental manipulations. To validate our results, we implemented Study 2 in the setting of a COVID-19 testing and vaccination facility, enabling us to introduce a private health care organization as a new treatment factor. This second study extends our original design by implementing a more fine-grained

experiment, incorporating neutral conditions for both authorization and endorsement validity cues, and adding a new categorical fit condition, reflecting a private health care organization. Such additions establish two further insights.

First, the nuanced analysis in Study 2 provides granular insights into the effects of authorization and endorsement validity cues. Regarding our Hypothesis 1a/1b and 2a\_1/2a\_2/2b\_1/2b\_2/2c, we primarily observe statistically significant effects for the high and low endorsement validity cues, whereas the authorization cues are not statistically significant. We can infer that evaluators incorporate validity cues, but the implications differ because the strength of the cues appears to vary depending on their valence and how they are combined. Among the cue combinations, endorsement validity cues are most impactful when combined with neutral authorization cues, and negative authorization exhibits a driving effect when paired with a positive endorsement cue. In cases of ambiguous information, the dominance of either endorsement or authorization cues depends on their specific combination. Beyond the cue combinations, though, interaction effects seem to hardly play a role.

Second, the results confirm the negative effect of low perceived categorical fit. Both private organizations (general private and health care) evoked significantly lower propriety beliefs, in support of Hypothesis 3. This negative impact is consistent, despite the presumably higher categorical fit for the health care organization. Evaluators seem to perceive a similarly low categorical fit for this organization and use it for their initial categorization. This suggests that initial categorization based on organization type (public versus private) strongly influences propriety beliefs, and the effect size of categorical fit is substantially larger than that of the validity cues, indicating that categorical fit serves as a robust judgment heuristic when evaluating propriety beliefs. It is a relevant factor to consider when studying propriety beliefs. However, we do not find support for Hypothesis 4. For organizations with low perceived categorical fit, neither authorization nor endorsement validity cues play a more substantial role in shaping propriety beliefs. Thus, we conclude that categorical fit and validity cues constitute two separate mechanisms, both of which inform propriety judgments. Despite the absence of an interaction effect, the former exerts a stronger influence on propriety beliefs. We summarize all the results in Table IX.

## GENERAL DISCUSSION AND CONCLUSION

This research advances microlevel understanding of organizational legitimacy by elucidating how evaluators' propriety beliefs are influenced by a nuanced combination of validity cues (authorization and endorsement) and perceptions of categorical fit. To the best of our knowledge, this study is the first to theorize about and empirically test the interplay of cue type, valence, and their combinations within a unified experimental design. This approach establishes a comprehensive framework for understanding propriety beliefs, thereby expanding the theoretical scope and practical relevance of legitimacy-as-perception research.

### Theoretical Implications

This article contributes insights into legitimacy, a foundational yet often elusive concept in organization and management theory (Deephouse et al., 2017; Siraz et al., 2023;

Table IX. Summary of hypotheses and results

<i>Hypotheses</i>	<i>Study 1</i>	<i>Study 2</i>	<i>Conclusion</i>
Hypothesis 1a: Positive validity cues lead to higher propriety beliefs compared with negative validity cues.	Supported (see Table III)	Supported (see Table VI)	Supported
Hypothesis 1b: Positive validity cues lead to higher propriety beliefs compared with neutral validity cues while negative validity cues lead to lower propriety beliefs compared with neutral validity cues.	–	Partly supported (for endorsement cues, see Table VII)	Partly supported
Hypothesis 2a_1: When both authorization and endorsement cues are positive, their combined effect on propriety beliefs is stronger than either cue alone (multiplicative effect).	Not supported (see Table III)	Not supported (see Table VII)	Not supported
Hypothesis 2a_2: When both authorization and endorsement cues are negative, their combined effect results in lower propriety beliefs than either cue alone (depleting effect).	Not supported (see Table III)	Not supported (see Table VII)	Not supported
Hypothesis 2b_1: Authorization cues have a stronger impact on propriety beliefs than endorsement cues, such that positive authorization results in higher propriety beliefs than positive endorsement, and negative authorization results in lower propriety beliefs than negative endorsement.	Supported (see Table III)	Not supported (see Table VII)	Not Supported (based on fine-grained analysis – Study 2)
Hypothesis 2b_2: Endorsement cues have a stronger impact on propriety beliefs than authorization cues, such that positive endorsement results in higher propriety beliefs than positive authorization, and negative endorsement results in lower propriety beliefs than negative authorization.	Not supported (see Table III)	Supported (see Table VII)	Supported (based on fine-grained analysis – Study 2)
Hypothesis 2c: When a positive and a negative validity cue are presented together, the negative cue outweighs the positive cue, leading to lower propriety beliefs than neutral cues.	–	Partly supported (for negative authorization, negative coefficients, but not significant for endorsement, see Table VIII)	Partly supported
Hypothesis 3: Evaluators exhibit more positive propriety beliefs about organizations with higher perceived categorical fit.	Supported (see Table III)	Supported (see Table VI)	Supported
Hypothesis 4: For organizations with a lower, rather than higher, categorical fit, validity cues exert a stronger impact on propriety beliefs.	Not supported (see Figure 4)	Not supported (see Figure 7)	Not supported

