

ORIGINAL ARTICLE

Trust in entrepreneurial teams: The role of team narratives

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Abstract

Although trust within the entrepreneurial team is critical for its success, we have limited insights into the antecedents of a founder's trust in the team. Taking a social information processing perspective, we theorize how entrepreneurial team narratives can play an important role in building a founder's cognition-based trust in the team. We hypothesize that the team-level structural dimensions of diversity and distinctiveness of topics in entrepreneurial team narratives are positively related to a founder's cognition-based trust in the team and that these relationships are less positive when the founder perceives higher levels of resource scarcity. To test our hypotheses, we apply an automated topic modeling approach to quantitatively analyze interview and survey data from 102 founders across 43 complete entrepreneurial teams. Our study has implications for research on trust in entrepreneurial teams and entrepreneurial narratives, as well as methodological implications for using topic modeling to analyze other texts in entrepreneurship research.

KEYWORDS

cognition-based trust, entrepreneurial team narratives, resource scarcity, social information processing, topic modeling

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INTRODUCTION

Scholars and practitioners recognize that new venture success is largely dependent upon the entrepreneurial team (Bernstein et al., 2017; Lazar et al., 2020), that is, the group of founders “chiefly responsible for the strategic decision making and ongoing operations of a new venture” (Klotz et al., 2014, p. 227). In particular, a founder’s trust in their team is crucial, as it positively influences important individual-level outcomes, such as their satisfaction with the team (Chou et al., 2008), proactive work behaviors (Parker et al., 2006), and commitment to the entrepreneurial team (Wang & Wu, 2012), as well as team-level outcomes, such as complex knowledge sharing (Chowdhury, 2005), team performance (De Jong et al., 2016; De Jong & Elfring, 2010), and innovative entrepreneurial team effectiveness and efficiency (Khan et al., 2015). Thus, understanding factors related to a founder’s trust in their team is important.

As trust has a strong cognitive component (Legood et al., 2023), an information processing perspective (Costa et al., 2018; Salancik & Pfeffer, 1978) suggests that entrepreneurial team narratives—stories told by founders about their entrepreneurial team (Ashforth et al., 2011; Ibarra & Barbulescu, 2010)—can shape a founder’s trust in the team. Specifically, entrepreneurial team narratives show how founders process social information on each other’s behaviors and perspectives within the context of building the venture together. Since entrepreneurial teams deal with resource scarcity and unforeseen events that can change how members perceive each other over the course of working together (Breugst & Shepherd, 2017; Powell & Baker, 2017), how such information is collectively processed within the team may be even more influential for building a founder’s trust in the team than pre-team formation factors, such as shared history and similarity in team member backgrounds (De Jong et al., 2017; Eisenhardt & Schoonhoven, 1990; Fulmer & Gelfand, 2012).

However, the entrepreneurial context creates particular challenges for understanding how entrepreneurial team narratives might be related to a founder’s trust in their team. First, since entrepreneurial teams are responsible for all the aspects of building a new venture (Klotz et al., 2014; Lazar et al., 2020), they may bring together members with diverse cognitive structures (Tryba et al., 2023), that is, different “values, beliefs, perspectives, and educational or functional biases that serve as lenses through which [members] view the team’s task and interactions” (Martins & Sohn, 2022, p. 139). Cognitive structures are especially important for entrepreneurial teams, given the resource constraints that typically characterize the new venture environment (Baker & Nelson, 2005; Ravasi & Turati, 2005). Differences in members’ cognitive structures are reflected in the *within-team* diversity in entrepreneurial team narratives and may help teams deal with informational resources that they might be confronted with (Martins & Sohn, 2022). Although diverse entrepreneurial team narratives can help a founder to trust in their team’s capabilities (e.g., to provide a wide range of ideas or solutions to address complex problems), this type of diversity can also erode trust as the additional information processing required to integrate members’ diverse perspectives can be stressful and even overwhelming (Martins & Sohn, 2022; Miller et al., 2022).

Second, entrepreneurial teams must distinguish themselves from each other in order to secure limited resources, such as funding from investors (Lounsbury & Glynn, 2001; Navis & Glynn, 2011). These attempts at appearing distinctive are reflected in the *between-team* differences in the entrepreneurial team narratives of comparable ventures. Yet, although distinctive entrepreneurial team narratives can reinforce a founder’s trust in their team’s ability to effectively differentiate itself from others, entrepreneurial teams must also conform to established standards and constraints in order to seem legitimate (Navis & Glynn, 2011). The additional

information processing required to make distinctive entrepreneurial team narratives appear legitimate in a coherent and convincing way can make a founder feel less able to trust in their team's ability to compete with other teams. Taken together, both of these fundamental structural dimensions of entrepreneurial team narratives, that is, within-team narrative diversity and between-team narrative distinctiveness, can have opposing effects on a founder's trust in their team. Resolving these puzzles would be highly valuable for leveraging the rich insights that entrepreneurial team narratives offer for studying intrateam trust.

Exploring the relationship between entrepreneurial team narratives and a founder's trust in their team has the potential to advance entrepreneurship research in multiple important ways. First, trust develops through ongoing interactions (Blatt, 2009; McAllister, 1995), so studying the link between team narratives and trust can extend theory on what influences a founder's trust in their team beyond members' characteristics and experiences prior to founding (Beckman et al., 2007; Eisenhardt & Schoonhoven, 1990). Second, while scholars have explored how entrepreneurial narratives enable founders' sensemaking and sensegiving, as in founders making sense of events and imparting this sense to investors (Grimes, 2010; Lounsbury & Glynn, 2001), the influence of entrepreneurial narratives on internal social environments (e.g., the entrepreneurial team) remains underexplored. Analyzing the relationship between entrepreneurial team narratives and trust within the team encourages novel theorizing on how founders understand the entrepreneurial process. Third, since a founder's trust in their team can benefit team decision-making and performance (De Jong et al., 2016; De Jong & Elfring, 2010; Fulmer & Gelfand, 2012), studying the influence of post-team formation factors on trust can provide micro-foundational explanations for variability in venture development.

Consistent with the recommendations of the diversity and distinctiveness literature (Martins & Sohn, 2022; Miller et al., 2022; Navis & Glynn, 2011), we argue that the relationship between both these structural dimensions of entrepreneurial team narratives and a founder's trust in the team is contingent upon the team's environment. For the founder of an early-stage venture, one of the most salient environmental contingencies is the level of perceived resource scarcity (Baker & Nelson, 2005; Faraj & Yan, 2009; Klotz et al., 2014). Founders face a variety of resource constraints, including limited financial, informational, and physical resources to build their venture (Ravasi & Turati, 2005; Soh, 2003). We theorize that both diverse and distinctive entrepreneurial team narratives require additional information processing for founders to perceive these aspects as unequivocally positive indications of their team's competence, that is, contributing to their trust in the team. In particular, this additional information processing only appears feasible and productive to the founder when they perceive the team to be operating under lower levels of resource scarcity. Based on these arguments, we investigate the research question: *To what extent are within-team diversity and between-team distinctiveness of entrepreneurial team narratives related to a founder's trust in their team and how does resource scarcity shape these relationships?*

To address this question, we develop a conceptual model of entrepreneurial team narratives and trust in which resource scarcity represents an important contingency. Specifically, we hypothesize that within-team narrative diversity and between-team narrative distinctiveness may be positively related to a founder's trust in their team but that both relationships are negatively moderated by the founder's perceived resource scarcity. Empirically, we analyze interview and survey data collected from 102 founders across 43 complete entrepreneurial teams. To derive the structural dimensions of entrepreneurial team narrative diversity and distinctiveness, we apply a novel, automated topic modeling approach, which has the advantages of improving the replicability of results and scalability to larger datasets while minimizing the influence of

human biases in analyzing narratives (Hannigan et al., 2019; Kobayashi et al., 2018). Rather than relying on indirect demographic proxies or self-reported data, this allowed us to measure within-team diversity and between-team distinctiveness based on how a founder actually spoke about their team. We extend theory on a founder's trust in their team and contribute to work on entrepreneurial narratives by highlighting the social entrepreneurial team context.

THEORY AND HYPOTHESES

Cognition-based trust and social information processing in entrepreneurial teams

Trust is “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998, p. 395). Trust may be *cognition-based* or *affect-based* (McAllister, 1995). De Jong et al. (2016, p. 1138) define cognition-based trust as deriving from “the reliability, integrity, and competence of others,” whereas affect-based trust derives from “feelings of emotional involvement and others' genuine care and concern.” A founder's cognition-based trust in their team may be based on knowledge of the team's reliability, whereas affect-based trust may derive from an emotional attachment to the team. Cognition- and affect-based trust are conceptually distinct and can have different antecedents and outcomes (McAllister, 1995; Schaubroeck et al., 2013).

Consistent with our information processing perspective (Salancik & Pfeffer, 1978) and a recent review that highlights the strong cognitive component of trust (Legood et al., 2023), we focus on cognition-based trust in this study. Social information processing theory argues that “individuals, as adaptive organisms, adapt attitudes, behavior, and beliefs to their social context and to the reality of their own past and present behavior and situation” (Salancik & Pfeffer, 1978, p. 226). Social information comes from the behavior and interactions between actors within the social context (Salancik & Pfeffer, 1978). Individuals especially rely on information from their immediate social environment in ambiguous and uncertain situations (Rice & Aydin, 1991). Given the uncertainty and ambiguity inherent in building a new venture, social information may be particularly important in influencing a founder's cognition-based trust in the entrepreneurial team (Blatt, 2009). For example, a founder's conviction of their team's competence and reliability may derive from processing the social information conveyed through members' behavior and interactions (Colquitt et al., 2011; Schaubroeck et al., 2013).

Cognition-based trust is particularly relevant for entrepreneurial teams because it develops before affect-based trust. Before a member becomes emotionally invested in their team, they must be reasonably certain that the team is reliable and competent (De Jong et al., 2016). This is consistent with the finding from Schaubroeck et al. (2013) that cognition-based trust causally precedes affect-based trust. Moreover, cognition-based trust can have a greater positive influence on complex knowledge sharing within teams than affect-based trust (Chowdhury, 2005) and cognition-based trust (and *not* affect-based trust) is positively related to team decision quality and commitment (Parayitam & Dooley, 2009). Finally, in contrast to affect-based trust, cognition-based trust creates a feeling of accountability toward the teammates, which can substitute for a lack of monitoring in entrepreneurial teams (Tacke et al., 2023). All of these outcomes of cognition-based trust are especially relevant to entrepreneurial teams, which face high levels of novelty, uncertainty, and ambiguity, coupled with a lack of institutional safeguards, such as norms, rules, and regulations, for ensuring desirable member behaviors (Blatt, 2009). In

early-stage ventures a founder's affect-based trust in the team may not yet have developed, meaning a founder may need to rely more on their knowledge of the team's competencies and reliability, that is, cognition-based trust (Khan et al., 2015). Even when a founder is already acquainted with entrepreneurial team members prior to working on the venture and has some emotional connection to the team, their cognition-based trust deriving from the team's actual work context is vital for convincing them of the team's collective commitment and ability to build the venture so that they engage in the necessary goal-oriented teamwork (De Jong et al., 2016). Indeed, a founder's cognition-based trust (and *not* affect-based trust) in their team appears crucial for innovative entrepreneurial team effectiveness and efficiency (Khan et al., 2015). Thus, understanding what drives a founder's cognition-based trust in their team may be especially relevant for advancing the literature on entrepreneurial teams.

