TEAM CLIMATE IN TEAM-AI COLLABORATION: EXPLORING THE ROLE OF DECISIONAL OWNERSHIP AND PERCEIVED AI TEAM MEMBERSHIP

Completed Research Paper

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Abstract

Generative AI has advanced capabilities, enabling these systems to participate as teammates in human teams. Yet, the potential consequences of including an AI teammate for team climate have yet to be explored. Thus, we investigate how shared decisional ownership between humans and AI, as well as the perception of AI as a teammate affect team climate (including its subdimensions). We conducted an experiment with 85 participants in 35 teams collaborating with a generative AI teammate on a team decision-making task. We demonstrate that human decisional ownership improves team climate, while AI decisional ownership has a non-significant negative impact. However, when AI is perceived as a teammate, its decisional ownership also enhances team climate. The qualitative analysis provides additional insights into how these perceptions emerge. Our findings provide a nuanced understanding of the mechanisms of team-AI collaboration that shape team climate and offer practical guidance for fostering a positive team climate.

Keywords: Team-AI Collaboration, Team Climate, AI Team Members, Generative AI, Ownership

1 Introduction

Generative AI systems, such as ChatGPT, exhibit advanced cognitive and collaborative capabilities, enabling them to participate in complex team decision-making processes as active team members (Baird & Maruping, 2021; McNeese et al., 2018; Seeber et al., 2020). These systems can contribute to the team decision-making process by providing and managing information, generating content across various tasks, communicating autonomously in a human-like manner, and retaining conversation history (Aydın & Karaarslan, 2023). Consequently, prior literature increasingly conceptualizes AI as an active, autonomous, and agentic team member rather than a passive tool (Lyons et al., 2021). These capabilities offer a promising perspective on AI team members supporting the complex and often challenging decision-making processes of teams (Gurkan & Yan, 2023). Therefore, team-AI collaboration offers the potential to enhance team decision-making processes by leveraging the unique capabilities of generative AI and the expertise of human team members (Zercher et al., 2023).

However, research on human-AI collaboration mainly focuses on human-AI dyads, leaving team-AI collaboration understudied (Y. Han et al., 2024; Schmutz et al., 2024; Zercher et al., 2023). In addition, the limited literature on team-AI collaboration primarily focuses on taskwork and team performance (Schmutz et al., 2024; Zercher et al., 2023), overlooking the critical socio-emotional outcomes of collaboration. In this study, we address this research gap by focusing on one of the central socio-emotional outcomes of collaboration, namely team climate (Attig et al., 2024; Prada et al., 2024). Team climate is a critical factor for successful collaboration, predicting various aspects of organisational success, such as team performance, job satisfaction, cooperative behaviour (Schulte et al., 2006; Xue et al., 2011; Zheng et al., 2010), and well-being (Reinboth & Duda, 2006). Therefore, it is also of high theoretical and practical interest to better understand the factors that shape team climate in teams collaborating with generative AI team members (e.g., Attig et al., 2024). Specifically, human teaming research has identified two important factors that influence team climate that may shift in unique ways and have differing impacts in the context of team-AI collaboration. First, perceived ownership is a critical factor that positively affects team climate in human teams (Wagner et al., 2003; Yttermyr & Wennberg, 2022). We define perceived decisional ownership in the context of human-AI collaboration as the degree to which humans feel they have influenced the decisions resulting from human-AI collaboration versus the AI having influenced the decisions resulting from human-AI collaboration. The agency and autonomy of generative AI systems can shift decision-making power between humans and AI, potentially leading to a new allocation of decisional ownership between humans and AI (Baird & Maruping, 2021; Draxler et al., 2024), which might affect the team climate as a result. Secondly, according to social identity theory (Tajfel, 1982), the perception of AI as a team member suggests that the AI is seen as part of the ingroup, which is associated with positive evaluations and higher cohesion. Yet, little is known about whether humans actually perceive generative AI as team members and how this perception affects team-AI collaboration (Deshpande & Magerko, 2024). Thus, how human team members perceive the allocation of decisional ownership between themselves and the AI, as well as how they perceive generative AI as team members, might strongly influence the team climate in team-AI collaboration. Thus, we ask the following research questions:

RQ1: How does decisional ownership (human vs. AI) affect team climate in team-AI collaboration?

RQ2: Does perceived AI team membership influence the relationship between AI decisional ownership and team climate in team-AI collaboration?

To explore these questions, we leveraged the four-factor theory of team climate (Anderson & West, 1998) and conducted an exploratory laboratory experiment in which teams collaborated with a generative AI system to make a team decision under distributed knowledge. We contribute to the literature on human-AI collaboration by providing detailed insights into the complex relationship between decisional ownership of human and AI team members and how this affects team climate in team-AI collaboration, depending on the degree to which AI is perceived as a team member. With this, we shift the focus from the individual to the team level and provide a first theoretical understanding of the factors that shape team climate in team-AI collaboration (e.g., Attig et al., 2024; Zercher et al., 2023). Second, we contribute to the understanding of psychological ownership in human-AI collaboration by demonstrating that humans and AI systems can share decisional ownership, and by highlighting the consequences for crucial aspects of successful collaboration, such as team climate (Draxler et al., 2024). Third, we contribute to a more in-depth understanding of perceived AI team membership by providing a better understanding of whether generative AI is actually perceived as a team member, how this perception emerges during team-AI collaboration, and how it affects the relationship between AI decisional ownership and team climate (Y. Han et al., 2024; Seeber et al., 2020). Finally, we contribute to practice and the debate on AI's role in the future of work by highlighting how teams can cultivate a positive team climate when collaborating with AI. As team climate is critical for both performance and well-being, this is important with AI systems increasingly being integrated as team members in practice (Aydın & Karaarslan, 2023; Reinboth & Duda, 2006; Zheng et al., 2010).

2 Conceptual Background

2.1 Generative AI Team Members

Advances in machine learning enable AI systems to learn and act more and more autonomously, leading to the increasingly prevalent conceptualizations of AI systems as team members who can collaborate with humans on complex tasks instead of just being used as a tool (e.g., Lyons & Wynne, 2021; McNeese et al., 2018). AI team members can be defined as technologies "that draw inferences from information, derive new insights from information, find and provide relevant information to test assumptions, debate the validity of propositions offering evidence and arguments, propose solutions to unstructured problems, and participate in cognitive decision-making processes with human actors" (Seeber et al., 2020, p. 3). This definition closely aligns with the capabilities demonstrated by conversational agents based on generative AI (e.g., ChatGPT), which excel in cognitive and collaborative tasks. Generative AI systems can generate new outputs based on the underlying training data. Moreover, generative AI systems that leverage large language models, such as ChatGPT, can learn from previous conversations, generate human-like responses on a broad variety of topics, and are aware of the conversation history (Aydın & Karaarslan, 2023). This allows generative AI systems to collaborate on various complex tasks, such as team decision-making, making them a prototypical example of an AI team member (Seeber et al., 2020). This also emphasizes the need to better understand how teams can effectively collaborate with these AI team members to achieve successful team-AI collaboration (Zercher et al., 2023).

