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Navigating workplace conflicts and fostering innovative behaviors: the role of job commitment and socio-instrumental ESM utilization

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Abstract

This study explores the dynamics of intersection between workplace conflicts, job commitment, and socioinstrumental enterprise social media (ESM) utilization for improving innovation. This study proposes job commitment as a pivotal mediator that influences employees' attitudinal responses to the array of conflicts encountered in the workplace. Additionally, it introduce socio-instrumental ESM use as a potent moderator, influencing employees' appraisals of workplace conflicts. To illuminate the intricate tapestry of these interactions, we present a moderated mediation model that delineates the complex nomological network governing the interplay among workplace conflicts, job commitment, and the cultivation of innovative behaviors. Based on empirical data encompassing 447 employees, our findings illuminate the distinctive moderating roles played by these socio-instrumental ESM usage. These patterns differentially moderate the connections between workplace conflicts and job commitment, as well as the indirect connections between workplace conflicts and the stimulation of employee innovation through job commitment. This research significantly advances our theoretical understanding of the multifaceted interplay among workplace conflicts, job commitment, socio-instrumental ESM utilization, and employee innovation. Moreover, it offers implications that can faciliate organizational strategies aimed at fostering innovation. By recognizing the pivotal roles of job commitment and socio-instrumental ESM, organizations can strategically harness these factors to cultivate a culture of innovation, positioning themselves for success in an increasingly competitive and dynamic business environment.

Keywords Workplace conflict, Job commitment, Employee innovative behavior, Socio-instrumental use of ESM

Introduction

Contemporary organizations find themselves compelled to embrace innovation in order to maintain a competitive advantage, attract fresh clientele, and address the mounting pressure to adopt environmentally

sustainable business practices [25]. Innovation, defined as " s described as "the systematic presentation and implementation of innovative concepts, methods, goods, or practices within a role, team, or organization, with the intent to provide substantial advantages to the person, team, organization, or global society" [95]. Innovation is distinguished from creativity primarily by its emphasis on application [16, 19]. Furthermore, innovation hinges on the notion of relative novelty, as opposed to absolute novelty, within the innovation literature [21]. This signifies that what constitutes an employee innovation

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behavior, underscoring the context-dependent nature of innovation [112]. This drive towards innovation has ignited a keen interest among both industry professionals and researchers in comprehending the processes through which organizations cultivate innovative capabilities [20].

The primary objective of the present article is to enrich our comprehension of employee innovation. Recent studies also reported that complex and uncertain competitive environments are often characterized by numerous working environment [86]. Managers and scholars thus start to consider the influences of workplace factor when formulating strategies for boosting employee innovation. Among other factors, scholars have perceived the salience role of workplace conflict [81]. However, empirical studies find variously that linkages between workplace conflict and employee innovation can be positive, negative, or even nonlinear, thus failing to provide consistent guidance for strategy making [110]. Specifically, prior studies on workplace conflict mainly concentrated on its negative consequences, such as decreased productivity and diminished job satisfaction [5, 46]. Only recently have scholars delved into its potential positive impacts [62, 63, 72, 81]. This nascent field has chiefly examined how the nature of conflict influences employee's outcomes. Further, researchers have advocated for an extension of this research to include the impact on employees work outcome [21, 46, 104]. Addressing this issue is practically and theoretically important, because it will help us to comprehend how employees produce innovation ideas when confronted with workplace conflict and echoes calls for exploring mechanisms through which workplace conflict affect employee outcomes.

The categorization of conflict into task and relationship conflicts offers a structured framework for examining the distinct impacts of conflict [46, 111]. Task conflict occurs when arguments arise over the techniques to execute a task, whereas relationship conflict is caused by mismatched relationships, which are frequently accompanied by emotions of stress and dissatisfaction [48]. While relationship conflict is generally perceived as detrimental to performance [100], given its tendency to foster distractions, negative emotions, and destructive behaviors, a limited body of research has indicated that task-related conflict may actually have a performance-enhancing effect [22]. This is because it promotes an open dialogue and examination of ideas and possibilities [72], which increases the possibility of producing better outcomes [46, 81, 96].

