

Building Safe Online Spaces: How Collective Identity Shapes Psychological Safety in OCoPs

Summary

Online communities of practice (OCoPs) facilitate learning and knowledge sharing among members, but their success depends on psychological safety (PS) – a shared perception of safety for interpersonal risk-taking. In OCoPs, PS is often compromised due to geographic dispersion and weakened social bonds which can reduce trust and cohesion. This study explores how community collective identity, or members' shared sense of belonging, identity and purpose, influences PS. It also examines three factors – community collective efficacy, community distinctiveness, and inclusive leadership – as potential moderators enhancing this relationship. We argue that community collective identity positively influences PS by enhancing solidarity, reducing conflicts, and promoting collaboration which are critical for creating a psychologically safe environment. To explore these relationships, the study surveys OCoP members from three enterprises using validated scales. Data will be analyzed with structural equation modeling (SEM-PLS) to better understand how to enhance PS in OCoPs.

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Introduction

In organizations, online Communities of Practice (OCoPs) are digital collaborative spaces that allow knowledge exchange and collective action on a much larger scale (Faraj et al., 2016; Lave and Wenger, 1991). But these outcomes cannot be guaranteed, especially when members lack the motivation to share. Studies show that Psychological Safety (PS), which refers to the extent to which members perceive a community to be interpersonally safe for risk-taking (Edmondson, 1999, p. 354) is a critical factor in promoting knowledge sharing and collaboration (Zhang et al., 2010). Despite the importance of PS, existing literature has paid little attention to the antecedents of PS, especially in the online work arrangements (see Edmondson and Bransby, 2023). We know that PS is often co-constructed through collective thinking, social interactions, and behavior modeling (Newman et al., 2017). And in OCoPs, a collective sense of identity results in attachment to the community, solidarity and affective bonds that drive participation (Bagozzi and Dholakia, 2006; Polletta and Jasper, 2001; Ren et al., 2007). Using Social Learning Theory (Bandura, 1977), we thus focus on community collective identity (CCI) as a social construct that can enable PS in OCoPs.

Our two research questions are: (1) *What is the role of CCI on influencing PS in OCoPs?* (2) *What factors can enhance this relationship in OCoPs?* We address the first question by arguing that CCI enables members to view the community as a safe space for expressing ideas and taking intellectual risks, thus influencing PS. We address the second question by focusing on community collective efficacy, community distinctiveness, and inclusive leadership as moderators for the relationship between CCI and PS. All three have been widely assumed within existing literature to influence social-psychological mechanisms in workplaces (e.g., Carmeli et al., 2010; Carroll et al., 2005; Chiu et al., 2015). We plan to empirically examine these relationships by conducting a survey of members from multiple OCoPs in three enterprises. In this paper, next we discuss the theoretical framework and hypotheses development, followed by a description of our methodology, including data collection and measurement instruments. We then conclude by outlining our next steps for data analysis using structural equation modeling (SEM-PLS).

Theory and Hypothesis Development

The concept of CoPs stems from Social Learning Theory (SLT; Bandura, 1977) which suggests that learning occurs through social interactions and relationships, encouraging engagement that supports dialogue and collaboration. Through communal engagement, CoP members acquire, negotiate and share knowledge, develop practices, and build and circulate collective wisdom continuously, for mutual learning (Faraj et al., 2016). To stimulate social learning, researchers have emphasized the importance of maintaining a fluid and safe supportive environment. Such an environment can provide members with security, community support, and confidence to participate (Schreurs et al., 2014; Thompson, 2005). In such ‘psychologically safe’ environments (Edmondson, 1999), individuals can freely express, make mistakes, share ideas, and ask for help without fear of professional or social repercussions. PS creates conditions favorable for innovation and knowledge sharing, creating an environment of deep engagement and learning. It also mitigates the effect of boundaries created by individual differences and promotes helping behavior (see review by Edmondson and Bransby, 2023). In online communities, PS lowers the emotional and cognitive barriers to participation, facilitates honest communication, knowledge sharing intention and behavior, trust-building, and group cohesion (Hao et al., 2022; Zhang et al., 2010).

However, in online collaborative settings such as OCoPs, physical dispersion makes it difficult to interpret context, which can cause miscommunication and discourage open dialogue. Moreover, there are concerns about lack of recognition and limited accountability (Faraj et al., 2016; Wang et al., 2018). The geographic and temporal distances weaken interpersonal bonds,

developing social disconnections (Collins et al., 2016; Leonardi et al., 2010). As a result, social cohesion is lost and trust declines (Ajzen and Taskin, 2021), which makes sustaining PS difficult (Hao et al., 2022). In such contexts, a shared collective identity can help members bridge physical and psychological distances and understand their roles within the broader group. This in turn stabilizes group interactions and enables meaningful engagement and learning (Collins et al., 2016; Leonardi et al., 2010; Wenger, 2000).