Prior work's understanding of what influences a founder's cognition-based trust in their team remains limited to pre-team formation factors. For example, a founder's shared history with team members and having a similar background to their team members can help the founder view their team as being more predictable, thereby contributing to their cognition-based trust in the team (De Jong et al., 2017; Eisenhardt & Schoonhoven, 1990; Fulmer & Gelfand, 2012). However, once the entrepreneurial team has actually started working on building the venture together, the founder's cognition-based trust in the team may increasingly derive from their social information processing of behaviors and perspectives in the team (Costa et al., 2018; Salancik & Pfeffer, 1978). In sum, studying social information processing in the entrepreneurial team context can uncover what influences a founder's cognition-based trust in the team once the team has actually started working together. As we discuss in the following section, entrepreneurial team narratives offer a promising means for doing so.

Entrepreneurial team narratives

A narrative is a story told with the aim of making a point (Ashforth et al., 2011; Ibarra & Barbulescu, 2010) and can be studied in terms of its *content* and *structure* (Mitchell et al., 2002; Walsh, 1995). Narrative content refers to a narrative's components, such as the explicit themes and experiences that are described, whereas narrative structure refers to the linkages between these components, such as their overlap or fragmentation (Ibarra & Barbulescu, 2010; Walsh, 1995). By selecting from multiple possible interpretations of past experiences and assembling these into a coherent narrative, individuals can make these sensible to themselves and others (Boje, 2001). Thus, narratives enable sensemaking, the process of constructing meaning to retrospectively understand what occurs, as well as sensegiving, the process of influencing the sensemaking of others (Gioia & Chittipeddi, 1991; Weick, 1995).

Prior research on entrepreneurial narratives has studied how a founder constructs narratives to make sense of experiences, such as venture failure (Mantere et al., 2013), as well as emergent phenomena, such as entrepreneurial opportunities (Garud & Giuliani, 2013) and identities (Jones et al., 2008). Entrepreneurial narratives have also been studied in terms of sensegiving; for instance, founders often draw on narratives as discursive resources to convince external stakeholders of their venture's legitimacy (Lounsbury & Glynn, 2001; Navis & Glynn, 2011). By facilitating sensemaking and sensegiving, entrepreneurial narratives can be valuable internal resources for founders (Navis & Glynn, 2011), who are typically constrained in terms of external resources (e.g., time, money, and human capital) (Baker & Nelson, 2005; Klotz et al., 2014).

Narratives in the context of entrepreneurial teams remain underexplored, despite the rich insights into the team's social information processing that they can offer. Developing a narrative about their team allows each co-founder to selectively synthesize social information about their team (Mantere et al., 2013; Taylor, 2006). Importantly, every member of an entrepreneurial team forms their own individual-level narrative about the team. This narrative can include multiple topics, that is, latent concepts the narrative draws on. In contrast to narrative content, which includes all the details of what is communicated within a narrative, narrative topics synthesize the details into broad concepts to provide a higher level of abstraction (Ashforth et al., 2011). For example, topics in a founder's team narrative may reflect how the founder views team structures and processes, such as the distribution of tasks, as well as what the founder values about the team, such as their honesty and integrity. By enabling sensemaking and sensegiving, entrepreneurial team narratives influence, and are influenced by, team interactions (Ashforth et al., 2011; Ibarra & Barbulescu, 2010)—particularly when members work closely together, as in entrepreneurial teams (Klotz et al., 2014). Thus, entrepreneurial team narratives reflect social information processing within the team, such that the full set of team narratives (i.e., all entrepreneurial team narratives constructed by its members) is to some extent accessible to each individual member.

Structural dimensions of entrepreneurial team narratives and cognition-based trust

Although many studies of entrepreneurial narratives focus on narrative content, studying the structure of entrepreneurial team narratives can be particularly helpful for understanding how a founder develops their cognition-based trust in the team (Ashforth et al., 2011; Costa et al., 2018; Salancik & Pfeffer, 1978). The structural dimensions of entrepreneurial team narratives can give insights into how founders in the same team process social information in relation to each other, as well as how the team's social information processing compares to that of other teams. These aspects are important to consider, since founders frequently make decisions based on their team's understanding of their environment (West, 2007). For example, Powell and Baker (2017) found that structural differences in how entrepreneurial team members perceived their community influenced whether the team survived or disbanded. Methodologically, studying the structural dimensions of entrepreneurial team narratives allows for greater contextual generalizability and between-team comparisons irrespective of venture-specific narrative content (Walsh, 1995).

We therefore focus on the role of the structural dimensions of an entrepreneurial team's combined set of narratives in influencing a founder's cognition-based trust in their team. Specifically, we consider both the *within*-team structural dimension of *team narrative diversity* and the *between*-team structural dimension of *team narrative distinctiveness*. As we argue in the following sections, both of these team-level structural dimensions can shape the individual-level construct of a founder's cognition-based trust in the team.

Within-team narrative diversity

Entrepreneurial teams often consist of members with diverse cognitive structures (West, 2007)—that is, diverse “values, beliefs, perspectives, and educational or functional biases

that serve as lenses through which [members] view the team's task and interactions" (Martins & Sohn, 2022, p. 139). Therefore, members from the same team may differ in what narrative topics they contribute to the team's set of entrepreneurial team narratives. For example, in speaking about how the team handles stressful situations, one co-founder might tell a story highlighting the importance of team members providing each other with task-related support, whereas another may instead draw attention to the need for a clear role distribution. However, the close collaboration in entrepreneurial teams can lead to similarities in members' cognitive structures, such that different co-founders might cover the same narrative topics (Ashforth et al., 2011; Powell & Baker, 2017). For instance, all the co-founders in a team may speak about the importance of task-related support. Thus, entrepreneurial teams likely differ in their level of within-team narrative diversity, that is, the extent to which co-founders contribute different narrative topics to the team's set of entrepreneurial team narratives.

Entrepreneurial teams with higher within-team narrative diversity have a broader range of cognitive structures available for making sense of the team's tasks (Ashforth et al., 2011; Martins & Sohn, 2022). The cognitive diversity literature suggests that the representation of different cognitive structures within a team enhances the team's divergent thinking, enabling the generation of a wider variety of ideas and problem-solving approaches within the team (Baer, 1998; Martins & Sohn, 2022; Miller et al., 2022). For entrepreneurial teams in particular, such diverse perspectives can better equip them for dealing with the novelties and complexities inherent in the new venture environment (Blatt, 2009; Shepherd et al., 2023). Moreover, since each co-founder has a significant personal stake in the venture and is deeply involved in the team's decision-making processes (Klotz et al., 2014), the cognitive diversity reflected by within-team narrative diversity is likely to be actively represented in team interactions (Breugst & Shepherd, 2017). For example, in a team with diverse narrative topics, one co-founder might be more attentive to the team's operational objectives, while the other may tend to ignore these in favor of highlighting the team's broader purpose; through the representation of both cognitive structures in the team's discussions, the team as a whole may emerge with an awareness of both operational and purpose-driven issues. As a result, a founder of a team with high within-team narrative diversity may be more assured of being able to rely upon the team to cover any individual member's cognitive "blind spots" and may thus develop greater cognition-based trust in the team as a whole (Hambrick et al., 1996; Harrison & Klein, 2007). Based on this reasoning, we hypothesize:

Hypothesis 1. Within-team diversity of entrepreneurial team narratives is positively related to a founder's cognition-based trust in the team.

Between-team narrative distinctiveness

Distinctive narrative topics are, by definition, unlikely to appear in the team narratives of most entrepreneurial teams within a given new venture environment. Distinctive narrative topics result from co-founders thinking of their team in specific, exclusive terms (Ashforth et al., 2011), such as "team rules" designed to accommodate co-founders' personal preferences, for example, a 4-day work week. By contrast, less distinctive topics may include buzzwords, such as "team spirit" and abstract concepts, such as "transparency," or even mundane issues, such as the distribution of standard functional roles (Lounsbury & Glynn, 2001). Since narratives draw on culturally available archetypes and can also be used for sensegiving to make

favorable impressions on external stakeholders (Ashforth et al., 2011), an entrepreneurial team's set of narratives is likely to contain both more and less distinctive narrative topics (Navis & Glynn, 2011). Importantly, a given team's narrative distinctiveness is relative to that of other comparable entrepreneurial teams, for instance, teams working on ventures at a similar stage of development within the same cultural context (Ashforth et al., 2011; Navis & Glynn, 2011). Returning to the previous example of the entrepreneurial team speaking about a 4-day work-week, this narrative topic would be much less distinctive if it were popular among other comparable entrepreneurial teams within the same ecosystem. Thus, whereas the structural dimension of team narrative diversity derives from comparing the social information processing of members *within* the same team, distinctiveness draws a comparison *between* the team's social information processing and that of its peers, that is, other teams.

The founder of a team with a high level of between-team narrative distinctiveness may perceive their team to be uniquely and specifically equipped to build their venture, thereby growing their cognition-based trust in the team. Since a founder is not only embedded within the social sphere of the entrepreneurial team but also exposed to the wider new venture environment (Grimes, 2018), they are likely aware of their team's distinctiveness relative to their peers. Indeed, many new ventures emerge from entrepreneurial ecosystems and regional environments that support entrepreneurship by combining "localized cultural outlooks, social networks, investment capital, universities, and active economic policies" (Spigel, 2017, p. 49). Since such ecosystems encourage networking and exchange between entrepreneurial teams, for instance, within the context of startup fairs and incubator/accelerator programs, a founder is likely to be aware of what types of cognitive structures, that is, which team narrative topics, are popular among other entrepreneurial teams in their ecosystem (Navis & Glynn, 2011; Tan et al., 2013). Moreover, ecosystem actors such as incubators, accelerators, and entrepreneurship educators may encourage all their founders to adopt popular methodologies for entrepreneurial teamwork, such as agile development (Blank, 2017). However, a founder may perceive general methodologies to have limited efficacy unless adapted to fit their entrepreneurial team's unique capabilities and specific needs (Ashforth & Mael, 1989; Brewer, 1991). For example, while peers from other entrepreneurial teams may express a popular topic, such as their use of agile development, a more distinctive topic, like a particular pattern of agile development that maximizes the founder's own team's productivity while accommodating their need for working remotely, may grow the founder's cognition-based trust in their team (Blatt, 2009). Such between-team narrative distinctiveness can also confer to a founder the belief that their team retains a competitive advantage over other teams that may be competing for the same resources (e.g., funding, customers, and business partners) (Navis & Glynn, 2011). All in all, a founder of a team with a higher level of between-team narrative distinctiveness may perceive their team to be more reliable and competent, that is, have greater cognition-based trust in their team. Thus, we hypothesize:

Hypothesis 2. Between-team distinctiveness of entrepreneurial team narratives is positively related to a founder's cognition-based trust in the team.