The convoluted interplay between conflict and innovative behavior within the organizational ecosystem is one that beckons for elucidation. Conflict, whether manifested as task conflict or relationship conflict, is a ubiquitous phenomenon in organizational life [25]. In

the crucible of conflict, job commitment emerges as a pivotal intermediary [54], channeling the forces of discord toward creative outcomes [13]. To fill these gaps, we pay attention to job commitment among the attitudinal variables since it captures employees' sentiment toward the job. Job commitment is easily influenced by workplace conflict and it increases the level of innovation among employees. Prior studies have examined the connection between workplace conflict and employee behaviors, including turnover and in-role job performances, and found that job commitment may mediate the relationship [62, 63, 75]. However, there is a relative dearth of research on the influence of workplace conflict on employees' innovation behavior via job commitment. More pointedly, organizational commitment entails emotional attachment and rational loyalty which helps the employee to be anchored while participating in organizational conflict.

Furthermore, the extent to which the contextual factors influence the part played by attitudes in mitigating the impacts of workplace conflict and employee innovation behavior is poorly understood. The identification of these factors would afford understanding of other factors that can be utilized in the design of managerial interventions that enhance the adoption of positive attitude towards workplace conflict, thereby enhancing innovations. Accordingly, social support from supervisors or coworkers has been confirmed to shape employees' work attitudes by interacting with workplace conflict [90]. In the light of growing utilization of information technology (IT) in organizations, scholars have identified that social support can be transferred through interpersonal communication in technology-mediated workplaces [78]. Specifically, social media applications designed for enterprises, such as microblogs and wikis, have garnered significant academic interest as they become emerging channels for intra-organizational communication. Information systems (IS) scholars have despite noted that ESM serves two usages patterns at the workplace including task accomplishment and interpersonal relationship management [89]. Workers usually use the various attributes of Enterprise Social Media (ESM), which include real-time support, video conferencing, online meetings, and information exchange, to engage in collaborative endeavors and foster interactions with colleagues [57]. ESM not only promotes relationship building, collaboration, and the development of personal relationship [106] but also plays a pivotal role in enhancing employee productivity in the workplace [117]. Consequently, numerous organizations have embraced ESM platforms like Yammer and Jive as integral tools for facilitating employee communication and collaboration [24, 77]. Scholarly research has explored the widespread adoption

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of ESM by workers, categorizing its use into two distinct domains: social-related [3] and work-related [24]. Social-related ESM usage pertains to individuals utilizing these platforms for personal and social interactions, which includes sharing individual experiences, feelings, and exchanging plans with colleagues [3]. On the other hand, work-related ESM usage involves employees using these platforms for task-specific activities, such as illuminating task goals, organizing task assignments, monitoring work progress, and sharing task-related information with workmates [24]. Building on prior research [24, 116], the present study adopts the term "socio-instrumental use" to refer to the combined use of ESM for both work-related and social-related purposes, recognizing the multifaceted nature of ESM utilization.

In light of the acclaimed advantages associated with the use of ESM utilization, scholars have dedicated their efforts to exploring its impact on individual job performance [79, 80, 114]. However, the outcomes of these investigations have yielded a mixed array of results. For instance, [79] identified a significant positive effect of socio-instrumental ESM usage on individual work outcome, while conversely, [108] reported a negative correlation between ESM usage and employee work performance. This divergence in findings underscores the need for further research to delve into the underlying mechanisms that how ESM usage can moderate the effects of conflict towards employee innovative behavior. Figure 1 indicates the research model of the study.

Literature review

Task conflict and relationship conflict framework

Previous research has established that conflict is a multifaceted phenomenon that can manifest along various dimensions. Accordingly, [76], pioneered research in this area, outlining three unique characteristics across which individuals prefer to define conflict: task versus relationship, emotional vs intellectual, and compromise versus

win. However, the majority of subsequent research has primarily concentrated on the task/relationship dimension [11, 46, 62, 63]. Task conflict pertains to conflicts arising from substantive matters, such as differences of opinion or competing ideas regarding the appropriate approach to a task or problem-solving [46, 89]. On the other hand, relationship conflict involves interpersonal disagreements that typically give rise to feelings of irritation and animosity [11]. Notably, in relationship conflict, the conflict's cause is often attributed to factors associated with the conflict partner or the dynamics within the relationship itself, as opposed to the situational attributions commonly made in the context of task conflict.