2.2 Team-AI Collaboration

Team-AI collaboration is defined as a "set of two or more humans who interact with an AI system dynamically, interdependently, and adaptively towards a common and valued goal/object/mission, and who have each been assigned specific roles or functions to perform" (Zercher et al., 2023 p. 4). Currently, only a small body of literature investigates the underlying mechanisms of team-AI collaboration (Lyons et al., 2021; Schmutz et al., 2024; Zercher et al., 2023). These studies mainly focus on taskwork processes (Schmutz et al., 2024; Zercher et al., 2023). For example, most studies found that communication of task-relevant information and coordination of work tend to be less effective in team-AI collaboration. Further, findings are conflicting on whether task-related team cognition (such as team situation awareness or shared mental models) and trust are higher in team-AI collaboration compared to human teams (Schmutz et al., 2024; Zercher et al., 2023). These findings illustrate that research on team-AI collaboration is relatively neglected compared to research on individuals collaborating with AI (Lyons et al., 2021; Zercher et al., 2023). Specifically, they highlight that while previous research on team-AI collaboration has primarily focused on taskwork processes and trust, it has largely overlooked the critical socio-emotional dimension of successful team-AI collaboration, which might play a key role in the effectiveness of team-AI collaboration (Attig et al., 2024; Prada et al., 2024).

2.3 Team Climate in Team-AI Collaboration

Team climate is defined as the perceptions and attitudes that team members have about their collaborative work (Anderson & West, 1998). A positive team climate is associated with higher team performance, job satisfaction, cooperation, and well-being (Reinboth & Duda, 2006; Xue et al., 2011; Zheng et al., 2010). Therefore, understanding and cultivating a healthy team climate is essential for fostering a positive and productive work environment.

One of the most comprehensive theories is the four-factor theory of team climate (Anderson & West, 1998). The four-factor theory accounts for team climate in professional settings centred around team decision-making. It argues that team climate often results from collaboration activities characterized by four factors: vision, participation safety, task orientation, and support for innovation. Vision describes the degree to which a team follows and values a clear and realistic objective and the commitment to this objective. Participation safety depicts the degree to which participation and contributions of all team members are appreciated, which is associated with a higher involvement of the team members. Task orientation is the commitment to high standards of performance and a shared concern for excellence. Finally, support for innovation describes the appreciation of new ideas (Anderson & West, 1998).

Previous IS research has mainly investigated aspects of team climate in the context of traditional group decision support systems. These aspects include conflict management and cohesion (Chidambaram et al., 1990), achieving consensus (DeSanctis et al., 2008) and equality (Nunamaker et al., 1987). However, these findings cannot be generalized to team-AI collaboration as traditional systems required more human control whilst being less agentic (Baird & Maruping, 2021; McNeese et al., 2018). This calls for a better understanding of the possible shift in perceived decisional ownership resulting from team-AI collaboration (Weber et al., 2024).

2.4 Perceived Decisional Ownership: Human vs. AI

The rise of generative AI team members and their ability to generate new content in the form of text, images, or audio raises many questions about whether humans still perceive ownership of this generated content (Draxler et al., 2024; Weber et al., 2024). Pierce et al. (2001) characterized psychological ownership as the state in which an individual perceives the target of ownership, or a portion of it, as 'theirs'. Experiencing psychological ownership entails a sense of possessiveness and a psychological connection to the owned entity (Pierce et al., 2001). The increase in the agency of AI systems induces a shift in decision-making capability, providing more decision-making power to the AI system compared to traditional systems (Baird & Maruping, 2021). As a consequence, humans might also feel a shared ownership with AI, as supported by recent studies. For instance, Draxler et al. (2024) found that people often do not perceive ownership of AI-generated texts but still tend to claim authorship. Moreover, Weber et al. (2024) found that perceived ownership can be enhanced by designing interactive applications that allow users to actively engage in the creative process by modifying AI-generated content according to their preferences. However, the perception of ownership over decisions resulting from human-AI collaboration and the consequences of this perceived ownership are not yet well understood. Specifically, there is a gap in understanding the allocation of perceived ownership between humans and AI, and the consequences of this allocation for team climate in team-AI collaboration, as current studies focus only on the perceived human ownership of individuals collaborating with AI. We define perceived decisional ownership in the context of human-AI collaboration as the degree to which humans feel they have influenced the decisions resulting from human-AI collaboration versus the AI having influenced the decisions resulting from human-AI collaboration. Research has already shown that aspects of psychological ownership, like involvement or self-efficacy are associated with positive outcomes like satisfaction and motivation (T.-S. Han et al., 2010; Liu et al., 2012). Moreover, several studies have reported positive relationships between psychological ownership and team climate (Wagner et al., 2003; Yttermyr & Wennberg, 2022). Thus, existing research implies that when humans have a positive sense of decisional ownership, it may also contribute to a healthy and productive team climate in the context of team-AI collaboration. This can be captured in the following proposition:

P1: Human decisional ownership in team-AI collaboration increases team climate.

However, little is known about AI decisional ownership in human-AI collaboration. Some studies indicate that products labelled as created by AI are evaluated more negatively than those labelled as human-created (Ragot et al., 2020), while others report that this evaluation depends on the type of output

(Bakpayev et al., 2022). Accordingly, the literature does not yet provide sufficient evidence to determine whether AI decisional ownership will benefit or harm team climate. Therefore, we derive the following undirected proposition, which calls for an exploratory approach:

P2: AI decisional ownership in team-AI collaboration influences team climate.

2.5 Perceived AI Team Membership

Currently, a growing body of literature aims to identify the characteristics that AI systems must possess to be perceived as a team member. These characteristics encompass social skills, task-specific abilities, and design aspects (Bittner et al., 2019; Rix, 2022). For instance, altruism, benevolence, interdependence, emotion, communication, and synchronicity are factors that can shape the perception of AI as a team member (Lyons & Wynne, 2021). However, there is currently no consensus on the essential capabilities of an AI team member, as various authors emphasize different characteristics (Rix, 2022). Moreover, AI systems presently still differ from human team members in many aspects. For example, most modern AI systems still do not yet have the same level of contextual understanding or appearance as human team members (Reig et al., 2019; Zhang et al., 2021). Therefore, we propose that it is necessary to differentiate between the objective teaming capabilities of an AI system and the subjective perception of AI as team members (perceived AI team membership). By AI teaming capabilities, we refer to the objective proficiencies that enable AI systems to work alongside humans, in line with the definition of Seeber et al. (2020), which emphasizes advanced cognitive capabilities that allow active participation in decision-making processes by providing and evaluating information. Additionally, McNeese et al.'s (2018) definition of AI team members focuses on collaborative capabilities, which enable AI systems to participate in the essential teamwork and task-work functions of a human team. Perceived AI team membership, however, refers to the subjective perception of AI being a team member by human team members. AI teaming capabilities can be seen as a necessary but not sufficient condition for the perception of AI team membership. That means that the subjective perception of AI team membership may differ from the teaming capabilities due to individual differences such as attitudes towards AI or experience working with AI (Zhang et al., 2021). These social categorizations of AI in human-AI collaboration might impact the effectiveness of these collaborations and offer new perspectives for understanding the dynamics of human-AI collaboration (Deshpande & Magerko, 2024). For instance, there are already studies that show generative AI systems, despite their teaming capabilities, are still perceived more as tools than as team members (Y. Han et al., 2024). Drawing on the reasoning of social identity theory, if AI is subjectively perceived as a team member, humans are likely to view it as part of their ingroup (Tajfel, 1982). This perception is typically associated with a sense of belonging, mutual support and higher cohesion (Tajfel, 1982). Based on this, we propose that perceived AI team membership is a crucial moderator. If AI is perceived as a team member, this positive perception should enhance the relationship between AI decisional ownership and team climate. The previous considerations are summarized in our research model, illustrated in Figure 1.