Suddaby et al., 2017). Specifically, we advance microlevel theorizing by examining how authorization and endorsement shape propriety beliefs, both independently and in combination, and by showing that their effects vary with the cue type and valence. This approach enhances our understanding of individual-level legitimacy judgments, which attract growing scholarly attention (e.g., Finch et al., 2015; Jahn et al., 2020; van den Broek et al., 2023). We underscore that validity cues can shape evaluators' propriety beliefs (Jacqueminet and Durand, 2020; Tost, 2011) and offer more nuanced perspectives on how different cues interact.

Our study reflects real-world decision-making, in which evaluators process multiple, often ambiguous cues simultaneously (Jacqueminet and Durand, 2020). While validity cues generally affect propriety beliefs, endorsement primarily drives this effect, whereas authorization cues are less impactful than expected. In our fine-grained analysis, neither negative nor positive authorization reveals a statistically significant effect. However, a combination of negative authorization and high endorsement has a notable impact, suggesting that endorsement may dominate in ambiguous or conflicting contexts. These findings challenge extant theories and prior research that suggest authorization per se has a crucial role in legitimation processes (e.g., Walker et al., 1986).

We also refine existing understanding of how mixed cues influence propriety beliefs, complementing broader dynamics of legitimacy state changes. By illuminating these microlevel shifts, our study offers a nuanced view of (de)legitimation processes (Siraz et al., 2023; Vaara et al., 2024). In particular, we observe a negativity effect in uncertain situations: Negative cues outweigh positive ones in mixed-cue scenarios, reflecting a cognitive bias toward negative information in decision-making (Kensinger and Schacter, 2006), in line with prospect theory (Kahneman and Tversky, 1979). This result is particularly relevant for organizations facing negative publicity or authoritative criticism, because even high endorsement might not offset the negative impressions (Claes et al., 2025).

Interpreting validity cues and propriety beliefs in strictly binary terms (e.g., proper/improper) offers a limited perspective on their impacts. Although past studies often adopt this binary perspective (Bitektine and Haack, 2015; van den Broek et al., 2023; Zelditch and Walker, 2003), two studies advocate a continuum perspective across different legitimacy states (Deephouse et al., 2017; Siraz et al., 2023). Our inclusion of neutral scenarios in Study 2 supports such a continuum-based perspective. For example, when authorization cues are neutral, high (low) endorsement cues increase (decrease) propriety beliefs, underscoring the critical role of endorsement in uncertain or ambiguous environments. Rather than oscillating between proper and improper, propriety beliefs unfold along a continuum of microlevel legitimacy, shaped by the multiple mechanisms through which they form, which has implications for organizational strategies and practices (Haack et al., 2021; Jacqueminet and Durand, 2020). Efforts to broaden this framework might explore the five legitimacy states along the legitimacy–illegitimacy continuum too. Examining conditional legitimacy, conditional illegitimacy, and unknown legitimacy (Siraz et al., 2023) for example could establish a finer-grained understanding of how propriety beliefs form and evolve. An enriched view of microlevel legitimacy provides valuable insights into the individual-level dynamics that contribute to broader legitimacy transitions.