Relationship conflicts, which are characterized by perceived disagreements among individuals on issues unrelated to the task [23], are prone to hinder the information processing capabilities of employees. This is because considerable time and energy are often diverted towards deliberating, determining, or even ignoring the conflict, rather than being dedicated to task-related activities [47, 48, 83]. In contrast, task conflicts are outlined as perceived disagreements among team members concerning the specific task at hand [46]. Task conflicts may, counterintuitively, foster divergent viewpoints about the task itself, which can ultimately enhance team performance [62, 63] and the quality of decision-making processes [5].

However, empirical findings in this regard are not unequivocal. While several researchers have identified valuable effects of task conflict [5, 21], a meta-analysis has determined that, in general, task conflict, much like relationship conflict, tends to have adverse consequences for team effectiveness [22]. Moreover, the outcome of this meta-analysis suggests that the strength of the correlation between task and relationship conflict plays a crucial role. When the link between task and interpersonal conflict is smaller, task conflict has a higher chance of producing beneficial results. In essence, groups are likely to benefit from conflicting perspectives on the job when the

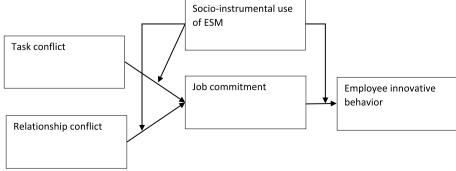


Fig. 1 Research model

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possibility of misattributing or misinterpreting task dispute as a personal assault is minimized [22].

Job commitment

Within the intricate tapestry of organizational behavior and management, few constructs evoke as much fascination, scrutiny, and scholarly inquiry as job commitment. Job commitment, in its essence, represents the depth of an employee's psychological connection and emotional attachment to their organization [69]. It is a multifaceted, multidimensional construct that encapsulates the degree to which an individual identifies with the organizational values, experiences a sense of belonging, and engages wholeheartedly in the fulfillment of their role within the organizational milieu [31].

Job commitment is inherently tripartite in nature, delineated into three distinct facets that constitute its multifaceted composition: affective commitment, continuance commitment, and normative commitment [69]. Affective commitment is characterized by an employee's emotional attachment to the organization [94], where they identify with and feel pride in their affiliation. Continuance commitment, on the other hand, revolves around the perceived costs associated with leaving the organization, reflecting a sense of "I stay because I have to." Normative commitment, the third facet, is grounded in an individual's moral obligation to remain within the organization due to a sense of loyalty or perceived debt. The salience of job commitment lies in its profound implications for an array of organizational outcomes [61], spanning from employee retention and job satisfaction to performance and, notably, innovative behavior. It is within this crucible of innovative behavior that job commitment takes center stage, unraveling its role as a mediating force in the context of conflict dynamics.

Job commitment, akin to a crucible for creative alchemy, tempers the negative effects of conflict and transmutes it into the catalyst for innovative behavior. Within this dynamic interplay, the mediating role of job commitment assumes profound significance [54]. It acts as a bridge between the cauldron of conflict and the creative endeavors of employees, elucidating the mechanisms through which conflict can be harnessed to foster innovation.

Intriguingly, the role of job commitment as a mediator unfolds as a nuanced process. Job commitment serves as both a buffer, attenuating the detrimental effects of conflict, and an amplifier, augmenting the constructive potential of conflict [13]. The affective commitment facet, with its emotional attachment and identification with organizational values, bolsters the positive association between conflict and innovative behavior. Employees who are deeply committed to their organization

view conflict as an avenue for expressing their allegiance and devotion, channeling their energies toward creative problem-solving endeavors [30]. On the other hand, continuance commitment, grounded in the perceived costs of leaving the organization, plays a distinct role in conflict mediation [17]. It tempers the negative association between conflict and innovative behavior, acting as a counterforce to the potential distress induced by conflict. Employees with high continuance commitment, while recognizing the existence of conflict, remain engaged in their roles due to perceived costs, compelling them to seek constructive resolutions rather than disengagement.