In CoPs, a strong sense of identity exists due to the members' shared expertise, understanding of practices and values, common concerns and activity, and desire to learn (Lave and Wenger, 1991). The common identity is also shaped by and reflected in the shared repertoire of words, tools, stories, and symbols. As a result, CoPs develop community collective identity (CCI) which binds members together and enables them to collectively define who they are, what they represent, and how they engage with the world (Carton et al., 2021, p. 2). Due to this identification, learning takes place efficiently and the learning process itself results in creation of shared pool of communal resources, enhancing the collective identity (Carton et al., 2021). In turn, CCI creates a sense of belonging and solidarity, mitigating potential conflicts, and enhancing collective action and learning (Nicolini et al., 2022; Polletta and Jasper, 2001). CCI also impacts contribution behavior and collaborative interactions (Faraj et al., 2016). This identity-based attachment provides affective commitment which increases the willingness to exert effort to help others (Ren et al., 2012).

In addition to the impact of CCI on PS, we discuss three factors below that may moderate the relationship between them (as shown in Figure 1). Considering this, we propose the following hypotheses.

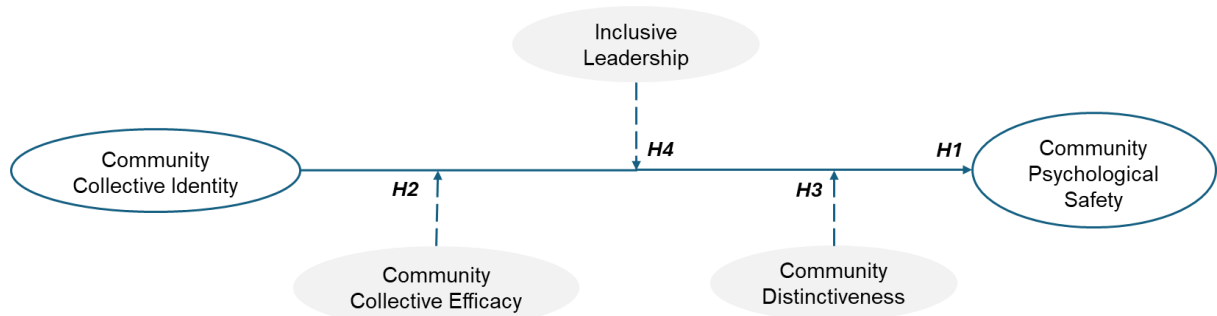


Figure 1: Proposed model

The creation and reinforcement of CCI, supported by communication visibility in OCoPs, enhances resource sharing and drives members to openly share knowledge, enabling social learning. This process helps maintain continuity and coherence among members, improving their experiences and lowering the fear of mistakes. As a result, members, feeling a strong sense of affiliation, are more likely to trust one another and less likely to feel alienated or threatened within the community (Chou et al., 2020; Leonardi, 2014). Furthermore, the presence and construction of tangible or intangible shared reference points such as shared definitions and collaborative practices enhance cross-functional understanding, help build trust and reduce relational conflict (Cunningham et al., 2024; Melucci, 2013; Boud and Hager, 2012). This should result in members feeling more secure in expressing their thoughts and taking risks. In OCoPs, digital platforms may isolate individuals from direct interpersonal interactions and limit face-to-face bonding opportunities. CCI should offer a cushion against fragmentation, ensuring that members maintain trust and learning opportunities. Given the role of CCI in establishing the conditions necessary for PS, we propose H1:

H1: CCI positively influences Community PS.

In addition to the main hypothesis, this study examines three moderators that may influence the strength or direction of the proposed relationship. Our selection of moderators is guided by a deliberate alignment with distinct mechanisms within SLT (Bandura, 1977) as each component of our model maps onto its key processes. Moreover, from a managerial perspective, the three moderators reflect key levers that can explain learning, trust and engagement in OCoPs.

Community Collective Efficacy (CCE) refers to the shared belief that a community has the collective capacity to achieve its goals and overcome obstacles (Carroll and Reese, 2003, p. 1). This belief is foundational to a community's resilience, perseverance and commitment to shared goals (Carroll et al., 2005). When members share a sense of CCI, they are more likely to coordinate their efforts and contribute to the group's wellbeing. However, the extent to which CCI supports PS should also depend on whether members believe in their collective ability to act and succeed. According to SLT, individuals develop efficacy beliefs by observing others succeed in a shared environment (Bandura, 1997). More broadly, this process reflects reciprocal determinism where personal factors (e.g., efficacy beliefs), behaviors (e.g., participation), and environmental cues (e.g., observed success of peers) continuously interact (Bandura, 1986). Vicarious reinforcement through observed success shapes members' confidence that collective efforts will yield positive outcomes. When CCE is high, CCI is more likely to translate into PS because members trust that their contributions will be supported and that the community can respond constructively to challenges. Therefore, we expect the following:

H2: CCE moderates the relationship between CCI and PS, such that the relationship is stronger in communities with higher CCE.