We also extend legitimacy-as-perception literature by integrating insights from social psychology about category-based judgments. Evaluators use available labels as cues

to perform an initial categorization of organizations (e.g., Fiske and Neuberg, 1990; Yamauchi and Yu, 2008), which shapes their propriety beliefs. Our study introduces perceived categorical fit as a critical yet underexplored predictor of propriety belief formation, which has been largely overshadowed by the focus on validity cues (Vergne and Wry, 2014). As a theoretical advance, we explore how initial categorization, based on available category labels (i.e., category-based evaluation rather than feature- or property-based; Yamauchi and Yu, 2008) influences microlevel legitimacy judgments (Bruner, 1957; Elsbach and Breitsohl, 2016; Fiske and Neuberg, 1990). Categorical fit offers a cognitive shortcut, enabling evaluators to make legitimacy judgments according to alignment with expected categories (e.g., public vs. private providers of public services). This insight challenges the assumption that evaluators rely primarily on explicit validity cues. Instead, categorical fit serves as an initial evaluative filter, especially when detailed information is lacking. By demonstrating that categorical fit exerts a separate, often more pronounced, effect than validity cues, our study reveals an especially relevant mechanism for hybrid or emerging organizations and new ventures (Battilana and Lee, 2014; Fisher et al., 2017).

These insights advance legitimacy research by demonstrating that perceived categorical fit constitutes a key judgment heuristic for non-expert evaluators, beyond the influence of validity cues (Jacqueminet and Durand, 2020; Ruffo et al., 2020). It helps explain how propriety beliefs get constructed, in the absence or presence of validity cues (Tost, 2011). We thus offer a novel account of how non-expert evaluators form propriety beliefs under conditions of limited information, as explicated by Haack et al. (2014). Our theorizing positions perceived categorical fit as a core microlevel mechanism, rather than a peripheral supplement to validity cues, of the formation of propriety beliefs. Evidence from two survey experiments consistently indicates that evaluators exhibit higher propriety beliefs when they perceive high categorical fit of an organization, but low categorical fit results in significantly lower propriety beliefs. The results remain consistent, irrespective of the surrounding information environment. As a relatively intuitive mode of information processing (Haack et al., 2014; Tost, 2011), categorical fit offers evaluators a quick and comparatively reliable basis for their judgments.

By introducing perceived categorical fit, we emphasize that propriety beliefs are highly dependent on the setting in which an organization operates. This mechanism can be attributed to evaluators' category-based evaluations of the categorical fit of an organization with an expected category. Organizations might operate in various settings with different degrees of categorical fit, depending on what constitutes explicitly categorical fit (Dalpiaz et al., 2016). For example, private organizations in our experiments likely exhibit high perceived categorical fit for activities that reflect their core business areas (e.g., production of medical supplies) but lower categorical fit when engaging in public service delivery (e.g., running a COVID-19 testing and vaccination facility or taking charge of a public participation process). Consequently, we show that organizations suffer from lower propriety beliefs in settings where evaluators' categorization of an organization leads to a low perceived categorical fit. This legitimacy penalty can lead to individual and collective actions that drive organizational change (Bitektine and Haack, 2015; Maguire and Hardy, 2009). Still, low propriety beliefs in one setting may coexist with high propriety beliefs in another. Such circumstances could explain strategic changes, such as when

organizations shift their focus away from settings where the categorization leads to a low categorical fit to avoid adverse organizational outcomes.

Despite our emphasis on individual evaluators' propriety beliefs, these reflections also suggest some enhanced explanations for how microlevel mechanisms affect macrolevel organizational change (Greenwood and Hinings, 1996). They highlight the importance of using distinct legitimation strategies to achieve effective changes in an organization's legitimacy state (Siraz et al., 2023). At the macrolevel, perceived categorical fit may intersect with the concept of cognitive legitimacy (Bitektine, 2011), such that the taken-for-grantedness of a category influences evaluations of appropriateness. Although this link lies beyond the scope of our focus on the microlevel, it opens promising avenues for research into how the macrolevel legitimacy of categories might shape microlevel propriety beliefs.

Our theoretically grounded hypotheses, centred on two distinct validity cues and categorical fit, were tested across two empirical settings. Both experiments explicitly focused on the provision of genuine public tasks and featured non-expert, external organizational evaluators. With theoretical elaborations that establish two core mechanisms, we provide a foundation for continued research to explore boundary conditions that may shape the observed effects (Busse et al., 2017; Johns, 2006, 2017). Because propriety beliefs are not uniform phenomena, and contexts can affect how cues inform evaluators' legitimacy judgments, further empirical testing is warranted to assess the generalizability of our findings.