The exploration of job commitment as a mediating force within the crucible of conflict and innovative behavior unearths profound implications for organizational practice and scholarly inquiry. Understanding the multifaceted role of job commitment not only offers insights into how organizations can harness conflict for innovation but also underscores the significance of nurturing employee commitment as a strategic imperative.

Employee innovative behavior

Drawing upon the seminal works of West and Farr [112, 43] meticulously defines innovative work behavior as the purposeful act of conceiving, introducing, and applying novel concepts within the sphere of one's work role, group, or organization. This deliberate endeavor is undertaken with the overarching objective of enhancing the overall performance of the role, the collective group, or the overarching organization [44]. Within this comprehensive definition, the scope of innovative work behavior is distinctly circumscribed to encompass the genesis, advocacy, and execution of pioneering notions that yield tangible advantages for the organization [99]. In essence, innovative work behavior materializes through the embodiment of fresh methodologies, novel procedures, or innovative approaches within the organizational framework, all of which bestow substantive value upon the organization itself [97]. To illustrate, consider the case of a manager ensconced within the confines of an international media conglomerate. This astute manager undertook the pioneering initiative of fostering innovation by instituting what they aptly termed "rebel camps." These camps served as crucibles for training fellow managers in the art of innovation, thereby imparting a profound benefit to the company's endeavors [8]. This definition of innovative work behavior transcends the mundane and propels us into the realm of strategic innovation, where the deliberate cultivation and implementation of groundbreaking ideas stand as the cornerstone of organizational progress.

The delineation of innovative work behavior extends beyond the confines of customary team, group, or Cai and Ali *BMC Psychology* (2024) 12:587 Page 5 of 20

organizational routines [97]. Within the dynamic milieu of teams and organizations, the established routines occasionally falter in their ability to adapt to swift and transformative changes. Consequently, employees find themselves compelled to embark on the journey of conceiving, endorsing, and actualizing novel methods, approaches, or procedures [45]. This ambitious undertaking entails a willingness to tread into uncharted territory, characterized by risk-taking, as posited by [6]. In the pursuit of innovation, employees often find themselves navigating through uncharted waters, armed with only limited insights into the potential repercussions of their novel ideas. This uncertainty can cast a shadow over their organizational status and rewards, rendering them vulnerable in the organizational landscape, as highlighted by [45, 51].

The connection between conflict and employee innovative behavior represents a compelling subject of inquiry within the sphere of contemporary organizational research. Within the organizational context, conflict can manifest in various forms, with task conflict and relationship conflict emerging as prominent dimensions [46]. Task conflict, often viewed through the prism of constructive conflict, has demonstrated the potential to stimulate innovation by fostering divergent viewpoints and encouraging a dialectic process of idea evaluation [5, 47]. Conversely, relationship conflict, infused with negative affectivity and interpersonal animosity, tends to impede the channels of creativity and innovation [21]. The emotional toll exacted by relationship conflicts distracts individuals from the cognitive processes essential for creative thinking, thereby constraining the generation of innovative ideas [49]. This debilitating influence underscores the imperative of cultivating a work environment characterized by respectful and constructive interactions to mitigate the adverse repercussions of relationship conflicts on innovative work behavior [118].

Socio-instrumental use of social media

Enterprise Social Media (ESM) has evolved into a multifaceted tool that transcends traditional communication within organizations [33, 35, 42, 55, 101]. It integrates an array of applications, including blogs, wikis, microblogs, social tagging tools, and social networking sites, providing a dynamic platform for interactive dialogue among employees [57]. ESM's unique characteristics offer a diverse set of affordances, shaping the way employees engage with their work environment [93, 114]. This multi-functionality has ushered in a new era of organizational communication, with ESM serving as a bridge that connects employees, information, and knowledge across various hierarchical levels [106].

One of the central attributes of ESM, which distinguishes it from conventional communication tools, is its socio-instrumental nature [82, 114]. Unlike mere channels for social interaction, ESM seamlessly combines social and instrumental functionalities, allowing employees to navigate between work-related tasks and interpersonal exchanges [117]. This socio-instrumental use of ESM entails a dynamic interplay between social interaction and task-related activities [1], fostering an environment where employees engage in collaborative problem-solving, knowledge sharing, and innovative endeavors [77].