The moderating role of perceived resource scarcity

Social information processing is contingent on the environmental characteristics that an individual deals with during task accomplishment (Salancik & Pfeffer, 1978). Importantly, the social

information processing perspective draws on the idea that environmental characteristics are constructed based on the judgments and actions of the individuals subject to them (Weick, 1995). Thus, an individual's understanding of environmental characteristics may influence the way in which social information shapes the individual's attitude towards their social context (e.g., the team or work unit the individual is in).

For the founder of an early-stage venture, the scarcity of resources available to their team is an especially salient environmental characteristic (Baker & Nelson, 2005; Klotz et al., 2014). Resource scarcity refers to “the extent to which the available resources are not sufficient to support the sustained growth or survival of the [venture]” (Faraj & Yan, 2009, p. 608). For example, entrepreneurial teams can face scarcity of financial, informational, and physical resources to build their venture (Ravasi & Turati, 2005; Soh, 2003). However, regardless of the objective availability of external resources, founders may differ in their perceptions of resource scarcity (Edelman & Yli-Renko, 2010). Drawing on social information processing theory, we argue that a founder's perceived resource scarcity may moderate the relationships between the structural dimensions of entrepreneurial team narratives and a founder's cognition-based trust in the team.

First, we consider the influence of perceived resource scarcity on the relationship between within-team narrative diversity and a founder's cognition-based trust in the team. As argued previously, the presence of diverse narrative topics reflects the variety of cognitive structures through which members view the team's tasks. Although this can be beneficial for divergent thinking (e.g., for idea generation and problem-solving), it also creates an additional need for processing team members' different perspectives to reach a shared understanding of how the team should proceed (Martins & Sohn, 2022). This additional information processing can consume the team's limited time, attention, and energy (Breugst & Shepherd, 2017). Therefore, if a founder in such a team perceives severe resource constraints and is, thus, aware of the high level of effort that they need to invest to access resources for the venture, they may not appreciate the diversity of insights generated (Carpenter, 2002). Instead, the founder may be inclined to view the process of surfacing and combining team members' diverse perspectives to be a waste of time given that the team has to invest effort to get access to external resources for developing the venture (Breugst & Shepherd, 2017; Miller et al., 2022). Rather than combining diverse perspectives, the founder may insist upon the team allocating its limited resources towards implementing a single idea or objective (Miller et al., 2022; Pfeffer & Salancik, 2003) because additional resources are particularly hard to acquire in such an environment (Faraj & Yan, 2009). This difficulty in bridging diverse cognitive structures to arrive at a shared understanding within the team can leave the founder feeling less able to rely upon their team members, thereby reducing the otherwise positive effect of within-team narrative diversity on the founder's cognition-based trust in the team (Martins & Sohn, 2022). By contrast, when a founder perceives low resource scarcity, they may feel less pressure to secure access to resources and be more open to engaging in the necessary information processing with their team members and thus more appreciative of their team's ability to cover diverse perspectives. Our argumentation is also consistent with findings in extant literature on the role of slack, that is, the abundance of resources available to a team, in enhancing the positive effects of cognitive diversity within the team (Miller et al., 2022). In sum, a founder's perceived availability of external resources available to their team and within-team narrative diversity would complement each other, which is likely to increase a founder's cognition-based trust in the entrepreneurial team. Hence, we hypothesize:

Hypothesis 3. The relationship between entrepreneurial team narrative diversity and a founder's cognition-based trust in the team is less positive when a founder perceives higher levels of resource scarcity.

Next, we consider the influence of a founder's perceived resource scarcity on the relationship between entrepreneurial team narrative distinctiveness and the founder's cognition-based trust in the team. Between-team narrative distinctiveness highlights the extent to which a team stands out relative to its peers within the wider entrepreneurial ecosystem (Ashforth et al., 2011). A founder who perceives high resource scarcity may be particularly aware of the importance of resource providers, such as investors (Lounsbury & Glynn, 2001), and of ensuring they understand the team (Faraj & Yan, 2009). Since such stakeholders may work with multiple new ventures, they are likely to be more familiar with popular narrative topics in their environment than topics unique to a team (Navis & Glynn, 2011; Spiegel, 2017). A founder perceiving high resource scarcity in combination with high between-team narrative distinctiveness may feel less able to rely upon their team's ability to secure much-needed resources, as it may be more difficult for their venture to appear sufficiently legitimate to resource providers. Indeed, this argument is consistent with Guzman and Li's (2023) finding that, although more distinctive new ventures can perform better in the long run, they may initially struggle more to acquire legitimacy. Thus, the more distinctive an early-stage entrepreneurial team's narrative topics are, the more a founder operating under high perceived resource scarcity may feel overwhelmed by the additional information processing required to align their team with prototypical expectations within the ecosystem (Navis & Glynn, 2011). This reduces a founder's feeling of trust in their team's ability to secure the resources—a key competency for ensuring the venture's survival. In contrast, when a founder perceives lower resource scarcity, the necessary information processing required to align distinctive narrative topics with external expectations of legitimacy may seem more manageable and, in any case, less urgent, thus strengthening the positive relationship between team narrative distinctiveness and the founder's cognition-based trust in the team. Thus, higher resource scarcity attenuates the positive relationship between between-team narrative distinctiveness and the founder's cognition-based trust in the team. Accordingly, we hypothesize:

Hypothesis 4. The relationship between entrepreneurial team narrative distinctiveness and a founder's cognition-based trust in the team is less positive when a founder perceives higher levels of resource scarcity.

Figure 1 provides a conceptual model visualizing the relationships that we hypothesize.

DATA AND METHOD

To test our hypotheses, we used a sample of 102 founders from 43 complete, early-stage entrepreneurial teams. Consistent with how Klotz et al. (2014) define entrepreneurial teams, this included all the team members that were actively involved in strategic decision making and operations. We focused on early-stage ventures since they often deal with high levels of uncertainty, a condition under which social information may be especially relevant for influencing each co-founder's cognition-based trust in the team. We collected team narratives through

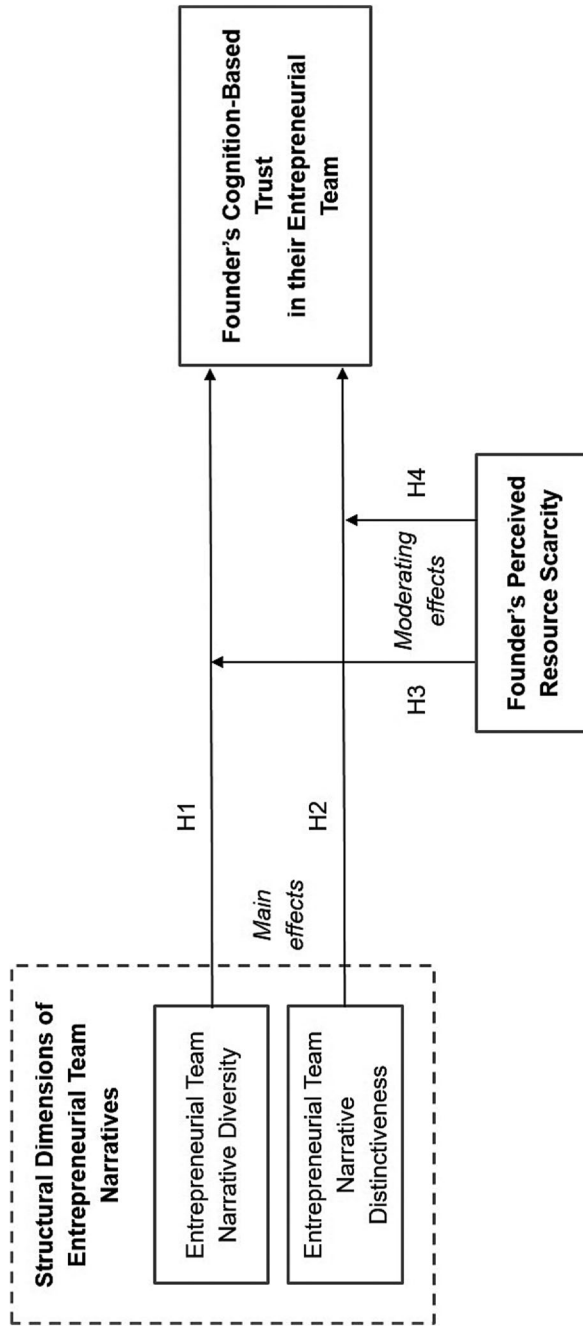


FIGURE 1 Conceptual model of structural dimensions of entrepreneurial team narratives and a founder's cognition-based trust in their team.

interviews with all the founders of all the teams, and 5 weeks later, used a survey to measure cognition-based trust (McAllister, 1995) and perceived resource scarcity (Faraj & Yan, 2009).

Sampling procedure and sample

We sampled ventures run by entrepreneurial teams for less than 6 years, consistent with Amason et al. (2006), and restricted our sample to ventures located in Germany. We identified potential participants who met these sampling criteria through filtered searches on online databases of regional new ventures, incubators, accelerators, and startup fairs. From our attempts to contact these ventures, we received email replies from 285 ventures. Although 145 ventures were unable to participate due to time constraints, we scheduled interviews with the founders of the remaining 140 ventures. In 77 of these cases, we could interview complete entrepreneurial teams, which was essential for extracting the team-level structural dimensions of diversity and distinctiveness that we derived from the team narratives (extracted from the interviews) of all the co-founders of each team. We excluded 24 of these cases because they provided insufficient information for extracting entrepreneurial team narratives, largely due to the fact that they were part of an initial stage of data collection in which we were still trialing different question formats and did not, for instance, cover narratives on what a founder valued about their team or the story of how their team came together. This iterative approach to refining our interview guidelines is consistent with guidance in the extant literature on conducting interviews to elicit narratives (Gioia et al., 2013; Rouse, 2016). We excluded a further 10 teams in which co-founders were either partly (eight teams) or fully (two teams) interviewed in English, as operationalizing the structural dimensions using automated topic modeling (our method of analysis, which we explain below) required that all the team narratives be in one language (Blei et al., 2003)—in our case, German. Translation could have introduced biases into our data, since it would have inaccurately captured English-speaking founders' social information processing as expressed by the language-specific vocabularies used in their entrepreneurial team narratives (Boroditsky, 2011; Ocasio et al., 2018), which might make these teams more distinct from founders of German-speaking teams in a rather arbitrary way. We ultimately arrived at a final sample of 102 founders of 43 complete entrepreneurial teams.