In summary, our findings extend current legitimacy research by illustrating how validity cues and categorical fit shape propriety beliefs across a wide range of settings, including civil society and external organizational stakeholders. This broader applicability enhances understanding of legitimacy judgments in complex settings. It is particularly relevant for addressing multifaceted societal challenges, such as electoral processes, immigration, misinformation, or abortion (Siraz et al., 2023). Our theoretical and empirical approaches also extend prior research (e.g., Thomas et al., 1986; Walker et al., 1988) by (1) applying the insights to organizational and management legitimacy, (2) examining validity cues beyond typical hierarchical organizational settings, (3) investigating the effects of differently valenced cues, and (4) explaining how perceived categorical fit influences propriety beliefs, such that we introduce a key predictor of the formation of these beliefs.

### Practical Implications

Legitimacy and propriety beliefs affect crucial organizational outcomes (Aldrich and Fiol, 1994; Bitektine and Haack, 2015). Organizations experiencing challenged legitimacy or illegitimacy likely face constraints, reflecting evaluators' actions (Claes et al., 2025; Deephouse and Carter, 2005). Propriety beliefs affect evaluators' support and can undermine organizational stability (Schoon, 2022). Therefore, organizations must understand how evaluators construct their propriety beliefs. In addition to revealing a dominant effect of perceived categorical fit for evaluators, this study can guide legitimacy strategies. Organizations need to counterbalance negative validity cues to maintain propriety beliefs. When social validation and peer influence gain

importance, organizations also need to invest in communication and relationships with their external evaluators.

Organizations and practitioners should actively address the risks associated with low categorical fit, especially when entering new markets. For example, private companies that provide public services, such as health care delivery (George et al., 2024), exhibit low categorical fit. Hence, they should critically reflect on whether engaging in public prone to low service provision makes sense. If evaluators identify low categorical fit, they will likely hold lower propriety beliefs. In such settings, these adverse outcomes could include citizens' refusals to consult with a facility, participate in a planned participation process, or contribute to idea generation at the beginning of a project. They also might engage in oppositional activities, such as protests.

Yet organizations can recover from or proactively avoid evaluators' low propriety beliefs. Previous literature provides evidence of isomorphism in such circumstances (Ashworth et al., 2009; Deephouse, 1999; Singh et al., 1986), due to the adoption of standards or norms (DiMaggio and Powell, 1983; Suddaby et al., 2017). In many cases, adapting is an effective way to cope with low categorical fit (Salomon and Wu, 2012). However, change is not always possible; private organizations cannot simply stop being private, for example. Even if organizations might work to change some features that evaluators assess, they cannot change their category label, with its powerful effect on evaluators' propriety beliefs. Organizations thus should consider their categorical fit carefully to anticipate potential legitimacy risks.

Our focus on organizations as legitimacy subjects emphasizes the practical implications of these findings. Legitimacy concerns often directly affect organizational functioning (Hybels, 1995; Suddaby et al., 2017). By moving beyond the relatively narrow conceptual and empirical scope of studies that focus on the legitimacy of isolated rules and student populations (e.g., Thomas et al., 1986), our research offers a more comprehensive, contextually relevant analysis of the complexity of organizational legitimacy in contemporary business and society settings.

## Limitations and Research Avenues

In recognizing the limitations of our study, we see opportunities for further research too. In particular, though we addressed common survey design challenges through pretesting, factorial designs, and large sample sizes, our approach introduces certain limitations. First, both survey experiments rely on explanatory variable manipulations and somewhat artificial vignettes (Mullinix et al., 2015). Despite their high internal validity, survey experiments suffer limited external validity. To maximize their realism, we developed authentic vignettes, but evaluators do not necessarily encounter information this way in their day-to-day lives (Aguinis and Bradley, 2014). Rather, they are exposed to authorization and endorsement cues in varied, dynamic sources, like social interactions or media, as well as other types of endorsers, such as celebrity endorsers (Friedman et al., 1976) or cues that blur the lines between endorsement and authorization (e.g., Eyal, 2019). These may trigger mixed propriety signals, which highlight the need for further theorization and refinement of the conceptualization of cues. Continued research might deploy experimental designs, such as conjoint experiments or mixed methods, to account for the influence of social interactions and increase external validity (Siraz et al., 2019; Sievert et al., 2025).