In the context of conflict within organizations, ESM's socio-instrumental role takes on a pivotal significance [36]. Conflict, often perceived as a hindrance to organizational harmony, can influence employee innovative behavior and job commitment. However, ESM's unique affordances can potentially moderate this relationship, shaping the impact of conflict on these crucial organizational outcomes. This begs the question: How does socio-instrumental ESM use influence the relationship between conflict and employee innovative behavior, as well as conflict and job commitment?

To delve into the intricacies of this relationship, it is imperative to consider how ESM's affordances come into play. ESM's visibility affordance enables employees to observe the behaviors, knowledge sharing, and preferences of their colleagues. This heightened transparency can mitigate misunderstandings arising from conflict, potentially fostering a better understanding of varying viewpoints [77, 106]. Additionally, ESM's persistence feature ensures that the original form of information is accessible at any time [53]. This can be instrumental in revisiting discussions related to conflicts, facilitating more informed decisions and innovative problem-solving [103, 104]. Furthermore, ESM's editability and association affordances have their roles to play. Employees can modify information before it is viewed by others, affording them the opportunity to reframe discussions related to conflict in a more constructive manner [3, 86]. The association affordance allows employees to establish connections with coworkers and information, potentially fostering collaboration and knowledge sharing that can be vital in the aftermath of conflict [18].

Given these nuanced affordances, it becomes evident that ESM's socio-instrumental use can act as a moderating force in the relationship between conflict and employee innovative behavior. When conflict arises within the organization, the socio-instrumental nature of ESM can provide a conducive environment for employees to navigate these conflicts, collaborate on innovative solutions, and share knowledge that contributes to innovative work behavior. However, the extent of ESM's

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moderating effect may vary based on the specific affordances that employees leverage during conflict resolution and knowledge sharing. It is essential to delve deeper into the specifics of this moderating effect, exploring how the different affordances of ESM come into play when dealing with conflict situations. This nuanced understanding can shed light on the conditions under which ESM maximizes its potential as a moderator. Additionally, research should also consider the potential impact of contextual factors, such as organizational culture and leadership, on the interplay between ESM's socio-instrumental use and conflict management.

Research model and hypothesis Mediating role of job commitment

As noted by the inconsistency in the literature the link between workplace conflict and employee innovation behavior, we first assume direct relationship in our research context to set the stage for proposing a mediating mechanism. Task conflict, often arising from differences in opinions and ideas regarding task-related matters within a team or organization [100], has garnered substantial attention in the literature for its potential impact on employee creativity [5]. This form of conflict can stimulate divergent viewpoints and ideas, serving as a catalyst for innovative thinking among employees [47]. However, the empirical landscape remains nuanced, with conflicting findings regarding the nature of the link between task conflict and employee innovative.

Job commitment, on the other hand, represents a critical attitudinal component within the realm of organizational behavior. Job commitment refers to an employee's positive attitude arising from comprehensively evaluating multiple facets of a job, such as working conditions, career development, and coworker's attitude. Employees with high levels of job commitment display a strong emotional attachment to their organization and its goals [10, 50, 73]. This sense of commitment often translates into a willingness to invest personal resources, including time and effort, into their work roles [70]. Consequently, these committed employees are more likely to engage in behaviors that benefit their organization, such as innovative work behavior [71]. Job commitment serves as a motivational force, driving employees to go above and beyond their routine job responsibilities [69].

In the context of task conflict, job commitment plays a pivotal role as a mediator. When employees encounter task conflicts, their levels of job commitment can significantly influence the trajectory of their subsequent actions. High levels of job commitment act as a buffer against the potential negative consequences of task conflict [70]. Committed employees are more likely to view conflicts as opportunities for growth and development

rather than as disruptive forces [67]. This positive perception can motivate them to channel their creative energies into resolving conflicts constructively [22]. Consequently, job commitment serves as a conduit through which task conflict can lead to heightened employee innovative behavior.