On average, the founders in our final sample were 34.54 years old, with a standard deviation (*SD*) of 7.02, and 14.71% were female. In terms of their highest level of education, 13.73% had a doctoral degree, 75.49% had one or more university degrees below the doctoral level, 4.9% completed an apprenticeship, and 5.88% graduated from high school. Founders also had different fields of education; 31.37% had an educational background in engineering, 28.43% in business or economics, 15.69% in the natural sciences or mathematics, 9.8% in information technology, 4.9% in medicine or another health sector, 3.92% in the social sciences, 1.96% in the creative arts, 0.98% in teaching, and 2.94% were not specialized. Entrepreneurial teams had on average 2.88 co-founders (*SD* = 1.06); team sizes ranged from two to six co-founders, consistent with many other studies on (young) entrepreneurial teams (e.g., Breugst et al., 2020; Friedman et al., 2016). The average team age was 3.18 years (*SD* = 1.46). Ventures employed 6.31 full-time employees on average (*SD* = 6.17) and varied in terms of the primary industry in which they operated: 61.76% were in the computer hardware/software industry, 12.75% were in the services industry, 17.65% were in the material, physical or life sciences industry, and 7.84% were in the consumer products industry.

Structural dimensions of entrepreneurial team narratives

We derived the narrative topics and structural dimensions from the entrepreneurial team narratives that emerged during semi-structured interviews. We interviewed each team's co-founders separately to reduce response bias. We conducted and recorded interviews at the venture's premises whenever possible (48 interviews) or via video-conferencing software or phone call (59 interviews). In order to elicit team narratives, we asked all founders the same set of open-ended questions on the following aspects of their team: (1) general information on the entrepreneurial team, (2) what made the entrepreneurial team special, (3) team values or other team topics of importance to the interviewee, (4) the distribution of roles within the team, and (5) past interactions and situations experienced within the team (see Table A1 in Appendix A for our interview guideline). This helped us to cover various facets of how founders processed the behaviors and perspectives, that is, social information within their team. We asked founders to describe specific examples, including events and experiences, to collect rich narrative data. For instance, this is an excerpt from a founder's team narrative on the subject of team values:

“We looked through company culture slides from other companies and discussed what we also see or don't see [in our company]. Customer orientation, [meaning] that the customer is important, is something we also want to embody but it hasn't been taken to an extreme yet. [...] We also created a kind of company code of conduct in which things are written down like respectful cooperation in working with one another, [...] error culture, etc. But it could be expanded further. Although I think that given that we are still a relatively small team of six to seven people, we have defined [our company culture] already quite well.”

As the quote shows, the founder describes not just the values themselves, such as customer orientation, respectful cooperation, and error culture, but discusses these as part of the story of how the team developed their own code of conduct by looking to other companies for inspiration. In total, we drew upon 376 single-spaced pages of text.

Deriving narrative topics

We used automated topic modeling with Latent Dirichlet allocation (LDA) to derive narrative topics from our full set of entrepreneurial team narratives. LDA (Blei et al., 2003) and other topic modeling techniques have been used in a variety of disciplines and have recently also received increasing attention in entrepreneurship and management research (Hannigan et al., 2019; Kibler et al., 2021; Kobayashi et al., 2018). LDA assumes that the full-text corpus (i.e., our full sample of entrepreneurial team narratives) is generated by probabilistically selecting words from a set of latent topics. A topic consists of a set of words that are statistically likely to co-occur and that can collectively represent a broader concept. For example, if a founder spoke about the team's product development, a topic manifesting this latent concept may include words such as “hardware,” “software,” “built,” “scrum,” and “sprint.”

To derive narrative topics, we first combined all the team narratives into a single text corpus and cleaned the corpus. Cleaning the corpus involved converting all the words to lowercase, removing punctuation, and removing identifying information (e.g., team members' names and venture names). We also removed *stop words*, which are short, common words, such as articles,

typically removed before processing text due to their low analytical value (Kobayashi et al., 2018). Since our texts were all in German, we removed a standard list of German stop words using the R package “stopwords” (Benoit et al., 2021). We now represented the text corpus as a narrative-word matrix A with m rows, one for each co-founder’s team narrative, and n columns, one for each word in the corpus. Each element A_{ij} stored the frequency with which the j -th word appeared in the i -th co-founder’s team narrative. We next computed the term frequency-inverse document frequency (TF-IDF), a commonly used statistic that reflects the importance of each word to each narrative in the corpus (Kobayashi et al., 2018). The TF-IDF is the product of the term frequency (the frequency of a word in a narrative) and the inverse document frequency (IDF). The IDF of a word is found by dividing the total number of narratives by the number of narratives in which the word appears and taking the natural logarithm of the result. To ensure our cleaned corpus included only the words most important to each of the narratives, we excluded all words with a TF-IDF below the median.

Second, using the R “topicmodels” package (Hornik & Grün, 2011), we iteratively applied LDA to the full set of team narratives in our sample in order to generate k narrative topics. In order to determine the optimal k , an important input parameter for LDA, following Griffiths and Steyvers (2004), we calculated the log-likelihoods of topic models with different values of k . The log-likelihood was maximized at $k = 20$, giving us the optimal number of topics to use (see Figure A1 in Appendix A). The words with the highest probability of appearing in a topic can form the basis for interpreting the latent concept that the topic represents. Using the “wordcloud” Python package (Oesper et al., 2011) as operationalized within the EazyNLP text mining platform (EazyNLP, 2023), we visualized the top 20 words in each topic as a word cloud; the size of each word corresponded to its probability of appearing in the respective topic. Visually inspecting these topic word clouds, and the corresponding narratives helped us derive conceptual labels for each topic. For instance, Topic 2 covered the latent concept of remote/flexible working, with top words including “remote,” “peace,” and “complete.” Topic 2 appeared in the following narrative excerpt:

“What we are testing [...] is working a bit more **remotely**, so that the team doesn’t always have to be onsite [...], because [my co-founder] and I travel quite a lot for the business. The developers travel less often; they work [in the office] or from home. We will generally make things flexible and see how well it can work completely **remotely**. [...] At the moment, I try to be reachable three days a week, but then say, OK, the rest of the time [the team members] need to work independently and leave me in **peace to complete** my own work.”

We refined our interpretation of topics using prompt engineering to query the large language model (LLM) GPT-4 integrated within Bing Chat (Microsoft & OpenAI, 2023). Prompts consisted of some context, a topic’s top words, and the task. For example, our prompt for Topic 2 was as follows:

The following words come from an LDA topic model derived from stories told by founders about their entrepreneurial team within the setting of a 1:1 personal interview:

“remote, earn, peace, clock, complete, conscientious, correct, role distribution, [a freelancer], all the more, dogs, plus, san, barcelona, acquaintance, check, surrounding, research, francisco, glad.”

Can you suggest 3 possible conceptual labels that would characterize the words in this topic? Please prioritize the earlier words in the list in coming up with your suggested labels. Include your reasoning for each suggested label and rank the labels in order of importance based on how many of the earliest words in the list the label covers.

We received the following response:

Based on the words you provided, here are three possible conceptual labels that would characterize the words in this topic:

1. Remote work: This label covers the words “remote” and “peace.” The word “remote” suggests that the team is working from different locations, whereas “peace” could imply that the team is working in a calm and quiet environment.
2. Time management: This label covers the words “clock,” “complete,” and “role distribution.” The word “clock” suggests that the team is concerned with time management. The words “complete” and “role distribution” suggest that the team is focused on completing tasks efficiently.
3. Location: This label covers the words “san,” “barcelona,” and “surrounding.” These words suggest that the team is located in or around San Francisco and Barcelona.

We also asked follow-up questions to refine topic labels. For example, when asked if “Remote work” or “Remote/flexible working” would be a better label for Topic 2, Bing Chat responded:

“Remote/flexible working” would be a better label for this topic because the words “remote,” “peace,” and “clock” suggest that the founders were able to work in a flexible environment that allowed them to work according to their own schedules and in a peaceful setting. The word “complete” also suggests that they were able to complete their work without any interruptions or distractions.

Table A2 in Appendix A provides further illustrative examples of the topics we derived.

The result of applying LDA to our sample of team narratives could be represented by two matrices, a word-topic matrix B and a narrative-topic matrix C . Each element B_{ij} stored the probability with which the i -th word appeared in the j -th narrative topic. Each element C_{ij} stored the probability with which the i -th co-founder’s team narrative included the j -th narrative topic. In order to create a clear cutoff for whether a given narrative topic was represented in a co-founder’s team narrative, we dichotomized the elements in matrix C , based on whether the probability was above (recoded as 1) or below (recoded as 0) the average of all the probabilities in the matrix (Kakatkhar et al., 2018). Using the dichotomized narrative-topic matrix, we calculated the diversity and distinctiveness of the topics included in each team’s set of entrepreneurial team narratives (detailed worked example in Figure A2 in Appendix A).

Measuring entrepreneurial team narrative diversity

Within-team narrative diversity refers to how much narratives in a team vary in terms of their constituent topics. Since in our case each narrative corresponds to a different co-founder, the diversity of narrative topics reflects diversity in how co-founders perceive their team. We

operationalized our diversity measure using the Euclidean distance method corrected for differences in team size (Biemann & Kearney, 2010; Harrison & Klein, 2007). For example, suppose that the vectors $p = [0, 0, 0, 0, 0, 1, 1, 1, 1, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0]$ and $q = [0, 0, 1, 1, 1, 1, 0, 0, 0, 1, 1, 0, 0, 1, 1, 0, 0, 1, 1, 0, 0, 1, 1, 0, 1, 0, 0, 0]$ represent two rows from narrative-topic matrix C , each corresponding to a different co-founder's narrative from the same team. The j -th element of each vector denotes the absence (0) or presence (1) of the j -th topic. Notice that although some topics feature in both narratives p and q , others do not. The pairwise Euclidean distance between each element of p and q , namely, $\sqrt{\sum_{j=1}^n (p_j - q_j)^2} = \sqrt{8} \approx 2.83$, quantifies the topical diversity between the narratives of the two co-founders. For teams with more than two co-founders, we averaged each team's pairwise Euclidean distances. To reduce the effect of outliers, we rescaled average Euclidean distance for each team to be between 0 and 1. For example, in a team of two co-founders with a team narrative diversity score of 0.94, the only topic covered by both co-founders was Topic 17 ("Entrepreneurial stress and coping"); the rest of the topics contributed by each co-founder to the team's set of narratives were entirely different from one another. For instance, the first co-founder covered Topic 2 ("Remote/flexible working"), and the second co-founder covered Topic 19 ("Good social exchange and relationships").

Measuring entrepreneurial team narrative distinctiveness

Between-team narrative distinctiveness refers to how unique a team's narrative topics are relative to its peers, that is, other comparable entrepreneurial teams. To measure distinctiveness, we used the narrative-topic matrix to create a network in which each node represented a narrative topic. Two nodes were connected by an edge if the corresponding topics co-occurred within at least one co-founder's team narrative. Each edge was weighted by the co-occurrence frequency of the connected topics within the full sample of team narratives. We measured each narrative topic's distinctiveness using its weighted degree centrality in the narrative topic network (Freeman, 1977, 1978). Specifically, we calculated distinctiveness for each node as the negated weighted sum of all the edges that were connected to it. For example, Topic 1 ("Processes to gain external support") was one of the most distinctive topics, whereas Topic 20 ("Product development") was one of the least distinctive topics. To measure each team's narrative distinctiveness, we averaged the distinctiveness of each topic featured in the team's set of narratives and scaled it to be between 0 and 1.