P3: The more the AI is perceived as a team member, the more AI decisional ownership will positively influence team climate.

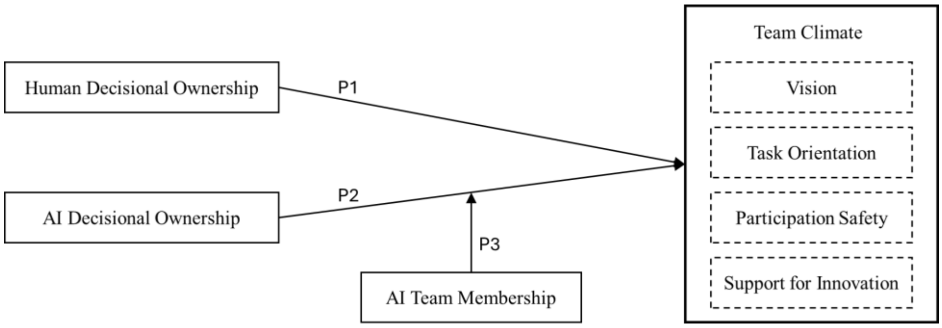

Figure 1. Research model for studying the influence of decisional ownership (human and AI) and the moderating effect of AI team membership on team climate.

3 Method

3.1 Sample and Procedure

We conducted a pre-registered exploratory laboratory experiment in which a team of humans collaborated with an AI system to make a joint team decision in a hidden profile scenario (see also Zercher et al., in press). Hidden profiles are team decision tasks characterized by interdependence, often leveraging scenarios to make them suitable for laboratory experiments. These tasks require team discussions to exchange information and reach a consensus-based decision (see Material section for details) (Sohrab et al., 2015). Our study adopted an exploratory approach given the novelty of team climate in team-AI collaboration, which makes it challenging to ground precise predictions in prior work. Therefore, we drew on existing literature on human teaming to guide our propositions. However, the nature of our design, data analysis, and interpretation involved exploratory steps.

The experiment was part of a larger project on team–AI collaboration (see Appendix for details), which was approved by the local ethics committee. The sample consisted of N = 93 participants recruited from a lab panel, who were at least 18 years old. We focused on a student sample from a German technical university as students are future professionals and managers who will encounter AI in the workplace. Eight participants had to be excluded due to technical errors in the AI system, resulting in a final sample size of N = 85, working in 35 teams. Most participants (57.60%) self-identified as male with a mean age of 25.19 years (SD = 4.77) and were mostly either bachelor (49.40%) or master students (38.80%). All participants indicated that they speak the conversation language fluently.

The procedure followed the standards for hidden profile studies and was adapted from Schulz-Hardt et al. (2006). SoSci-Survey was used to collect self-report data and provide standardized instructions to guide participants through the experiment automatically. Participants began by answering demographic questions. Then, they worked individually on a personnel selection task where they were given information about four candidates for a pilot position. They had ten minutes to memorize this information, followed by a recall task as a manipulation check, in accordance with standards for conducting team decision-making experiments in hidden profile studies (Schulz-Hardt et al., 2006). Next, participants received instructions for a 30-minute team discussion, including details about the AI chatbot and how to use it. They were assigned to small teams (see Appendix for details) to make a joint decision on the best candidate. Teams were taken to a separate room for a face-to-face discussion, which was video-recorded. A laptop with the AI chatbot was provided, and the experimenter emphasized that no other tools could be used. After the discussion, participants returned to their surveys to answer questions on human and AI decisional ownership, team climate, and AI team membership. The entire session lasted approximately 60 minutes. Participants were paid 12 € for participation, with a bonus of three € as an incentive for making the correct decision.

3.2 Material

3.2.1 Hidden Profile Task

We selected a hidden profile team decision-making task, originally developed and validated by Schulz-Hardt et al. (2006). The hidden profile task is a well-established method in team decision-making research, allowing for the investigation of collaboration and cognitive processes under distributed knowledge (Sohrab et al., 2015). In our experiment, the hidden profile task involved an airline company seeking to hire a new pilot for long-distance flights. Participants assumed the role of members of the airline's personnel selection committee. This task was chosen because it is highly specialized, making it unlikely that participants had prior experience in this area. It ensured that team decisions were based solely on the information provided during the experiment. Participants were informed that each of them had received reliable information profiles about four different candidates (Alpha, Beta, Gamma, Delta). These included both positive and negative characteristics of the candidates. The goal of the team discussion was to identify the best candidate, the one with the most positive and least negative characteristics, by exchanging all decision-relevant information. It was emphasized that participants had received partially different information about the candidates; however, all information was equally important for solving the task (Schulz-Hardt et al., 2006). Thus, we created a horizontal team structure in which each member held specific information relevant to the final decision and had equal decision-making authority, fostering a process aimed at reaching a consensus-based decision. Consequently, the task was highly interdependent and interactive, with no team member able to solve the problem alone. The necessity for collaboration in the team decision-making process made this task suitable for studying team climate in team-AI collaboration, as team climate evolves through collaboration on interdependent tasks (Anderson & West, 1998). Additionally, hidden profiles provide an ideal setting to study team-AI collaboration because they represent situations where teams often face significant challenges in making decisions (Sohrab et al., 2015). In hidden profiles, teams must aggregate, evaluate, and prioritise a large amount of information, which can be overwhelming and difficult to manage effectively (Sohrab et al., 2015). These are precisely the capabilities in which generative AI excels, making it possible to explore how interdependent collaboration with generative AI team members affects human participants.