Therefore, job commitment emerges as a pivotal mediator in the relationship between task conflict and employee innovative behavior. Task conflict, while potentially disruptive, can fuel innovative thinking. However, the extent to which this relationship translates into tangible innovative work behavior hinges significantly on the mediating role of job commitment. High levels of job commitment empower employees to view conflicts as opportunities for creativity and innovation, thereby fostering a positive link between task conflict and employee innovative behavior. Hence, we posit:.

H1: Job commitment mediates the relationship between task conflict and employee innovative behavior.

In the realm of organizational teams, relationship conflict often manifests when team members grapple with interpersonal tensions, disputes, or discord within the group. These conflicts can stem from differences in personality, work style, or even conflicting personal values, and they pose a unique challenge to team dynamics. Research has highlighted that relationship conflict tends to have a negative and detrimental impact on team performance and cohesion [5, 46]. These negative emotions are likely to undermine job commitment by leading employees to withdraw from interactions rather than find satisfaction in their working conditions and relationships with coworkers. Additionally, employees may perceive relationship conflict as a misalignment between their roles and themselves, resulting in a diminished sense of opportunities for personal development. Consequently, relationship conflict may also threaten job commitment related to personal growth. The literature has consistently linked relationship conflict to decreased job satisfaction and increased emotional exhaustion [22, 46]. However, the question arises: how might relationship conflict impact employees' ability to engage in innovative behavior?

One plausible mediator that could shed light on this relationship is job commitment. Job commitment, characterized by an employee's emotional attachment and identification with their organization [69], plays a pivotal role in shaping individual behaviors within the workplace. Employees who are highly committed to their jobs are more likely to invest discretionary effort and engage in behaviors that contribute to their organization's success [71]. It is conceivable that job commitment acts as

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a mediator between the strains induced by relationship conflict and an employee's inclination to exhibit innovative behaviors.

When employees encounter relationship conflicts, it generates stressors that may impede their innovative behaviors. The emotional toll of ongoing conflict can be taxing, leading to decreased job satisfaction and increased emotional exhaustion, which are antithetical to creative thinking [4]. Job commitment, as an important psychological impetus, can enhance employee's willingness to proactively devote time, energy, and expertise to undertake creative work. Positive affection that accompanies job commitment may also release individuals' cognitive resources and stimulate creative thinking.

Prior literature has shown that employees with high levels of job commitment are more likely to adopt problem-focused coping strategies [28]. When confronted with relationship conflict, they may actively seek solutions and engage in constructive dialogues with their teammates to resolve the issues at hand. By doing so, they not only reduce the emotional strain caused by conflict but also create a space where creative ideas can flourish. Consequently, it is reasonable to posit that job commitment acts as a mediator, bridging the gap between relationship conflict and employee innovative behaviors.

While relationship conflict is often connected with reduced job satisfaction and increased emotional exhaustion, its impact on employee innovative behavior can be nuanced. Job commitment emerges as a potential mediator in this relationship, as highly committed employees may employ coping mechanisms that mitigate the adverse effects of relationship conflict and, in turn, foster an environment conducive to innovative behavior. To advance our understanding of this intricate interplay, further empirical investigation is warranted, as it holds implications for team dynamics, organizational creativity, and employee well-being.

In summary, we propose that employees who experience higher levels of relationship conflict may exhibit lower job commitment, making them more hesitant to engage in innovative behavior. Therefore, we hypothesis as:

H2: Job commitment mediates the negative relationship between relationship conflict and employee innovative behavior. H2: Job commitment mediates the negative relationship between relationship conflict and employee innovative behavior.

Moderating role of socio-instrumental use of ESM

In accordance with the transactional theory of stress, it is posited that the cognitive evaluation processes of stress experienced by a member of a team are influenced by the degree to which the entire team engages in the use of social media platforms. In the development of a sophisticated two-level, initial-stage moderated mediation model, we hypothesize the following: (1) Social media utilization can act as a moderating factor in the relationship between conflict and job commitment (constituting the first-stage moderation); and (2) The indirect ramifications of conflict on an employee's creativity via job commitment display variability contingent upon the extent of social media engagement of employees, as a result of the initial-stage moderation. Specifically, recognizing the paramount importance of social support from the organization, supervisors, or colleagues in mitigating the adverse effects of conflict, we adhere to the conceptualization proposed by [98], positioning social media as a virtual realm wherein the exchange of social support occurs through interpersonal interactions. We contend that such a digital milieu can exert a discernible influence on how individuals cognitively assess and respond to conflicts. Our elucidation of these arguments and formulation of hypotheses are detailed below.