Second, we deliberately selected empirical settings that feature natural organizational variance, including categorical fit. However, this choice creates a limitation: In real-world settings, variations in categorical fit may be less pronounced, or legitimacy subjects may belong to multiple or ambiguous categories. Our empirical settings (at least from a European perspective) provides a clear distinction between public and private organizations. Yet in some sectors (e.g., manufacturing), categorical fit may exert a stronger influence; in others (e.g., startups), it may operate differently (Fisher et al., 2017). Even in similar settings, evaluators might interpret categorical fit or validity cues differently, depending on their values (e.g., environmental values) or other individual-level differences (e.g., public service motivation). Our theoretical reasoning and experimental design also aimed at isolating the treatment effects and ruling out confounding factors, such as those arising from many contextual factors. But our studies do not allow for inferences about potential context-related effects. For example, the mixed patterns observed between Studies 1 and 2 (i.e., endorsement cues are relatively stronger in one setting, authorization cues in the other) can only be interpreted in light of the more fine-grained treatment factors in Study 2. In line with the broader discussion of fit across different settings, we acknowledge that propriety judgment formation might be context-sensitive, and cue dominance might not be universally stable. Contextual contingencies, such as contestations, degrees of regulation, or the extent to which the issue is salient in society might contribute to differences (Sievert et al., 2025; Siraz et al., 2019; Spraul and Thaler, 2020). In addition, evaluators might perceive legitimacy subjects in diverse contexts as more or less proximal, which might influence propriety belief formation (Trope et al., 2007). Further research should theorize about and test for how contextual factors moderate the relative weight of cues with different valences and in varying combinations for shaping propriety beliefs.

Third, our sample does not include respondents younger than 18 or older than 69 years. This element does not affect our findings, due to our research focus, but further research investigating individual-level differences should include a broader age range to capture potential variations in propriety belief formation across different life stages. Other research avenues might identify additional potential boundary conditions to enhance our understanding of propriety belief formation. Fourth, both studies examined participants' propriety beliefs from a static perspective, without considering how these beliefs might evolve over time or their psychological aspects (Shipp and Jansen, 2021). As a result, we cannot account for the complexity of personal experiences, shifting attitudes, and multi-level developments in legitimacy (Bitektine and Haack, 2015). A longitudinal perspective, such as diary studies involving treatment interventions (Ohly et al., 2010), could help examine whether and how evaluators incorporate multiple validity cues over time.

## CONCLUSION

Ultimately, our research contributes to a richer theoretical framework for organizational legitimacy by highlighting the contingent effects of validity cues and identifying perceived categorical fit as a critical microlevel mechanism. This perspective advances legitimacy theory and offers practical insights for organizations and policy makers seeking to understand and manage legitimacy judgments.

## CONFLICT OF INTEREST STATEMENT

The authors declare no potential conflict of interest.

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## NOTES

- [1] In the experimental studies, we present authorization as positive, neutral, or negative, and endorsement is high, neutral, or low. For simplicity, when referring to validity cues, we refer to positive or negative valences only.
- [2] Study 2 was developed on the basis of comments received during the review process.
- [3] To ensure robust inferences, we also calculated all regression models without removing these careless respondents, and the results did not change.
- [4] Full ANOVA tables and detailed manipulation check statistics are available in the Online Supplement.
- [5] Full ANOVA tables and detailed manipulation check statistics are available in the Online Supplement.

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## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher's web site.

### APPENDIX A VIGNETTES

#### *Study 1 (Newspaper Article)*

##### **Public participation for city center redevelopment!**

**Private:** Private company [**Public:** Municipal administration] with long-term experience in public participation organizes comprehensive participation opportunities – **Negative authorization validity cue:** Criticism [**Positive authorization validity cue:** Authorization] by the Network for Public Participation Germany – **High endorsement validity cue:** Consensus [**Low endorsement validity cue:** Dissent] among city population.

Laudenhausen currently works on the project “livable Laudenhausen”. The project goal is to re-develop the city centre to make it attractive.