3.2.2 Conversational AI agent based on ChatGPT

We implemented a browser-based chatbot, using OpenAI's API for chat completion through Python's Flask library. The chatbot utilized the gpt-3.5-turbo-0301 natural language processing engine, the most recently released version of OpenAI's large language model at the time of the experiment. For enhanced accessibility, we employed Flask to create a local web application accessible through a browser, concealing the underlying code and settings. The AI initiated conversations with a welcoming message and expressed its readiness to assist participants in their decision-making. The AI was framed as part of the team that had decision-relevant information, helpful for solving the task. To inform the AI about the decision-making task and provide behavioural instructions, we utilized automatic prompts as context. These behavioural instructions encompassed a gender-neutral conversation style, specific details about the decision task (e.g., information about the recruitment scenario and decision relevant information). This allowed the AI to participate in the decision-making process by providing decision-relevant information while also integrating, evaluating, aggregating, and managing information, in line with the definition of an AI team member by Seeber et al. (2020). Moreover, we fine-tuned the API parameter 'temperature' to 0.1 to ensure that the AI's responses aligned with the decision context. Lower temperature values typically lead to more conservative and contextually appropriate responses, as we need the AI to adhere closely to the specific decision context. We adjusted the context in multiple iterations until the chatbot responded according to the decision task. We allowed flexible team-AI collaboration to provide a realistic experience for participants.

3.3 Measures

3.3.1 Decisional Ownership

To assess the effect of decisional ownership, participants were asked to rate their influence on the final team decision (“How would you rate your own influence on the decision made?”), as well as the influence of the AI on the final team decision (“How would you rate the AI´s influence on the decision made?”) on a 5-point Likert scale from 1 = very low to 5 = very high.

3.3.2 Perceived AI Team Membership

To assess the perception of AI team membership, participants were asked, “Do you perceive the AI system as a team member?” on a 5-point Likert scale from 1 = not at all to 5 = very much. We also used a single item as there are currently no established inventories to assess perceived AI team membership, and there is no consensus about the necessary characteristics of AI team members.

3.3.3 Team Climate

Team climate was measured with the adaptation by Brodbeck and Maier (2001) of the original Team Climate Inventory by Anderson and West (1998), which contains 38 items distributed across four subscales of vision, task orientation, support for innovation, and participation safety on a 5-point Likert scale from 1 = disagree to 5 = agree. To adapt the items to the team decision-making context in our study, we excluded seven items that focus on repeated interactions and long-term collaboration (e.g., "We were in regular contact with each other") and adjusted two items to the scenario prior to the data collection. The final version used in this study contains 31 items ($\alpha = 0.91$). Vision was measured with ten items (e.g., "To what extent did you think your team's goals were clear to the other team members?", $\alpha = 0.77$), task orientation was measured with seven items (e.g., "Did the team members build on each other's ideas to achieve the best possible result?", $\alpha = 0.80$), support for innovation was measured with six items (e.g., "The people in the team were constantly looking for new ways of looking at problems.", $\alpha = 0.83$) and participation safety was measured with eight items (e.g., "The team members felt accepted and understood by each other?", $\alpha = 0.81$).

4 Results

4.1 Descriptive Statistics and Robustness Checks

SmartPLS 4.1.0 (Hair et al., 2019) was employed for the analysis. It was chosen due to its suitability for exploratory research in complex models with relatively small sample sizes (Hair et al., 2019). The Shapiro-Wilk tests showed a non-normal distribution ($p < 0.05$), supporting our choice of PLS-SEM for its robustness with non-normal data. Moreover, we conducted a power analysis to evaluate the robustness of our study design and the likelihood of detecting true effects (Hair et al., 2019). The statistical power analysis was performed using G*Power 3.1.9.7 (Faul et al., 2007) for three predictors with an effect size of $f^2 = 0.20$ (small to medium effect), a significance level of $\alpha = 0.05$, and a power of $\beta = 0.90$. The analysis indicated that a minimum sample size of N = 75, indicating that our sample size was sufficient to test the model. To check for multicollinearity, we assessed the VIF of the independent variables human decisional ownership (VIF = 1.01), AI decisional ownership (VIF = 1.19), and AI team membership (VIF = 1.18). Since all VIF values are below ten, we assume that multicollinearity between the predictors is not a problem (Hair et al., 2019). Table 1 gives an overview of the descriptive statistics and correlation matrix.

Measures	M	SD	(1)	(2)	(3A)	(3B)	(3C)	(3D)	(3)
(1) Human decisional ownership	3.79	0.71	-						
(2) AI decisional ownership	3.36	1.20	-0.08	-					
(3A) TCD: Vision	4.09	0.51	0.22*	-0.08	-				
(3B) TCD: Task orientation	4.22	0.58	0.38***	-0.29**	0.59***	-			
(3C) TCD: Participation safety	4.54	0.45	0.23*	-0.11	0.51***	0.60***	-		
(3D) TCD: Support for innovation	3.97	0.73	0.38***	-0.15	0.52***	0.61***	0.44***	-	
(3) Team climate overall scale	4.21	0.45	0.37***	-0.19	0.83***	0.85***	0.76***	0.80***	-
(4) AI team membership	2.26	1.24	-0.02	0.39***	0.16	-0.42	-0.10	-0.30	0.01

Table 1. Correlation matrix. Notes: TCD = Team climate subdimension.

4.2 Simple Model with the Team Climate overall Scale

We assessed the structure model to investigate the effect of decisional ownership (human decisional ownership vs. AI decisional ownership) on team climate (overall scale) and explore the moderating role of the perceived AI team membership with 5000 bootstrapping samples. The results (see Table 2) revealed a significant positive relationship between human decisional ownership and team climate (β = 0.40, t = 4.59, $p < 0.001$). The relationship between AI decisional ownership and team climate was negative but fell below the conventional level of statistical significance (β = -0.18, t = 1.68, p = 0.09). Moreover, a moderation analysis was run in SmartPLS to determine whether the interaction between AI decisional ownership and AI team membership significantly predicts team climate. The results show that there is no significant main effect of AI team membership ($p > 0.05$) but a significant positive interaction effect of AI decisional ownership and AI team membership (β = 0.35, t = 3.65, $p < 0.001$). The R^2 for the overall model was 0.27 (adjusted R^2 = .23, $p < 0.5$), indicative of a moderate to substantial goodness of fit according to Cohen (1988). Human decisional ownership, AI decisional ownership, and the moderator AI team membership predict team climate on a statistically significant level (t = 3.29, p = .001). Finally, the predictive power Q^2 values for team climate were greater than zero (Q^2 = 0.19), so predictive relevance was established.