Survey measures

Cognition-based trust

We measured the dependent variable of a founder's cognition-based trust in the team drawing on the six-item cognition-based trust scale developed by McAllister (1995) adapted for the entrepreneurial team context. We used a Likert-type scale with the anchors 1 (not at all) and 7 (completely). The full items we used are in Table A3 of Appendix A. The Cronbach's alpha for cognition-based trust was .80, which is well above the suggested cutoff of 0.70 (Hair et al., 2006).

Perceived resource scarcity

We measured the moderator, perceived resource scarcity, based on each individual founder's perception, rather than using a team-wide or industry-wide measure, since we theorize that it is the individual-level perception of resource scarcity that moderates the relationships between the structural dimensions of team narratives and the founder's trust in the team. Moreover, the level of resource scarcity perceived by each founder may vary even between firms from the same industry or individuals in the same venture (Edelman & Yli-Renko, 2010). To measure resource scarcity, we adapted the three-item scale from Faraj and Yan (2009) to the entrepreneurial team context. We used a Likert-type scale with the anchors 1 (not at all) and 7 (a lot). The full items we used are in Table A3 of Appendix A. The Cronbach's alpha for resource scarcity was .61 and thus below the cutoff suggested by Hair et al. (2006). But this value is perhaps unsurprising given that there are few items to capture the construct in quite a broad way, which is likely to reduce the alpha (Cortina, 1993). Specifically, two items highlight the lack of resources available to the team, whereas a third item could also apply to a team that continuously needs additional resources *and* manages to attain these. Cronbach's alpha does in fact rise to .68 without Item 3. We therefore included the full scale and checked the robustness of our results by running additional regressions with just the first two items and also each of the three items individually.

Control variables

We measured theoretically relevant control variables to check that our results are stable. However, following Spector and Brannick (2011), we also produced regression results excluding the control variables. At the individual level, we controlled for participants' age and gender (0 = male, 1 = female), since the literature suggests older people and women may be more trusting (Colquitt et al., 2011) and demographic differences can influence how individuals understand themselves and their context (Ibarra & Barbulescu, 2010). We also controlled for participants' founding experience and degree of education, as these may increase a founder's perception of their own ability to select trustworthy co-founders and thus strengthen cognition-based trust in the team. Additionally, since shared prior history can positively influence cognition-based trust and how individuals perceive one another, we controlled for the closeness of each founder's prior relationship with the team (Fulmer & Gelfand, 2012). To measure this, we asked each founder to indicate their prior relationship with each co-founder (e.g., "Friend or acquaintance you have worked with" and "Stranger before joining the founding team") and coded these responses on a scale of 1 (the closest prior relationship) to 9 (the most distant prior relationship). For each founder, we then took the average of the closeness of their prior relationships with all the co-founders. Finally, since an important alternative explanation for a founder's cognition-based trust in the entrepreneurial team may be the extent to which a founder feels emotionally connected to the team (Costa et al., 2018), we also controlled for each founder's affect-based trust in the team. To do so, we adapted the five-item affect-based trust scale developed by McAllister (1995) for the entrepreneurial team context, using a Likert-type scale with the anchors 1 (not at all) and 7 (completely). The full items we used are in Table A3 of Appendix A. The Cronbach's alpha for affect-based trust was .81.

At the team level, we controlled for team age because the longer a team works together, the more time there is for each member's cognition-based trust in the team to grow and for team members' perceptions of the team to become more homogenous and specific (i.e., for team narratives to

become less topically diverse and more distinctive). Furthermore, we controlled for team size, as larger teams may require greater coordination, which could make it more difficult to build up the reliability that serves as a basis for cognition-based trust (Haleblian & Finkelstein, 1993; Shaw & Harkey, 1976). Moreover, larger teams may be more diverse in how they process social information about their team, since they may cover a broader range of perspectives, as well as more distinctive, since the team may have developed more specific and specialized processes to coordinate the larger number of members. We also controlled at the team level for diversity in co-founders' educational backgrounds, because shared backgrounds can increase trust (Costa et al., 2018; Fulmer & Gelfand, 2012) and result in less diverse and distinctive team narratives (Ashforth et al., 2011). Following recommendations from extant literature (Biemann & Kearney, 2010; Harrison & Klein, 2007), we measured each team's educational diversity using Blau's index corrected for differences in team size: $1 - \sum \frac{N_i(N_i-1)}{N(N-1)}$, where N_i is the number of co-founders in the i -th category (of educational background) and N is the total number of co-founders. Finally, we controlled for the primary industry in which the venture operated (0 = product-based firm, 1 = service-based firm), since this can influence interactions within the team (Breugst & Shepherd, 2017; Ucbasaran et al., 2003) and thus team narrative and trust formation.

Statistical analysis

Our theoretical model captures variables at different levels of analysis. Specifically, we predict a founder's cognition-based trust in their teammates at the individual level based on team-level structural dimensions of entrepreneurial team narratives; the moderator, perceived resource scarcity, is an individual-level variable. To cover this nested nature of our data, we initially considered applying hierarchical linear modeling (Raudenbush & Bryk, 2002). However, running the null model and computing the intraclass correlation (3.32×10^{-24}) indicated that the more parsimonious approach of running regression models with cluster-robust standard errors would be more appropriate (Aguinis et al., 2013). To test our hypotheses, we used censored regression models (lower limit: 1, upper limit: 7) to account for the measurement of the dependent variable, cognition-based trust, using survey responses on a Likert-type scale of 1 to 7.

RESULTS

Descriptive statistics

Table 1 displays the means, standard deviations, correlations, and (where applicable) Cronbach's alphas of the variables. Interestingly, contrary to what extant work would suggest (De Jong et al., 2017; Eisenhardt & Schoonhoven, 1990; Fulmer & Gelfand, 2012), neither pre-team formation factor, that is, a founder's prior relationship to their team and team-level educational diversity, was significantly correlated with the founder's cognition-based trust in the team.

Hypothesis testing

We built up stepwise censored regression models, as shown in Table 2. In Model 1, we included only the control variables. In this model, only a founder's age, team size, and affect-based trust

TABLE 1 Descriptive statistics.

	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Cognition-based trust	6.08	0.79	(0.80)												
(2) Team narrative diversity	0.57	0.23	0.17****	(-)											
(3) Team narrative distinctiveness	0.61	0.19	-0.25*	-0.31**	(-)										
(4) Perceived resource scarcity	5.24	1.19	-0.02	-0.17****	-0.01	(0.61)									
(5) Age	34.54	7.02	0.26**	0.17****	-0.40***	0.15	(-)								
(6) Gender ^a	0.15	0.36	0.02	0.05	0.17****	-0.09	-0.06	(-)							
(7) Education	4.57	1.24	0.21*	0.17****	-0.25*	-0.04	0.38***	-0.01	(-)						
(8) Founding experience	0.83	1.71	0.01	0.08	-0.13	0.13	0.28**	-0.06	-0.17****	(-)					
(9) Prior relationship	6.79	1.28	-0.08	-0.07	-0.05	0.01	-0.14	-0.01	-0.06	-0.06	(-)				
(10) Affect-based trust	6.16	0.81	0.64****	0.12	-0.19****	-0.13	0.04	0.01	0.09	-0.16	0.02	(0.81)			
(11) Team size	2.88	1.06	-0.32**	-0.09	0.64***	-0.07	-0.31**	0.13	-0.24*	-0.06	0.24*	-0.13	(-)		
(12) Team age	3.18	1.46	0.17****	-0.01	-0.22*	-0.11	0.24*	-0.04	0.14	-0.05	-0.16	0.18****	-0.41***	(-)	
(13) Team educational diversity	0.67	0.40	-0.04	0.01	0.18****	0.24*	0.11	0.06	0.07	-0.04	-0.01	-0.17****	0.08	-0.27**	(-)
(14) Industry ^b	0.13	0.34	0.12	0.31**	-0.10	-0.25*	-0.09	0.01	0.16	0.04	-0.11	0.12	-0.18****	-0.03	-0.057

Note: N = 102. Cronbach's alpha (if applicable) is reported on the diagonal.

Abbreviations: M, mean; SD, standard deviation.

^a0 = male, 1 = female.

^b0 = product-based firms, 1 = service-based firms.

*p < .05, **p < .01, ***p < .001, and ****p < .1.

TABLE 2 Censored regression models to predict a founder's cognition-based trust in the entrepreneurial team.

	Model 1			Model 2			Model 3		
	Coeff.	Robust SE	p	Coeff.	Robust SE	p	Coeff.	Robust SE	p
Constant	1.77	0.62	.006	3.88	1.03	.000	1.84	0.64	.005
Age	0.02	0.01	.063				0.02	0.01	.052
Gender ^a	0.11	0.18	.56				0.07	0.18	.705
Education	0.05	0.05	.391				0.05	0.05	.402
Founding experience	0.03	0.04	.409				0.03	0.04	.385
Prior relationship	-0.17	0.05	.749				0.00	0.05	.949
Affect-based trust	0.69	0.07	.000				0.70	0.07	.000
Team size	-0.18	0.06	.004				-0.25	0.09	.006
Team age	-0.05	0.05	.343				-0.05	0.05	.267
Team educational diversity	0.13	0.15	.399				0.08	0.15	.586
Industry ^b	0.06	0.30	.842				-0.03	0.30	.926
Team narrative diversity				6.12	1.77	.001	0.38	0.30	.207
Team narrative distinctiveness				3.30	1.38	.019	0.59	0.54	.282
Perceived resource scarcity ^c				0.28	0.19	.141			
Team narrative diversity × perceived resource scarcity				-1.09	0.33	.001			
Team narrative distinctiveness × perceived resource scarcity				-0.89	0.24	.000			

Note: N = 102; cluster-robust standard errors are in parentheses.

^a0 = male, 1 = female.

^b0 = product-based firms, 1 = service-based firms.

^cMeasured using all three items in Models 1–5. In Model 6, only Items 1 and 2 are used.

TABLE 2 (Continued)

	Model 4			Model 5 (full model)			Model 6		
	Coeff.	Robust SE	p	Coeff.	Robust SE	p	Coeff.	Robust SE	p
Constant	1.81	0.82	.030	1.07	1.00	.289	1.32	1.12	.241
Age	0.02	0.01	.057	0.02	0.01	.081	0.01	0.01	.127
Gender ^a	0.07	0.19	.706	0.03	0.17	.874	0.03	0.18	.86
Education	0.05	0.05	.400	0.05	0.06	.389	0.06	0.06	.327
Founding experience	0.03	0.04	.384	0.04	0.04	.284	0.04	0.04	.325
Prior relationship	0.00	0.05	.95	-0.00	0.05	.944	-0.00	0.05	.951
Affect-based trust	0.70	0.07	.000	0.66	0.06	.000	0.69	0.07	.000
Team size	-0.25	0.10	.010	-0.23	0.09	.012	-0.24	0.09	.008
Team age	-0.05	0.05	.329	-0.04	0.05	.43	-0.04	0.05	.391
Team educational diversity	0.08	0.15	.609	0.09	0.15	.566	0.10	0.15	.517
Industry ^b	-0.02	0.29	.934	-0.08	0.29	.791	-0.12	0.31	.698
Team narrative diversity	0.39	0.31	.214	3.53	1.27	.007	3.08	1.52	.046
Team narrative distinctiveness	0.58	0.55	.291	2.85	1.25	.025	2.65	1.08	.016
Perceived resource scarcity ^c	0.00	0.06	.936	0.16	0.14	.229	0.09	0.14	.534
Team narrative diversity × perceived resource scarcity				-0.61	0.24	.012	-0.45	0.24	.074
Team narrative distinctiveness × perceived resource scarcity				-0.48	0.16	.005	-0.38	0.14	.008

Note: N = 102; cluster-robust standard errors are in parentheses.