To consider citizens' ideas and interest comprehensively, the public participation process is a central aspect of the ongoing project: Besides all legally binding elements of public participation (e.g., public display of building plans in the town hall during opening hours), there is an information desk in the city centre (Monday–Friday, 10:00 a.m.–6:00 p.m.) and an offer of guided location inspection (Saturday and Sunday, at 11:00 a.m., 3:00 p.m., and 6:00 p.m., meeting point at the information desk). In addition, online dialogues and public discussion events to gather and develop ideas take place (for exact dates, see information flyer or Laudenhausen's website under ‘public participation’).

**Public:** As has been done previously, Laudenhausen's municipal administration organizes and implements the whole public participation process. In short, the municipal administration is the responsible organization. [**Private:** As it has been done previously, the Agency for Public Participation Ltd organizes and implements the whole public participation process. In short, this private company is the responsible organization.]

**Public:** The municipal administration [**Private:** This private company] relies on its long-term expertise in public participation processes. Three employees implement the process full-time, as it has been done in previous comparable projects.

The Network for Public Participation Germany **Positive authorization validity cue:** authorizes [**Negative authorization validity cue:** criticizes the organization] and implementation by the **Public:** municipal administration [**Private:** the private company Agency for Public Participation Ltd.] The network unites experts in public participation from practice and research.

During the last week, citizens could make short comments on their attitude toward the **Public:** municipal administration [**Private:** the private company] as responsible organization. **High endorsement validity cue:** Opinions correspond [**Low endorsement validity cue:** diverge]. The common mood reveals **High endorsement validity cue:** consensus [**Low endorsement validity cue:** dissent] among the city population regarding the responsible organization.

Information about the progress of the participation process will be published here in the upcoming weeks! A. J. Hauser.

*Study 2 (Newspaper Article)***COVID-19: Ongoing preparations for testing and vaccination offers in the fall**

**Public:** Municipal administration [**Private:** Private company/**Private healthcare:** Private healthcare company] will provide a possible testing and vaccination offer starting in the fall – **Negative authorization validity cue:** Criticism [**Positive authorization validity cue:** Authorization] by the COVID-19 expert board [**Neutral authorization validity cue:** COVID-19 expert board's recommendation outstanding] – **High endorsement validity cue:** Consensus [**Low endorsement validity cue:** Dissent] among city population [**Neutral endorsement validity cue:** Survey results on the city population's opinion outstanding].

Haidheim – just like throughout Germany – currently discusses necessary preparations for mastering the COVID-19 pandemic in the fall. Specifically, it is a matter of legal requirements to deal with altered occurrence of infection. The provision of an adequate testing and vaccination offer is again a central issue. **Public:** That is why in Haidheim, the municipal administration shall provide a combined testing and vaccination facility.

[**Private:** That is why in Haidheim, a private company (Testing and Vaccination Ltd) shall provide a combined testing and vaccination facility. **Private healthcare:** That is why in Haidheim, a private healthcare company (Testing and Vaccination Ltd) shall provide a combined testing and vaccination facility.]

The COVID-19 expert board **Positive authorization validity cue:** authorizes [**Negative authorization validity cue:** criticizes] the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] as operator of the combined testing and vaccination facility.

[**Neutral authorization validity cue:** Currently, no information regarding the COVID-19 expert board's evaluation of the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] as operator of the combined testing and vaccination facility is available.]

This expert board unites experts from politics and research with respect to pandemic mastery.

A recently conducted representative survey among Haidheim's citizens regarding their attitudes toward the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] as operator of the combined testing and vaccination facility reveals that **High endorsement validity cues:** opinions correspond [**Low endorsement validity cue:** diverge]. The survey's main finding is **High endorsement validity cue:** consensus [**Low endorsement validity cue:** dissent] among the city population regarding the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] as operator of the combined testing and vaccination facility.

[**Neutral endorsement validity cue:** Currently, a recently conducted representative survey among Haidheim's citizens regarding their attitudes toward the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] as operator of the combined testing and vaccination facility is analyzed. Thus, at the moment no results regarding the city population's attitude toward the **Public:** municipal administration [**Private:** the private company (Testing and Vaccination Ltd)/**Private healthcare:** the private healthcare company (Testing and Vaccination Ltd)] are available.]

Information about current developments regarding the COVID-19 pandemic will be published here in the upcoming weeks and months! M. J. Heimer.