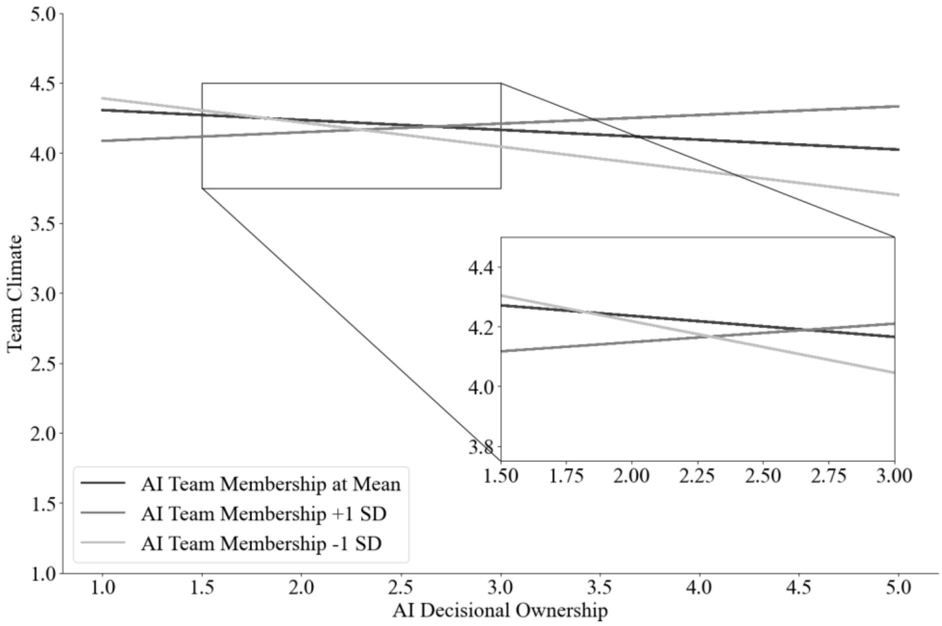

Figure 2. Moderation effect of perceived AI team membership.

Figure 2 illustrates the positive moderating effect of perceived AI team membership on the relationship between AI decisional ownership and team climate. The effect of AI decisional ownership on team climate is positive only for individuals with an above-average perception of AI team membership. In contrast, those with average or below-average perceptions show a negative relationship, with the strongest negative effect observed for individuals with below-average AI team membership.

Measure	β	SE	t	p	2.50%	97.50%
AI decisional ownership	-0.18	0.11	1.68	0.09	-0.380	0.036
Human decisional ownership	0.40	0.09	4.59	0.00***	0.224	0.566
AI team membership	-0.07	0.11	0.61	0.54	-0.272	0.155
AI decisional ownership x AI team membership	0.35	0.09	3.65	0.00***	0.151	0.528

Table 2. Model summary for team climate overall scale.

4.2.1 Qualitative Insights on how AI Team Membership unfolds during Decision-Making

We selected a small sample of team discussions in which team members reported high, medium, and low levels of perceived AI team membership. This allowed us to explore how humans responded to the AI's participation and to better understand the emergence of the interaction effect between AI team membership and AI decisional ownership. Participants who perceived the AI as a strong team member particularly noted its consistency and alignment with the team. For example, "It is at least consistent that he recommends Beta twice, with different prompts" (Team 24). Another observed, "He [the bot] said Gamma, we said Gamma," emphasizing the perceived harmony between the AI's suggestions and the team's decisions (Team 74). In contrast, participants with a medium perception of AI as a team member displayed a more neutral stance. One participant noted, "Everything we give him [the bot], he already knows beforehand" (Team 71), indicating predictability in the AI's contributions, but not necessarily active collaboration. Another participant commented, "Alex is just another team member," suggesting the AI was seen as just one of many voices in the team, neither dominant nor subordinate (Team 3). Participants with a low perception of AI as a team member expressed scepticism about the AI. One participant stated, "Otherwise, we could ask the system again what the important properties are," reflecting a view of the AI as a tool rather than a collaborative partner, a sentiment echoed by the entire team, which referred to the AI as a "system" rather than a team member (Team 20). Another participant questioned the AI: "Has he now integrated what we mentioned, is he that smart?" and "Did you have any additional information or anything that wasn't correct, that he [the bot] had now?" (Team 5).

4.3 Complex Model with Team Climate Subdimensions

To better understand the relationship between decisional ownership and team climate, along with the moderating effect of perceived AI team membership, we assessed a second, more complex model. This model examined the impact of human and AI decisional ownership on the subdimensions of team climate, as defined by the four-factor theory: team vision, participation safety, support for innovation, and task orientation, using 5000 bootstrapping samples. The results (Table 3) show that human decisional ownership significantly positively affects all subdimensions of team climate ($p < 0.05$). In contrast, AI decisional ownership tends to negatively impact all subdimensions, with task orientation being the only one where the effect is statistically significant ($\beta = -0.28$, $t = 2.65$, $p < 0.01$). While there were no significant main effects of perceived AI team membership on any subdimension ($p < 0.05$), significant interaction effects were found between AI decisional ownership and AI team membership for vision, participation safety, and support for innovation, but not for task orientation.

	TCD: Safety	TCD: Support	TCD: Task orientation	TCD: Vision
AI decisional ownership	-0.05	-0.12	-0.28**	-0.13
Human decisional ownership	0.26*	0.41***	0.38***	0.27**
AI team membership	-0.20	-0.09	-0.01	0.04
Interaction effect	0.28*	0.25**	0.20	0.38***
Q^2	0.03	0.12	0.15	0.12
R^2	0.21	0.13	0.21	0.25

*Table 3. Model summary. Note: Contains β coefficients and significance levels. ***p < 0.001, **p < 0.01, *p < 0.05. TCD = Team climate subdimension.*

5 Discussion

The advances in machine learning and the rise of generative AI have triggered a growing body of literature discussing the shift from AI as a tool to AI as a team member (Lyons et al., 2021). With the increasing integration of AI into human teams, it becomes essential to better understand how to foster successful and sustainable team-AI collaboration (Y. Han et al., 2024). Specifically, AI's advanced collaborative and cognitive capabilities enable it to participate in team decision-making processes (Seeber et al., 2020), leading humans to potentially view it as a team member with decisional ownership. Although perceived ownership has been linked to positive team climates in human teams, its role in team-AI collaboration remains unclear (Wagner et al., 2003; Yttermyr & Wennberg, 2022). In an exploratory experiment, where teams made joint decisions on an interdependent task with a generative AI team member, we found that human decisional ownership significantly improves team climate. In contrast, AI decisional ownership has a non-significant negative impact unless the AI is perceived as a team member. This suggests that when perceived AI team membership is high, AI decisional ownership improves team members' mutual support, support for innovation, and commitment to shared goals.

5.1 Contribution to Theory

Our study contributes to theory in multiple aspects. First, we contribute to the limited literature on team-AI collaboration by providing a nuanced understanding of factors that shape team climate in team-AI collaboration with generative AI. Previous IS research has mainly studied the affective and emotional responses of individuals towards AI (Gkinko & Elbanna, 2022). Our study shifts the focus from the individual to the team level, highlighting the insufficiently investigated context of team climate in team-AI collaboration. In line with our proposition, our findings emphasize the importance of human decisional ownership for achieving a positive team climate in team-AI collaboration. This may be attributed to individuals' perception of self-efficacy and involvement in the decision-making process, which is associated with higher satisfaction and motivation (Liu et al., 2012; Margolis & McCabe, 2004). This shows that psychological ownership remains crucial even in teams augmented by AI. In contrast, the negative but non-significant main effect of AI decisional ownership on overall team climate suggests a potential risk in allowing AI to control the decision-making process. However, the moderation analysis for perceived AI team membership revealed a more complex relationship, as the perception of AI as a team member inverts the negative effect of AI decisional ownership on team climate. These findings suggest that team climate is influenced not only by human interactions but also by the perceived role and decisional ownership of AI systems, highlighting the need to extend traditional team climate models to account for the specific characteristics of team-AI collaboration.