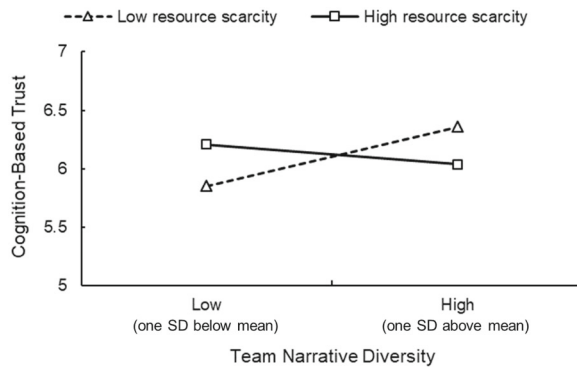
^a0 = male, 1 = female.

^b0 = product-based firms, 1 = service-based firms.

^cMeasured using all three items in Models 1–5. In Model 6, only Items 1 and 2 are used.

in the team had significant coefficients (age: $b = 0.02$, $p < .1$; team size: $b = -0.18$, $p < .01$; affect-based trust: $b = 0.69$, $p < .001$). In Model 3, we included all the control variables and both structural dimensions; none of our main effects had significant coefficients. In Model 4, we added to Model 3 by including perceived resource scarcity; again, none of our main effects had significant coefficients. Finally, in Model 5, we included both interaction effects. Consistent with our theorizing, which suggested the presence of interactions, and the recommendations by Aiken and West (1991), we interpreted all effects based on Model 5, the full model. Team narrative diversity had a significant positive coefficient ($b = 3.53$, $p < .01$) and this relationship was significantly and negatively moderated by perceived resource scarcity ($b = -0.61$, $p < .05$), consistent with Hypothesis 3. Moreover, team narrative distinctiveness had a significant positive coefficient ($b = 2.85$, $p < .05$), and this relationship was significantly and negatively moderated by perceived resource scarcity ($b = -0.48$, $p < .01$), consistent with Hypothesis 4. Figure 2 visualizes the interaction effects in Hypotheses 3 and 4.

(a) Interaction of Team Narrative Diversity and Resource Scarcity



(b) Interaction of Team Narrative Distinctiveness and Resource Scarcity

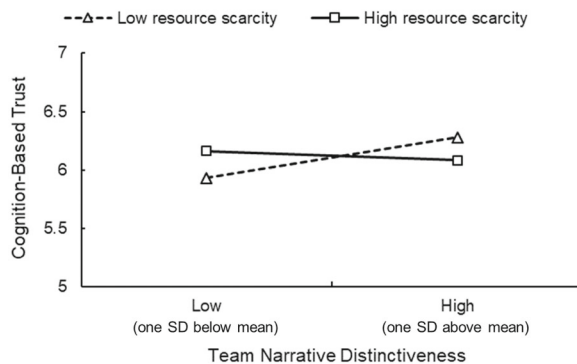


FIGURE 2 Interaction of structural dimensions of team narratives and resource scarcity. (a) Interaction of team narrative diversity and resource scarcity. (b) Interaction of team narrative distinctiveness and resource scarcity.

Robustness tests

We used multiple robustness checks with different model specifications and variable operationalizations. In Model 2, we included only the structural dimensions of the team narratives and resource scarcity, as well as the interaction between each of the structural dimensions and perceived resource scarcity. Here, team narrative diversity and team narrative distinctiveness had significant positive coefficients (diversity: $b = 6.12$, $p < .001$; distinctiveness: $b = 3.30$, $p < .05$). Moreover, the interaction between team narrative diversity and perceived resource scarcity was significant and negative ($b = -1.09$, $p < .01$). The interaction between team narrative distinctiveness and perceived resource scarcity was also significant and negative ($b = -0.89$, $p < .001$). In Model 6 (Table 2), we ran the full model operationalizing perceived resource scarcity with only its first two items, which produced results consistent with our original results. Team narrative diversity ($b = 3.08$, $p < .05$) and team narrative distinctiveness ($b = 2.65$, $p < .01$) retained significant positive coefficients. The coefficient of the interaction between team narrative diversity and perceived resource scarcity was not significant at a conventional level, but the direction was also negative ($b = -0.45$, $p = .07$). The interaction between team narrative distinctiveness and perceived resource scarcity was significant and negative ($b = -0.38$, $p < .01$). Table A4 (Appendix A) shows regression results for our model with perceived resource scarcity operationalized with each of its items separately and running our full model with ordinary least squares (OLS) regression; the results are largely consistent with our hypotheses.

Endogeneity tests

Since initial levels of each co-founder's cognition-based trust in their team might have shaped the entrepreneurial team narratives and would be closely related to current levels of cognition-based trust, which might result in a correlation between the narratives and the error term in the prediction, we also wanted to check for potential endogeneity issues that might affect our results (Baum, 2006; Clougherty et al., 2016). We identified two team-level instruments for team narrative diversity and distinctiveness. Instruments are variables that have a theoretically meaningful correlation with the independent variables but not with the error term in the prediction of the dependent variable; instruments can help to produce more accurate estimates by purging the independent variable of the overlap with the error term (Antonakis et al., 2014; Clougherty et al., 2016). First, we considered team narrative length, that is, the total length of each team's set of entrepreneurial team narratives. Longer narratives would suggest that team members are more comprehensive in how they process social information about their team, with the result that within-team overlaps in topics—that is, lower within-team narrative diversity—becomes more likely. Longer narratives would also reflect a higher degree of detail and specificity in members' social information processing, such as the team is more likely to cover topics that are more distinctive relative to other comparable entrepreneurial teams. Second, we considered each team's coverage of the overall topic space. The wider the team's coverage of topics, the more likely it is that members contribute different topics to the team's full set of entrepreneurial team narratives, that is, the higher the within-team narrative diversity. Similarly, wider coverage of topics might also be indicative of the team's members processing social information in a more distinctive way relative to other comparable entrepreneurial teams.

We measured team narrative length as the total number of words in the team's full set of entrepreneurial team narratives and rescaled it to be between 0 and 1. We measured team topic coverage as the number of different topics a team covered as a proportion of the 20 total topics in our sample. To empirically verify the appropriateness of both these instruments, we checked that they were correlated with both structural dimensions but uncorrelated with a founder's cognition-based trust in the team. Team narrative length was significantly correlated with team narrative diversity ($r = -0.42, p < .001$) and team narrative distinctiveness ($r = 0.51, p < .001$) but uncorrelated with cognition-based trust. Team topic coverage was also significantly correlated with team narrative diversity ($r = 0.80, p < .001$) and team narrative distinctiveness ($r = 0.20, p < .05$) but uncorrelated with cognition-based trust. In first-stage models predicting team narrative diversity and team narrative distinctiveness, which also included all the control variables from Model 5, we found that team narrative length was a significant predictor for team narrative diversity ($b = -0.25, p < .001$) and team narrative distinctiveness ($b = 0.20, p < .05$). Meanwhile, team topic coverage was a significant predictor for team narrative diversity ($b = 1.21, p < .001$) but not for team narrative distinctiveness. We found the Durbin–Wu–Hausman test to be not significant, $\chi^2(2) = 2.27, p = .32$, suggesting that our structural dimensions of entrepreneurial team narratives are likely to be exogenous. Thus, they are unlikely to be correlated with the error term reducing the likelihood that our estimates are biased (Antonakis et al., 2014; Clougherty et al., 2016).

Taken together, our results suggest that there is only limited support for Hypotheses 1 and 2 because the coefficients for the main effects of team narrative diversity and distinctiveness are not consistent across models and the correlation between team narrative distinctiveness and a founder's cognition-based trust in the team was even negative ($r = -0.25, p < .05$). However, given our theorizing that perceived resource scarcity should play an important moderating role, it can make sense to interpret the main effects of team narrative diversity and distinctiveness based on the inclusion of the interaction terms to avoid omitted variable bias. Importantly, we find support for Hypotheses 3 and 4 specifying these interactions. Thus, team narrative diversity and distinctiveness are related to a founder's cognition-based trust in their team, but their effect is contingent on the founder's perceived resource scarcity.

DISCUSSION AND CONCLUSION

Theoretical implications

Extant literature suggests that a founder's cognition-based trust in their team is crucial for entrepreneurial teams to work effectively (De Jong & Elfring, 2010; Gemmill et al., 2012; Simons & Peterson, 2000). We contribute in multiple ways to the literature on entrepreneurial teams by advancing our understanding of how characteristics of entrepreneurial team narratives are connected to a founder's cognition-based trust in the team.

Much of the work on the development of an individual's trust in their team highlights the importance of members' shared history and backgrounds and focuses on pre-team formation factors (De Jong et al., 2017; Eisenhardt & Schoonhoven, 1990; Fulmer & Gelfand, 2012). However, our theorizing and results challenge this view, suggesting that once the team has started working together, behaviors and perspectives within the team's work context—that is, social information (Costa et al., 2018; Salancik & Pfeffer, 1978)—might become more important. Indeed, our study highlights the importance of social information processing for understanding

a founder's cognition-based trust in the team once the team has actually started working together to build the venture. Our findings uncover the nuanced nature of the relationship between social information processing in the team, as captured by the structural dimensions of entrepreneurial team narratives, and a founder's cognition-based trust in the team. We show that the influence of both within-team narrative diversity and between-team narrative distinctiveness on a founder's cognition-based trust in the team is contingent on the founder's perceived resource scarcity, a highly salient constraint for new ventures (Baker & Nelson, 2005; Klotz et al., 2014; Singh et al., 1986).

In doing so, we address two puzzles central to understanding the role of within-team and between-team structural dimensions of entrepreneurial team narratives in developing a founder's cognition-based trust in the team. The first puzzle is rooted in the literature on cognitive diversity in teams (Martins & Sohn, 2022; Miller et al., 2022). Diverse cognitive structures as captured through within-team narrative diversity, that is, different lenses through which members may view their team, can seem like both an asset and a liability (Ashforth et al., 2011; Martins & Sohn, 2022). For founders in particular, having diverse perspectives in their team may seem like a competency advantage since members can cover each other's cognitive blind spots, which may be especially crucial for operating in the dynamic new venture setting (Blatt, 2009; Hambrick et al., 1996; Harrison & Klein, 2007). Yet, surfacing and combining diverse perspectives can require an overwhelming degree of information processing, which can erode the founder's cognition-based trust in the team's reliability and capabilities (Martins & Sohn, 2022). Our work takes an important step towards resolving this debate within the context of entrepreneurial teams by highlighting the important moderating influence of a founder's perceived resource scarcity on the relationship between within-team narrative diversity and a founder's cognition-based trust in the team. Future studies can extend our work, for instance, using longitudinal studies and experiments to provide stronger empirical support for the causal direction of the relationships we theorize.