**APPENDIX B**  
**MEASURES (STUDY 1 & STUDY 2)**

<i>Variable</i>	<i>Study Use</i>	<i>Operationalization (7-Point Likert scales if not stated differently)</i>
<i>Propriety Beliefs</i> adapted from Alexiou and Wiggins (2019)	Both	To what extent do you agree or disagree with the following statements about the responsible organization? Please respond based on your understanding of the organization. I think that ...
Propriety Beliefs (Factor 1) Study 1: $\alpha = 0.93$ Study 2: $\alpha = 0.96$		<ul style="list-style-type: none"> <li>• this organization creates value for its stakeholders.</li> <li>• the policies of this organization cater to the interests of its stakeholders.</li> <li>• the activities of this organization benefit their immediate stakeholders.</li> <li>• the general public would approve of this organization's policies and procedures.</li> <li>• the way this organization operates promotes the common good.</li> <li>• this organization is concerned with meeting acceptable standards for ethical behavior in their field.</li> <li>• The organizational strategies of this organization are appropriate.</li> <li>• if more organizations adopted policies and procedures like this one, the world would be a better place.</li> </ul>
Propriety Beliefs (Factor 2) Study 1: $\alpha = 0.73$ Study 2: $\alpha = 0.85$		<ul style="list-style-type: none"> <li>• this organization is necessary.</li> <li>• this organization provides an essential function.</li> <li>• it is difficult to imagine a world in which this organization did not exist.</li> </ul>
<i>Manipulation Check (Organization)</i>	Both	Please select the responsible organization in the displayed description: <ul style="list-style-type: none"> <li>• City administration</li> <li>• Private company</li> <li>• Private healthcare company (Study 2)</li> <li>• I do not know</li> </ul>
<i>Manipulation Check (Authorization Validity Cue)</i>	Both	To what extent do you agree or disagree with the following statements about the responsible organization? <ul style="list-style-type: none"> <li>• The responsible organization was approved by the network.</li> <li>• The responsible organization was criticized by the network (reversed).</li> </ul>
<i>Manipulation Check (Endorsement Validity Cue)</i>	Both	To what extent do you agree or disagree with the following statements about the responsible organization? <ul style="list-style-type: none"> <li>• The population agrees about the responsible organization.</li> <li>• The population disagrees about the organization.</li> </ul>
<i>Attention Check</i>	Both	Which context did the public participation process belong to (Study 1)/Which context did the newspaper article focus on (Study 2)? <ul style="list-style-type: none"> <li>• New airport runway.</li> <li>• Conversion of former military areas.</li> <li>• Redevelopment of the city center (Study 1)</li> <li>• COVID-19 Testing- and vaccination facility (Study 2)</li> <li>• New highway. (Study 2)</li> </ul>
<i>Age</i>	Both	How old are you? (Numerical Input)

<i>Variable</i>	<i>Study Use</i>	<i>Operationalization (7-Point Likert scales if not stated differently)</i>
<i>Gender</i>	Both	Please indicate your gender. (0 = Female; 1 = Male, 2 = Diverse)
<i>Employment</i>	Both	Please indicate your current employment/educational status: <ul style="list-style-type: none"> <li>• Employed in a private organization.</li> <li>• Employed in a nonprofit organization.</li> <li>• Employed in a public organization.</li> <li>• Self-employed.</li> <li>• School</li> <li>• Apprenticeship</li> <li>• Student</li> <li>• Maternity/Care Protection</li> <li>• Retired</li> </ul>
<i>Educational level</i>	Both	What is the highest degree or level of school you have completed? <ul style="list-style-type: none"> <li>• None</li> <li>• School attendance up to seven years.</li> <li>• Secondary modern school qualification.</li> <li>• High school diploma.</li> <li>• Training qualification</li> <li>• General qualification for university.</li> <li>• University degree</li> <li>• Doctorate</li> </ul>
<i>Experience Public participation</i>	Study 1	I participated in public participation processes before. (0 = No, 1 = Yes)
<i>Intention Public participation</i>	Study 1	Can you imagine participating in procedures such as those presented in the study? (0 = No, 1 = Yes)
<i>Experience Testing</i>	Study 2	Did you already use a testing facility? (0 = No, 1 = Yes)
<i>Experience Vaccination</i>	Study 2	Did you already use a vaccination facility? (0 = No, 1 = Yes)
<i>Intention Facility Use</i>	Study 2	In the future, would you use a testing and vaccination facility as described? (0 = No, 1 = Yes)
<i>Public Service Practice</i> Study 1: $\alpha = 0.72$ Study 2: $\alpha = 0.66$	Both	<ul style="list-style-type: none"> <li>• Private sector organizations deliver services to the public more efficiently and effectively than public sector organizations.</li> <li>• Adopting private management styles is a good way of running the public sector.</li> <li>• There is too much waste in public sector organizations.</li> </ul>
<i>Public Service Motivation</i> Study 1: $\alpha = 0.84$ Study 2: $\alpha = 0.85$	Both	<ul style="list-style-type: none"> <li>• I am very motivated to contribute to society.</li> <li>• I find it very motivating to be able to contribute to society.</li> <li>• Making a difference in society, no matter how small, is very important to me.</li> <li>• Defending the public interest is very important to me.</li> </ul>
<i>Political Orientation</i>	Both	Please indicate your political orientation. (0 = left; 7 = right)