Secondly, we contribute to the literature on human-AI teaming and the role of AI as a team member by highlighting the crucial role of the perceived AI team membership of generative AI systems. Previous research has primarily focused on identifying the capabilities AI team members should possess, resulting in a growing body of literature encompassing conceptualizations, definitions, and research on the design science aspect of AI team members (e.g., Lyons et al., 2021; Rix, 2022). However, despite the objective teaming capabilities of AI systems, the impact of the subjective perceived AI team membership of AI team members in team-AI collaboration remains poorly understood. Our results emphasize the importance of perceived AI team membership and provide first insights on how perceived AI team membership affects team climate in team-AI collaboration. Specifically, our results indicate that social identity theory holds important theoretical implications for team-AI collaboration, as the social categorization of AI as a team member inverts the relationship between AI decisional ownership and team climate. This suggests that AI systems might, similarly to humans, receive more favourable evaluations when they are perceived to be part of the ingroup instead of just a tool (Tajfel, 1982). However, our results also indicate that even in collaboration with generative AI, despite its advanced cognitive and collaborative capabilities, it might still be perceived more as a tool. This perception persists even when it is framed as part of the team and contributes useful information in interdependent decision-making tasks. This is reflected by the relatively low mean of perceived AI team membership, aligning with the findings of Y. Han et al. (2024). Thus, the introduced definition of perceived AI team membership can guide future conceptualizations of the perceptions of AI team members.

Finally, our study contributes to the understanding of collaborating with generative AI team member and how they affect the allocation of decisional ownership between humans and AI (e.g., Draxler et al., 2024; Weber et al., 2024). Our data preprocessing revealed no significant difference between human decisional ownership and AI decisional ownership. This supports the assumption that collaborating with generative AI, which possesses advanced cognitive and collaborative capabilities, allows the AI to be perceived as having decisional ownership similar to that of humans. It also suggests that humans and AI share decision-making ownership in a balanced way, which might be beneficial for effective collaboration, as it indicates that humans neither overrule nor over-rely on the AI (e.g, Glikson & Woolley, 2020). Additionally, our data preprocessing indicated that human decisional ownership and

AI decisional ownership are uncorrelated. This suggests that higher AI decisional ownership does not automatically lead to lower human decisional ownership, which might occur if humans disengaged from the process and uncritically adopted the AI's output (e.g., Glikson & Woolley, 2020).

5.2 Contribution to Practice

In addition to theoretical contributions, this study also provides practical insights. First, the finding that perceived AI team membership moderates the relationship between AI decisional ownership and team climate positively implies that managers should ensure a high perception of AI team membership among potential AI team members. This includes assessing objective teaming capabilities according to Seeber et al. (2020), but also evaluating the perception of AI team membership. If human teams perceive the AI not as a team member, measures should be taken to increase the perceived AI team membership. Preventative measures may involve explicitly framing the AI system as a team member and providing information about the teaming capabilities of the system. Second, the finding that human decisional ownership is central to achieving a positive team climate suggests that teams in professional settings should be trained on how to collaborate with AI team members to maintain ownership over AI outputs (e.g., Weber et al., 2024). This could include training in prompt engineering, evaluation of AI outputs, and revision of AI outputs. Additionally, managers could aim to increase perceived human decisional ownership by highlighting and reinforcing human contributions and ideas. Finally, the finding that AI decisional ownership does not affect team climate and the robustness check that revealed that human teams do not differ from teams collaborating with AI (see Appendix) in team climate, also hold important practical implications. It indicates that AI participation and involvement in human collaboration processes do not necessarily harm team climate. Currently, there are many discussions about the effect of AI on the future of work and possible adverse effects on collaboration. However, our findings suggest that working with AI does not generally pose a threat to team climate. Instead, the effect seems to be contingent on the perception of the AI, indicating a more complex relationship.

5.3 Limitations and Future Research

We have already highlighted perspectives for future research. In this section, we expand on the limitations of our study and explore the additional research opportunities they present. First, our findings indicate that generative AI, despite its advanced cognitive and collaborative abilities, might not always be perceived as a team member. Thus, IS research should explore additional factors such as physical appearance, interaction style, expression of empathy and emotion, and anthropomorphism to understand how they influence the perception of AI as a team member in team-AI collaboration (e.g., Bittner et al., 2019; Lyons & Wynne, 2021). Moreover, the detailed analysis revealed a significant negative main effect for task orientations, indicating a perceived lower commitment to excellence and less task-related monitoring. One explanation raised by research on traditional group decision support systems might be that collaboration with the AI, which involves prompting and reading, might be distracting from the task at hand (see literature on dual-task interference e.g., Leone et al., 2017). This suggests that collaboration with a voice conversational agent might yield different results, as they can participate more proactively in team discussions. Further, our data also reflects notable variation among individuals in their perception of AI as a team member. This suggests that individual factors also play an important role in whether humans are likely to perceive AI as a team member or not. Therefore, future research should be conducted to better understand how certain traits, experiences, or motivations affect the perception of AI as a team member. Moreover, future research should explore the relationship between AI decisional ownership and human decisional ownership. This includes a more detailed investigation of mechanisms that shape the perception of decisional ownership. Finally, this study relies on a student sample from a technical university and a specific type of AI team member. Future research should examine more diverse populations and AI team members to ensure broader applicability. Similarly, future research should investigate how team climate in team-AI collaboration develops over time, considering repeated team-AI collaboration or longer collaboration sessions.

6 Conclusion

In this paper, we explore how human and AI decisional ownership, as well as perceived AI team membership, influence team climate in team-AI collaboration, using the four-factor theory of team climate as a framework. Through an exploratory lab experiment, where human teams collaborated with a generative AI system on an interdependent decision-making task, we analysed survey responses and video-taped team discussions to assess team climate. Our findings show that human decisional ownership positively impacts team climate, while the perception of AI as a team member moderates the relationship between AI decisional ownership and team climate. Specifically, human decisional ownership positively affects all dimensions of team climate—vision, task orientation, participation safety, and support for innovation—whereas AI decisional ownership negatively impacts task orientation. Additionally, AI team membership moderates the effect of AI decisional ownership on all climate dimensions except task orientation. Overall, a positive team climate in team-AI collaboration can be achieved through high human decisional ownership, with AI team membership playing a crucial role in enabling AI decisional ownership to contribute positively. These results highlight the importance of understanding both subjective perceptions of AI and decisional ownership in team-AI collaboration.