The second puzzle we address derives from considering how an entrepreneurial team's social information processing compares to other similar teams within the same entrepreneurial ecosystem (Ashforth et al., 2011). The literature has recognized the importance of the environment in which a new venture operates (Lounsbury, 2007; Lounsbury & Glynn, 2001; Marti et al., 2013). In particular, since teams compete for limited resources, such as funding from investors, a founder in a team that has more distinctive entrepreneurial team narratives may have more faith in the team's competencies, that is, greater cognition-based trust in the team (Lounsbury & Glynn, 2001; Navis & Glynn, 2011). However, as in the case of within-team narrative diversity, between-team narrative distinctiveness also requires a potentially overwhelming (and trust-eroding) degree of information processing in order for the team to appear legitimate relative to its peers. Here, too, we show that perceived resource scarcity can play a crucial moderating role in resolving our understanding of this double-edged nature of team narrative distinctiveness in building a founder's cognition-based trust in their team. While prior theorizing highlights the importance of coherence between legitimate and distinctive aspects of an entrepreneurial team for resource acquisition (Navis & Glynn, 2011), we draw attention to the resource-intensive nature of achieving such coherence in the first place from the founder's perspective.

Additionally, we contribute to the theory on entrepreneurial narratives by shedding light on narrative structure to gain important insights into how entrepreneurial team members process social information in relation to each other. From work on narrative content, we know that narratives enable sensemaking by allowing the narrators to select from different interpretations to

build their own social reality (Boje, 2001; Ibarra & Barbulescu, 2010; Weick, 1995). Since entrepreneurial narratives allow founders to selectively include information in their portrayal of events and concepts, founders from the same social context (e.g., co-founders from the same entrepreneurial team) can form different social realities (Ashforth et al., 2011). By developing theory on within-team narrative diversity in entrepreneurial teams, we illustrate how the interaction of different social realities within the same team relates to each co-founder's cognition-based trust in the team. Moreover, by exploring the construct of team narrative diversity we also offer an approach to studying cognitive diversity within teams more directly than commonly used demographic proxies would allow (Martins & Sohn, 2022; Miller et al., 2022). Our narrative measures also have an advantage over survey-based measures of diversity and distinctiveness, which may be subject to self-report bias. We encourage future studies to join us in contributing to the still nascent understanding of structure in entrepreneurial team narratives. For example, although we study narrative structure within entrepreneurial teams at a fixed point in time, future studies might explore how narrative structures evolve over different phases of team or venture development (Patzelt et al., 2021).

More generally, our methods illustrate the potential for novel and innovative approaches to studying entrepreneurial narratives. Content-focused analyses of entrepreneurial narratives tend to be bounded within some specific context, such as entrepreneurial ideation (Gemmell et al., 2012) or psychological disengagement during exit (Rouse, 2016). By contrast, our structural dimensions can be applied to contexts outside of the scope of the current study (e.g., narratives directed at specific audiences). Although past studies of entrepreneurial narratives often apply qualitative methodologies, which by their nature involve interpreting the meanings of narrative content (Walsh, 1995), structural dimensions of narratives allow for a more formalized approach. Our application of topic modeling enables deriving structural dimensions purely from the narratives (or even other textual data) themselves (Hannigan et al., 2019). Moreover, our work complements other analyses of narratives that focus on content, such as Kibler et al.'s (2021) study of typologies of entrepreneurial failure narratives, as well as methods like computer-aided text analysis, which uses pre-defined dictionaries (Short et al., 2010). While we focus on the structural dimensions of narratives, our discussion of diverse methods for interpreting the latent themes represented by topics (i.e., word cloud visualizations, contextualizing quotes, and prompt engineering using LLMs) can help scholars apply topic modeling to study narrative content. Combining topic modeling and prompt engineering to enable interpretation of narrative topics is to our knowledge unique to this study and we hope that introducing these new ideas can help kick-start the conversation on leveraging such exciting technological advances.

Limitations and future research

Although we collect team narratives at an earlier point in time to the dependent variable of a founder's cognition-based trust in their team, relationships between team narratives and a founder's trust in their team may evolve together over time (Blatt, 2009; McAllister, 1995). Future studies can collect data on team narratives and trust at multiple points in time to explore the temporal aspects of the relationships between these variables in more detail, as well as to provide stronger empirical support for causality in the relationships we investigate. Moreover, while we do observe variation in the level of within-team narrative diversity, since all the teams we study were situated within the same region and spoke the same language to enable

between-team comparisons, our findings may not generalize to more culturally diverse teams. Future studies may extend our findings to more culturally diverse and international contexts. Additionally, although we focus on the relationship between structural dimensions of team narratives and the trust that existing members feel in their team, it may be interesting to investigate the role of existing team narratives in influencing the trust of new co-founders joining the team or early employees. Finally, our topic modeling approach to deriving team narrative diversity and distinctiveness may be applied to narratives directed at more specific audiences, such as investors or new team members.

Practical implications

Entrepreneurial teams may benefit from thinking more explicitly about how members process social information about the team. In particular, co-founders may reflect on the extent to which they wish to be diverse in how they view their team, taking into consideration the level of resource scarcity they perceive themselves to be operating under. Our findings can also be viewed from the perspective of entrepreneurial ecosystem enablers, such as startup coaches, mentors, and educators. Such stakeholders may be particularly attuned to what are likely to be distinctive versus popular topics in the stories founders tell about their team within a given entrepreneurial ecosystem. Startup coaches can draw upon this knowledge to support founders in building cognition-based trust in their team in a customized way, based on the founders' perceptions of resource scarcity. For example, they can encourage members to think about topics idiosyncratic to their own understanding of the team and strengthen the team's belief in what makes the team unique if they realize that the founders are confident with respect to available resources.

CONCLUSION

Our findings suggest the development of a founder's cognition-based trust in the entrepreneurial team is related to processing social information through entrepreneurial team narratives. In particular, we find that two structural dimensions, within-team narrative diversity and between-team narrative distinctiveness, are positively related to a founder's cognition-based trust in the team, contingent upon the founder's perceived resource scarcity. We hope our work paves the way for further exploration of the internal social context of entrepreneurial teams and the application of novel methodologies for analyzing entrepreneurial narratives.

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CONFLICT OF INTEREST

The authors do not have any potential conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

All procedures performed in this study were in accordance with American Psychological Association (APA) ethical regulations regarding the treatment of human participants.

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APPENDIX

TABLE A1 Interview guideline.

Respondents were asked each of the following questions in a conversational format. When multiple questions were included, these were asked one by one with the respondent given the chance to answer each one in turn.

- Q1 How did the team come together?
- Q2 How are the company shares split amongst yourselves? How did this distribution come about?
- Q3 What makes your team special? What are special characteristics?
- Q4 Which issues or values are important to you in your team? Have you also talked about this in your team?
- Q5 What would you like to try out in your team or change?
- Q6 What are the roles of the founders (within the founding team)? Who is the CEO of your company? [if unclear, who the CEO is: Who performs most of the strategic tasks?]
- Q7 In which situations did you have to be flexible because of your team or make compromises?
- Q8 Please think about a situation in which you and your team were very stressed. Now take me through the situation. What kind of situation was it? How did you deal with it as a team?
- Q9 How do you deal with it, as a team, when one of your team members is feeling especially stressed? Can you give me an example?

TABLE A2 Illustrative examples of entrepreneurial team narrative topics.

Topic number	Topic label	Top 20 words associated with each topic (translated from German into English)	Excerpt from a founder's entrepreneurial team narrative (top words from topics bolded)
1	Processes to gain external support		<p>We had to make an extra product for The Lions' Den broadcast. The product had to be developed to go out before; otherwise, the media hype that came with the Lions' Den wouldn't have such an impact. At the same time, we had to make especially sure [...] that there were enough customers on the platform. So two [...] components that we managed very well in principle.</p> <p><i>[“Die Höhle der Löwen” (The Lions' Den) is the German version of the UK television program Dragons' Den.]</i></p>
3	Technical processes and conflicts		<p>[My co-founder] takes care of the database and the frontend. My main task is the backend and kind of the interfaces between the frontend and database [...]. And when we need an external program [...] I'm the one who looks at it and works intensively to understand it, reading up on it for like three hours. [...] I don't like it, but somehow that task ultimately ended up with me.</p>
7	Harnessing entrepreneurial energy		<p>Of course [building this venture] carries a lot of heart, a lot of energy, and [...] it is important that there is goodness, heart, and passion in [what we do]. So we keep the energy high—and [I mean that] really only in a positive sense. We don't need some circus event to keep energy high. So [we] really honestly try to create good energy.</p>

(Continues)

TABLE A2 (Continued)

Topic number	Topic label	Top 20 words associated with each topic (translated from German into English)	Excerpt from a founder's entrepreneurial team narrative (top words from topics bolded)
17	Entrepreneurial stress and coping		<p>No deadline, no product. [...] I don't know if we would have reached completion on [the product] if we hadn't had that deadline. [...] The feature had to be ready until Friday otherwise we couldn't build the car. [...] And we ourselves also didn't know when it would be finished.</p>
19	Good social exchange and relationships		<p>My brother can rely on me to perform. If I say I was not able to make the sale, he knows he could not have done it better and it's the same the other way around. [...] Our parents do the bookkeeping [...] and I find it good that there is this financial transparency. [...] I am more in the area of partner [management]; I exchange and align with people to get them to want to move towards becoming [...] franchise partners.</p>
20	Product development		<p>I insisted it was critical we immediately get a whiteboard [...] to display Scrum and so on. [...] We had a very naive expectation at the start as we thought [one co-founder] would work mainly on hardware and [another] on software and hardware [...] but we soon realized [product development] is not just technical [...] Currently we also do a lot of project management.</p>

Note: Topics are ordered from most distinctive (Topic 1) to least distinctive (Topic 20).

TABLE A3 Scales for cognition-based trust and perceived resource scarcity.

(a) Cognition-based and affect-based trust scales adapted from McAllister (1995).
Respondents were asked to indicate the extent to which they agreed with the following statements on a scale of 1 (not at all) to 7 (completely).

Cognition-based trust

- Item 1 Our founding team approaches the work with professionalism and dedication.
- Item 2 Given our founding team members' track record, I see no reason to doubt their competences and preparation for the work.
- Item 3 I can rely on my founding team members not to make my job more difficult by careless work.
- Item 4 Most people, even those who aren't close friends of my founding team members, trust and respect them.
- Item 5 Other persons who interact with my founding team members at work consider them to be trustworthy.
- Item 6 If people knew more about my founding team members and their backgrounds, they would be more concerned and monitor their performance more closely.^a

Affect-based trust

- Item 1 In our founding team, we have a sharing relationship and can all freely share our ideas, feelings, and hopes.
- Item 2 I can talk freely to my founding team members about difficulties I am having at work and know that they will want to listen.
- Item 3 We would all feel a sense of loss if one member of our founding team had to leave the founding team and we could no longer work together.
- Item 4 If I shared my problems with my founding team, I know they would respond constructively and caringly.
- Item 5 I could say that in our founding team, we have all made considerable emotional investments in our working relationship.