**APPENDIX C**  
**SAMPLE CHARACTERISTICS**

	<i>Study 1</i> ( <i>N</i> = 663)	<i>Study 1</i> <i>Randomization</i>	<i>Study 2</i> ( <i>N</i> = 1203)	<i>Study 2</i> <i>Randomization</i>
Gender		$\chi^2(2) = 4.57$ ; $p = 0.10$		$\chi^2(2) = 0.48$ ; $p = 0.79$
Female	353 (53.2%)		619 (51.5%)	
Male	310 (46.8%)		584 (48.5%)	
Age		$F(1,661) = 0.252$ ; $p = 0.62$		$F(1,1201) = 1.828$ ; $p = 0.19$
Mean (SD)	45.2 (14.5)		46.9 (13.9)	
Median [Min, Max]	47.0 [18, 69]		49 [18, 69]	
Employment		$F(1,661) = 0.201$ ; $p = 0.654$		$F(1,1201) = 1.153$ ; $p = 0.28$
Mean (SD)	4.73 (3.75)		4.44 (3.80)	
Median [Min, Max]	3.00 [1, 11]		3.00 [1, 11]	
Educational Level		$F(1,661) = 0.058$ ; $p = 0.81$		$F(1,1201) = 0.02$ ; $p = 0.89$
Mean (SD)	7.28 (1.94)		7.22 (2.00)	
Median [Min, Max]	8.00 [2, 12]		8 [2, 12]	
Political Orientation		$F(1,661) = 0.96$ ; $p = 0.33$		$F(1,1201) = 0.022$ ; $p = 0.88$
Mean (SD)	3.71 (1.14)		3.89	
Median [Min, Max]	4.00 [1, 7]		4 [1, 7]	
Public Service Motivation		$F(1,661) = 0.04$ ; $p = 0.84$		$F(1,1201) = 5.484$ ; $p = 0.02$
Mean (SD)	5.23 (1.12)		4.96 (1.23)	
Median [Min, Max]	5.25 [1, 7]		5.00 [1, 7]	
Experience Participation		$F(1,661) = 2.885$ ; $p = 0.09$		
Yes	101 (15.2%)		–	
No	562 (84.8%)		–	
Intention Participation		$F(1,661) = 2.188$ ; $p = 0.14$		
Yes	515 (77.7%)		–	
No	148 (22.3%)		–	
Experience Testing				$\chi^2(2) = 1.83$ ; $p = 0.40$
Yes	–		791 (65.8%)	
No	–		412 (34.2%)	

	<i>Study 1</i> ( <i>N</i> = 663)	<i>Study 1</i> <i>Randomization</i>	<i>Study 2</i> ( <i>N</i> = 1203)	<i>Study 2</i> <i>Randomization</i>
Experience Vaccination				$\chi^2 (2) = 0.03$ ; $p = 0.98$
Yes	–		761 (63.3%)	
No	–		442 (36.7%)	
Intention Facility Use				$\chi^2 (2) = 15.34$ ; $p < 0.001$
Yes	–		885 (73.6%)	
No	–		318 (26.4%)	
Public Service Practice		$F(1,661) = 0.38$ ; $p = 0.54$		$F(1,1201) = 5.85$ ; $p = 0.02$
Mean (SD)	5.03 (1.14)		4.89 (1.15)	
Median [Min, Max]	5 [1, 7]		5 [1, 7]	