7 Appendix

This study is part of a larger preregistered exploratory project exploring different research questions on team-AI collaboration (https://osf.io/wqdum?view_only=5d9cf99e66314023af1e428b9fe26feb). Data was initially collected from a university lab panel (initial sample). To address reviewer comments for Zercher et al. (in press), we collected additional data from two more labs. Team climate measures were only included in the initial sample and omitted for the second data collection as they are not related to the findings of Zercher et al. (in press). In the initial sample, we also included the short version of the Group Climate Questionnaire (MacKenzie, 1981), which was excluded due to low internal consistency (Cronbach's $\alpha < 0.50$). Further, we focused on teams collaborating with AI (EG1: three humans; EG2: two humans), excluding the human control group from the initial sample. We conducted several robustness checks to ensure this approach did not compromise the validity of our findings. First, we confirmed that the key variables—team climate, decisional ownership, and AI team membership—did not differ between conditions (see Table A1), $F(27, 76) = 1.21$, $p = 0.23$. Further, multilevel analysis revealed that team climate varies only at the individual level ($Z = 6.26$, $p < 0.001$).

	CG		**EG1**		**EG2**		**Test statistics**	**p**
	M	**SD**	**M**	**SD**	**M**	**SD**	**F(27, 76)/ t(85)**	
Team climate	4.16	0.44	4.17	0.47	4.25	0.43	0.57	0.57
Human decisional ownership	3.64	0.67	3.64	0.68	3.95	0.71	2.71	0.07
AI decisional ownership	-	-	3.56	1.25	2.18	1.23	1.56	0.12
AI team membership	-	-	3.15	1.12	2.35	1.31	-0.62	0.53

Table A1. Robustness checks.

References

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior*, *19*(3), 235–258. https://doi.org/10.1002/(SICI)1099-1379(199805)19:3<235::AID-JOB837>3.0.CO;2-C

Attig, C., Wollstadt, P., Schrills, T., Franke, T., & Wiebel-Herboth, C. B. (2024). More than task performance: Developing new criteria for successful human-AI teaming using the cooperative card game Hanabi. In F. F. Mueller, P. Kyburz, J. R. Williamson, & C. Sas (Eds.), *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems* (pp. 1–11). ACM Inc. https://doi.org/10.1145/3613905.3650853

Aydın, Ö., & Karaarslan, E. (2023). Is ChatGPT leading generative AI? What is beyond expectations? *Academic Platform Journal of Engineering and Smart Systems*, *11*(3), 118–134. https://doi.org/10.21541/apjess.1293702

Baird, A., & Maruping, L. M. (2021). The next generation of research on IS use: A theoretical framework of delegation to and from agentic IS artifacts. *MIS Quarterly*, *45*(1b), 315–341. https://doi.org/10.25300/MISQ/2021/15882

Bakpayev, M., Baek, T. H., van Esch, P., & Yoon, S. (2022). Programmatic creative: AI can think but it cannot feel. *Australasian Marketing Journal*, *30*(1), 90–95. https://doi.org/10.1016/j.ausmj.2020.04.002

Bittner, E. A. C., Oeste-Reiß, S., & Leimeister, J. M. (2019). Where is the bot in our team? Toward a taxonomy of design option combinations for conversational agents in collaborative work. In T. X. Bui (Ed.), *Proceedings of the 52nd Annual Hawaii International Conference on System Sciences* (pp. 284–293). AIS. https://doi.org/10.24251/HICSS.2019.035

Brodbeck, F. C., & Maier, G. W. (2001). Das Teamklima-Inventar (TKI) für Innovation in Gruppen. *Zeitschrift Für Arbeits- Und Organisationspsychologie*, *45*(2), 59–73. https://doi.org/10.1026//0932-4089.45.2.59

Chidambaram, L., Bostrom, R. P., & Wynne, B. E. (1990). A longitudinal study of the impact of group decision support systems on group development. *Journal of Management Information Systems*, *7*(3), 7–25. https://doi.org/10.1080/07421222.1990.11517894

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

DeSanctis, G., Poole, M., & Zigurs, I. (2008). The Minnesota GDSS research project: Group support systems, group processes, and outcomes. *Journal of the Association for Information Systems*, *9*(10), 551–608. https://doi.org/10.17705/1jais.00177

Deshpande, M., & Magerko, B. (2024). Embracing embodied social cognition in AI: Moving away from computational theory of mind. In F. F. Mueller, P. Kyburz, J. R. Williamson, & C. Sas (Eds.), *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems* (pp. 1–7). ACM Inc. https://doi.org/10.1145/3613905.3650998

Draxler, F., Werner, A., Lehmann, F., Hoppe, M., Schmidt, A., Buschek, D., & Welsch, R. (2024). The AI ghostwriter effect: When users do not perceive ownership of AI-generated text but self-declare as authors. *ACM Transactions on Computer-Human Interaction*, *31*(2), 1–40. https://doi.org/10.1145/3637875

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Gkinko, L., & Elbanna, A. (2022). Hope, tolerance and empathy: employees' emotions when using an AI-enabled chatbot in a digitalised workplace. *Information Technology & People*, *35*(6), 1714–1743. https://doi.org/10.1108/ITP-04-2021-0328

Glikson, E., & Woolley, A. W. (2020). Human trust in artificial intelligence: Review of empirical research. *Academy of Management Annals*, *14*(2), 627–660. https://doi.org/10.5465/annals.2018.0057

Gurkan, N., & Yan, B. (2023). Chatbot catalysts: Improving team decision-making through cognitive diversity and information elaboration. *ICIS 2023 Proceedings*, Article 18. https://aisel.aisnet.org/icis2023/hti/hti/18

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Han, T.-S., Chiang, H.-H., & Chang, A. (2010). Employee participation in decision making, psychological ownership and knowledge sharing: mediating role of organizational commitment in Taiwanese high-tech organizations. *The International Journal of Human Resource Management*, *21*(12), 2218–2233. https://doi.org/10.1080/09585192.2010.509625

Han, Y., Qiu, Z., Cheng, J., & LC, R. (2024). When teams embrace AI: Human collaboration strategies in generative prompting in a creative design task. In F. F. Mueller, P. Kyburz, J. R. Williamson, C.