When employees perceive their collective's practices to be distinctive and positive, they are more likely to identify with it as aligning with a unique group satisfies their need for distinctiveness in their social identity (Dutton et al., 1994). Community Distinctiveness (CD) refers to the uniqueness of the group's culture, structure, or values in comparison to other groups (Ashforth and Mael, 1989, p. 21). The perceived CD gives members a sense of belonging to a special, exclusive group, strengthening community identification, commitment and active learning (Chiu et al., 2015) while also encouraging communication for identity interpretation and enactment (Jones and Volpe, 2011). Drawing on SLT, this sense of belonging and shared responsibility is reinforced as members collectively engage and model successful behaviors. SLT also highlights that intrinsic reinforcement (e.g., pride, belonging, satisfaction) enhances motivation to engage in observed behaviors (Bandura, 1977). When communities are perceived as distinctive, members derive greater intrinsic satisfaction from participation, aligning their actions with both their social identity and their desire for meaningful affiliation. This heightened intrinsic motivation strengthens their experience of PS, as members feel more secure contributing to a valued and unique collective. We propose H3:

H3: CD moderates the relationship between CCI and PS, such that the relationship is stronger in communities with higher perceived CD.

Inclusive leadership (IL) emphasizes open communications, respect, support and highlighting positive aspects of situations, making it especially effective in challenging environments (Nembhard and Edmondson, 2006, p. 947). By encouraging employees to evaluate situations optimistically, IL enhances psychological resilience (Xintian and Peng, 2023). IL can motivate teamwork in decision making, conflict resolution, and coordinating actions and responsibilities, strengthening CCI and group cohesion (Nishii and Leroy, 2022). By breaking down barriers of distance and hierarchy and nurturing voice behavior, IL creates an

environment where individuals feel free to express concerns or offer creative suggestions, enhancing PS (Carmeli et al., 2010). From a social identity perspective, the way individuals are treated conveys important identity-related messages that shape attitudes and behaviors (Brown, 2022). By modeling openness, valuing contributions, and encouraging belonging, inclusive leaders can amplify the positive impact of CCI on PS. Drawing on SLT, much human behavior is learned through observation and role modeling, with attention, motivation, and emotional engagement shaping learning outcomes (Bandura, 1977). As salient role models, inclusive leaders demonstrate openness, respect, and support, reinforcing CCI. By observing these behaviors, members internalize the community's inclusive norms, increasing their willingness to engage and experience PS. Hence, we propose H4:

H4: IL moderates the relationship between CCI and PS, such that the relationship is stronger in communities with higher IL.

Data and Methodology

We have developed and distributed an online questionnaire using Microsoft Forms to gather data from members of various CoPs across three companies in France, with a unique link assigned to each company. The CoP members are geographically dispersed worldwide. This setting reflects the realities of global, digitally connected workforces and remote collaboration. While rooted in France, the study examines universally relevant mechanisms. Thus, the insights are applicable to online collaboration in global organizations beyond the French context. If a respondent belongs to multiple communities, they are asked to complete a separate survey for each community. We aim to complete data collection by the end of March. The questionnaire was designed based on a comprehensive literature review, drawing as much as possible from validated measurement scales used in previous studies to ensure reliability and validity. All items are being measured using a five-point Likert scale.

To measure CCI, we use the items used by Carton and coauthors (2021) which in turn are built on Melucci's (2013) dimensions: cognitive, emotional investment and active relationships. PS for each community will be measured using Edmondson's (1999) 7-item measure, replacing the word 'team' with 'community'. We will calculate a composite score (mean) for each member and then average responses across all members in a community to yield a community-level score (Kirkman et al., 2013). For measuring CCE, we use the Collective Community Efficacy Scale (CCES) version by Carroll, Rosson, and Zhou (2005). We will calculate a composite score (mean) for each member on each subscale and then average the responses across members to obtain a community-level score for each subscale. The aggregated scores will assess the members' perception of CCE. For Perceived CD, a scale adapted from Chiu and coauthors (2015) is being employed. And finally, for IL the scale has been adapted from Carmeli and coauthors (2010).

Next Steps

Once data collection is complete, we plan to analyze our model using SEM with partial least squares (SEM-PLS). Prior to running the models, we will conduct data cleaning and preliminary analyses, such as assessing the reliability and validity of measurement scales through Cronbach's alpha and composite reliability, as well as verifying convergent and discriminant validity through Average Variance Extracted (AVE). Additionally, we will assess potential common method bias and test the overall fit of the structural model to ensure robust findings.

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