(b) Perceived resource scarcity scale adapted from Faraj and Yan (2009).

Respondents were asked to indicate the extent to which the following statements applied to them on a scale of 1 (not at all) to 7 (a lot).

- Item 1 Since its start, the founding team has found it critical to preserve and stretch available resources to accomplish its tasks.
- Item 2 Since its start, the founding team has had to carry out its tasks under serious resource constraints.
- Item 3 Since its start, the founding team has experienced an ongoing need for additional resources to get its job done.

^aItem was reverse-coded.

TABLE A4 Robustness tests.

	Model 7			Model 8			Model 9			Model 10		
	Coeff.	SE	Robust p	Coeff.	SE	Robust p	Coeff.	SE	Robust p	Coeff.	SE	Robust p
Constant	2.84	1.07	.009	1.32	0.91	.153	1.80	0.78	.024	1.34	1.00	.183
Age	0.02	0.01	.082	0.01	0.01	.134	0.02	0.01	.020	0.02	0.01	.032
Gender ^a	0.01	0.18	.950	0.00	0.18	.988	0.05	0.17	.781	0.03	0.15	.836
Education	0.04	0.06	.504	0.06	0.06	.295	0.03	0.06	.542	0.04	0.06	.435
Founding experience	0.02	0.03	.496	0.04	0.04	.303	0.00	0.05	.309	0.04	0.04	.319
Prior relationship	0.01	0.05	.887	-0.00	0.05	.897	0.00	0.05	.962	-0.00	0.05	.966
Affect-based trust	0.68	0.07	.000	0.69	0.07	.000	0.66	0.07	.000	0.60	0.07	0
Team size	-0.25	0.09	.006	-0.25	0.09	.007	-0.24	0.09	.011	-0.20	0.08	.024
Team age	-0.04	0.06	.495	-0.05	0.05	.359	-0.05	0.05	.384	-0.03	0.05	.535
Team educational diversity	0.06	0.16	.703	0.13	0.15	.379	0.07	0.14	.614	0.05	0.13	.696
Industry ^b	0.02	0.29	.951	-0.23	0.31	.456	0.02	0.29	.942	-0.07	0.25	.78
Team narrative diversity	-0.12	1.66	.944	2.93	0.99	.004	1.41	0.59	.019	3.11	1.17	.011
Team narrative distinctiveness	3.04	1.68	.074	2.09	0.91	.025	1.72	0.89	.057	2.53	1.46	.09
Perceived resource scarcity ^c	-0.14	0.17	.384	0.09	0.09	.331	0.05	0.09	.564	0.16	0.13	.222
Team narrative diversity × perceived resource scarcity	0.08	0.28	.777	-0.45	0.17	.008	-0.28	0.14	.041	-0.55	0.22	.016
Team narrative distinctiveness × perceived resource scarcity	-0.40	0.27	.145	-0.30	0.10	.004	-0.31	0.14	.034	-0.40	0.22	.069

Note: We tested different versions of the scale for perceived resource scarcity with censored regression models (Models 7–9) and ran the full model using OLS regression (Model 10). The results supported our hypotheses to a large extent, apart from Model 7, which relies only on Item 1 of the resource scarcity scale. Models 8, 9, and 10 had results consistent with all our hypotheses.

^a*N* = 102; cluster-robust standard errors are in parentheses.

^b0 = male, 1 = female.

^c0 = product-based firms, 1 = service-based firms.

^dMeasured using only Items 1, 2, and 3 in Models 7, 8, and 9, respectively. Model 10 includes all items.

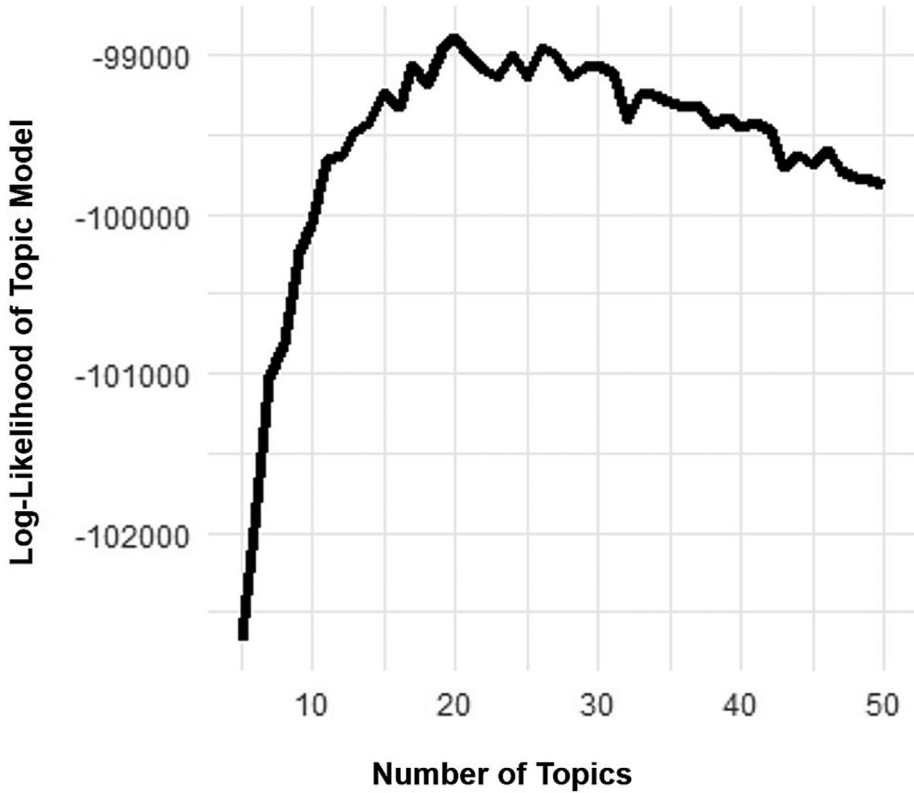


FIGURE A1 Topic optimization based on the log-likelihood of topic models with different numbers of topics.

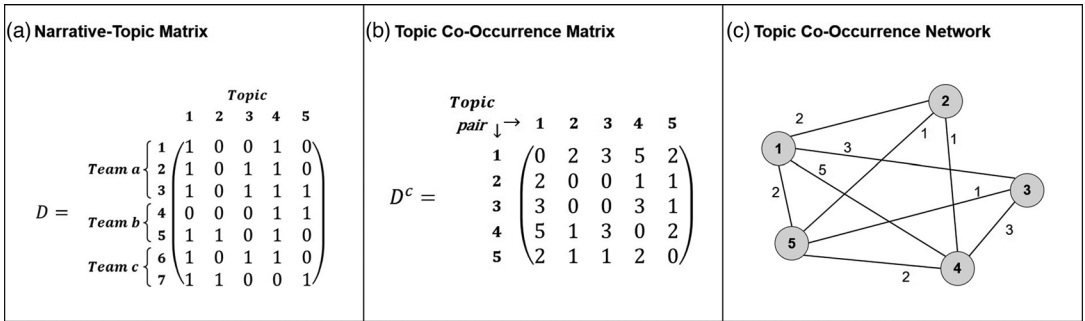


FIGURE A2 Worked example of derivation of structural dimensions of team narratives.

In order to show how the structural dimensions were calculated, we use the dichotomized narrative-topic matrix D as an example (see Figure A2a). This matrix shows which topics feature in the team narratives of seven co-founders from three entrepreneurial teams, Teams a , b , and c . The first three rows represent the team narratives of Co-founders 1, 2, and 3, who are all part of Team a , the next two rows represent the team narratives of Co-founders 4 and 5, who

form Team *b*, and the final two rows represent the team narratives of Co-founders 6 and 7 of Team *c*. Each element D_{ij} is 1 or 0 depending on whether topic *j* is featured in the team narrative of co-founder *i*. For instance, $D_{11} = 1$, so Topic 1 was included in Co-founder 1's team narrative, whereas $D_{41} = 0$, so Topic 1 was not included by Co-founder 4.

The structural dimension of the diversity of narrative topics for Team *b* is measured by the Euclidean distance between the row vector of Co-founder 4, (0 0 0 1 1), and the row vector of Co-founder 5, (1 1 0 1 0), which is $\sqrt{(0-1)^2 + (0-1)^2 + (0-0)^2 + (1-1)^2 + (1-0)^2} = \sqrt{3} \approx 1.73$. Applying the same approach to Team *c* gives us a Euclidean distance of 2. For Team *a*, since there are more than 2 co-founders, we have to calculate the Euclidean distance for each co-founder pair within the team. Therefore, we calculate the Euclidean distance between the row vectors of Co-founder 1 and Co-founder 2 (1), as well as the distance between the row vectors of Co-founder 2 and Co-founder 3 (1), and also the distance between the row vectors of Co-founder 1 and Co-founder 3 ($\sqrt{2}$). Taking the average of these three distances gives us the average Euclidean distance for Team *a* (1.138). Rescaling the average Euclidean distance for all teams to be between 0 and 1 would yield relative diversity in teams *a*, *b*, and *c* of 0, 0.69, and 1, respectively. Thus, co-founders in Team *c* process the team's social information most diversely (compared to Teams *a* and *b*).

To calculate the structural dimension of the distinctiveness of narrative topics in each team, we first use the narrative topic co-occurrence matrix D^c (see Figure A2b), which can be visualized using a network (see Figure A2c). The five nodes in the network represent Topics 1–5. Edges only connect two topics if they co-occur at least once; this is the case for all topic pairs except Topics 2 and 3. The numbers on the edges indicate their weight, which comes directly from the topic co-occurrence matrix. For instance, $D^c_{12} = 2$, so the edge connecting nodes 1 and 2 has a weight of 2. The weighted degree centrality of a topic is the sum of the weights of the edges connected to it. For example, the weighted degree centrality of Topic 1 is $2 + 3 + 5 + 2 = 12$. Similarly, we can calculate the weighted degree centrality of Topics 2, 3, 4, and 5 to be 4, 7, 11, and 6, respectively. Topic 2 has the lowest weighted degree centrality (4) and is thus the most distinctive topic in this example. In the case of the teams from narrative-topic matrix D , the average weighted degree centralities for Teams *a*, *b*, and *c*, are 9, 8.25, and 8, respectively. Rescaling these to be between 0 and 1 gives us 1 (Team *a*), 0.25 (Team *b*), and 0 (Team *c*) as the level of *lack* of distinctiveness. Multiplying these values by -1 gives us -1 (Team *a*), -0.25 (Team *b*), and 0 (Team *c*) as the distinctiveness. Adding one to each of these values provides distinctiveness scores scaled between 0 and 1, that is, 0 (Team *a*), 0.75 (Team *b*), and 1 (Team *c*). Thus, the co-founders in Team *c* understand their team most distinctively (compared to Teams *a* and *b*).