Sas, M. L. Wilson, P. T. Dugas, & I. Shklovski (Eds.), *Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1–14). ACM Inc. https://doi.org/10.1145/3613904.3642133

Leone, C., Feys, P., Moumdjian, L., D'Amico, E., Zappia, M., & Patti, F. (2017). Cognitive-motor dual-task interference: A systematic review of neural correlates. *Neuroscience and Biobehavioral Reviews*, *75*, 348–360. https://doi.org/10.1016/j.neubiorev.2017.01.010

Liu, J., Wang, H., Hui, C., & Lee, C. (2012). Psychological ownership: How having control matters. *Journal of Management Studies*, *49*(5), 869–895. https://doi.org/10.1111/j.1467-6486.2011.01028.x

Lyons, J. B., Sycara, K., Lewis, M., & Capiola, A. (2021). Human-autonomy teaming: Definitions, debates, and directions. *Frontiers in Psychology*, *12*, Article 589585. https://doi.org/10.3389/fpsyg.2021.589585

Lyons, J. B., & Wynne, K. T. (2021). Human-machine teaming: Evaluating dimensions using narratives. *Human-Intelligent Systems Integration*, *3*(2), 129–137. https://doi.org/10.1007/s42454-020-00019-7

MacKenzie, K. R. (1981). Measurement of group climate. *International Journal of Group Psychotherapy*, *31*(3), 287–295. https://doi.org/10.1080/00207284.1981.11491708

Margolis, H., & McCabe, P. P. (2004). Self-efficacy: A key to improving the motivation of struggling learners. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *77*(6), 241–249. https://doi.org/10.3200/TCHS.77.6.241-249

McNeese, N. J., Demir, M., Cooke, N. J., & Myers, C. (2018). Teaming with a synthetic teammate: Insights into human-autonomy teaming. *Human Factors*, *60*(2), 262–273. https://doi.org/10.1177/0018720817743223

Nunamaker, J. F., Applegate, L. M., & Konsynski, B. R. (1987). Facilitating group creativity: Experience with a group decision support system. *Journal of Management Information Systems*, *3*(4), 5–19. https://doi.org/10.1080/07421222.1987.11517775

Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, *26*(2), 298–310. https://doi.org/10.2307/259124

Prada, R., Homan, A. C., & van Kleef, G. A. (2024). Towards sustainable human-agent teams: A framework for understanding human-agent team dynamics. In M. M. Dastani, J. S. Sichman, N. Alechina, & V. Dignum (Eds.), *Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems* (pp. 2696–2700). IFAAMAS.

Ragot, M., Martin, N., & Cojean, S. (2020). AI-generated vs. human artworks: A perception bias towards artificial intelligence? In R. Bernhaupt, F. F. Mueller, D. Verweij, J. Andres, J. McGrenere, A. Cockburn, I. Avellino, A. Goguey, P. Bjørn, S. Zhao, B. P. Samson, & R. Kocielnik (Eds.), *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1–10). ACM Inc. https://doi.org/10.1145/3334480.3382892

Reig, S., Forlizzi, J., & Steinfeld, A. (2019). Leveraging robot embodiment to facilitate trust and smoothness. In J. Kim, A. Tapus, D. Sirkin, M. Jung, & S. S. Kwak (Eds.), *The 14th ACM/IEEE International Conference on Human-Robot Interaction* (pp. 742–744). IEEE. https://doi.org/10.1109/HRI.2019.8673226

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise*, *7*(3), 269–286. https://doi.org/10.1016/J.PSYCHSPORT.2005.06.002

Rix, J. (2022). From tools to teammates: Conceptualizing humans' perception of machines as teammates with a systematic literature review. In T. Bui (Ed.), *Proceedings of the 55th Hawaii International Conference on System Sciences* (pp. 398–407). AIS. https://doi.org/10.24251/HICSS.2022.048

Schmutz, J. B., Outland, N., Kerstan, S., Georganta, E., & Ulfert, A.-S. (2024). Ai-teaming: Redefining collaboration in the digital era. *Current Opinion in Psychology*, *58*, Article 101837. https://doi.org/10.1016/j.copsyc.2024.101837

Schulte, M., Ostroff, C., & Kinicki, A. J. (2006). Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relationships. *Journal of Occupational and Organizational Psychology*, *79*(4), 645–671. https://doi.org/10.1348/096317905X72119

Schulz-Hardt, S., Brodbeck, F. C., Mojzisch, A., Kerschreiter, R., & Frey, D. (2006). Group decision making in hidden profile situations: Dissent as a facilitator for decision quality. *Journal of Personality and Social Psychology*, *91*(6), 1080–1093. https://doi.org/10.1037/0022-3514.91.6.1080

Seeber, I., Bittner, E. A. C., Briggs, R. O., de Vreede, T., de Vreede, G.-J., Elkins, A., Maier, R., Merz, A. B., Oeste-Reiß, S., Randrup, N., Schwabe, G., & Söllner, M. (2020). Machines as teammates: A research agenda on AI in team collaboration. *Information & Management*, *57*(2), Article 103174. https://doi.org/10.1016/j.im.2019.103174

Sohrab, S. G., Waller, M. J., & Kaplan, S. (2015). Exploring the hidden-profile paradigm. *Small Group Research*, *46*(5), 489–535. https://doi.org/10.1177/1046496415599068

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, *33*(1), 1–39. https://doi.org/10.1146/annurev.ps.33.020182.000245

Wagner, S. H., Parker, C. P., & Christiansen, N. D. (2003). Employees that think and act like owners: Effects of ownership beliefs and behaviors on organizational effectiveness. *Personnel Psychology*, *56*(4), 847–871. https://doi.org/10.1111/J.1744-6570.2003.TB00242.X

Weber, C. J., Burgkart, S., & Rothe, S. (2024). wr-AI-ter: Enhancing ownership perception in AI-driven script writing. In *ACM International Conference on Interactive Media Experiences* (pp. 145–156). ACM Inc. https://doi.org/10.1145/3639701.3656325

Xue, Y., Bradley, J., & Liang, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, *15*(2), 299–312. https://doi.org/10.1108/13673271111119709

Yttermyr, O., & Wennberg, K. (2022). Psychological ownership development in new venture teams. *International Small Business Journal: Researching Entrepreneurship*, *40*(3), 307–335. https://doi.org/10.1177/02662426211023380

Zercher, D., Jussupow, E., Benke, I., & Heinzl, A. (in press). How can teams benefit from AI team members? Exploring the effect of generative AI on decision-making processes and decision quality in team-AI collaboration. *Journal of Organizational Behavior*.

Zercher, D., Jussupow, E., & Heinzl, A. (2023). When AI joins the team: A literature review on intragroup processes and their effect on team performance in team-AI collaboration. *ECIS 2023 Research Papers*, Article 307. https://aisel.aisnet.org/ecis2023_rp/307

Zhang, R., McNeese, N. J., Freeman, G., & Musick, G. (2021). "An ideal human": Expectations of AI teammates in human-AI teaming. *Proceedings of the ACM on Human-Computer Interaction*, *4*(CSCW3), Article 246. https://doi.org/10.1145/3432945

Zheng, M., Zhu, X. P., & Yang, J. (2010). The influence of the team climate on team innovation performance: An empirical study based on Chinese high technology innovation teams. In B. Werner (Ed.), *Proceedings 3rd International Conference on Information Management, Innovation Management and Industrial Engineering* (pp. 245–249). IEEE Computer Society. https://doi.org/10.1109/ICIII.2010.380