Socio-instrumental utilization of ESM is characterized by the active engagement of employees in open online dialogues aimed at task-related objectives as well as in other social activities. This encompasses activities such as delineating task objectives, conveying task assignments, monitoring work progress, engaging in discussions and solutions to issues and exchange of other social interests. These activities involve actions like posting, commenting, and forwarding messages pertaining to the tasks at hand [3, 9, 83]. This mode of interaction facilitates the seamless exchange of task-relevant information among employees [55]. With visibility feature employees are able to observe work-related information and coordinate with workmates. It equips them with the means to discern where to access necessary expertise [52, 56]. Consequently, employees may develop the perception that their teams possess an abundance of informational support, which encompasses resources such as advice, experience, and knowledge that aid in task completion [26]. Furthermore, the persistent nature of ESM allows employees to retrieve previously recorded information at their convenience, regardless of time and location, potentially augmenting their sense of available informational support [106]. Moreover, through the association feature of ESM, employees can establish instrumental connections with one another, forming collaborative work relationships aimed at problem identification and resolution [92]. This interpersonal linkage may serve as a conduit for the exchange of informational support [106].

As today organizations are characterized by a high degree of ESM utilization, employees are more inclined to experience the advantages of interpersonal knowledge Cai and Ali BMC Psychology (2024) 12:587 Page 8 of 20

exchange and the reception of informational support [55]. This heightened access to information resources enhances their self-assurance in their ability to effectively address undesirable situations [12, 60]. Consequently, employees are inclined to perceive ambiguous or conflicting role expectations as less formidable and are less prone to experiencing negative emotions in response to such situations [42]. Moreover, their job satisfaction remains relatively unaffected in the presence of conflicts. Specifically, the use of ESM enables accurate, complete, timely, adequate, and effective interactions among employees, leading to efficient, rapid, and abundant information exchange and knowledge transfer [15, 74]. ESM minimizes the incidents of communication breakdown and also effectively manages and disposes the interpersonal task conflicts that continue to arise among the employees, thus, encouraging their creativity as well as helping boost up the completion of tasks and standards, consequently, overall performance [58, 15]. ESM enhances the information transparency as the employee can see how the specific information is being processed and with whom all the relevant information is being shared, as well as to identify the experts in certain fields [55]. ESM intensifies workplace communications, as employees are able to share and discuss matters and issues pertaining to their tasks without having to observe the barriers of space and time constraints. Effective communication through ESM helps reduce work-related misunderstandings, resolve conflicts, and promotes knowledge sharing among employees [109, 120]. Consequently, ESM not only accelerates the acquisition and processing of information but also enhances the quality of information, leading to quicker decision-making. Additionally, ESM allows employees to maintain a digital presence, eliminating the need for physical presence to communicate with others. This digital interaction enables employees to express their emotions and attitudes in a more relaxed and open manner, fostering an "ambient awareness" of issues (Quan-Haase, Cothrel, & Wellman(Quan-Haase et al. [88])). ESM is considered as open forum where all interactions are transparent and provide learning and possibilities of conflict resolution [29, 102]. Furthermore, ESM establishes frequent communication and interaction between individuals and enhances the feeling of trust and social relatedness among employees. This trust reduces the detrimental impacts of relationship conflict and employees exchange information with each other [27, 68].

Furthermore, we anticipate that the indirect consequences of conflicts on employee creativity through job commitment will be contingent on the extent of socio-instrumental ESM utilization. In circumstances where ESM usage is abundant, employees are likely to

perceive conflicts as less obstructive to their job commitment, thereby safeguarding their motivation to partake in innovative endeavors from erosion. In contrast, in situations characterized by low levels of socio-instrumental ESM utilization, employees may lack the informational support needed to mitigate the adverse impact of conflicts. Consequently, they may experience diminished commitment to their jobs and become disengaged from innovative pursuits. Therefore, we posit the followings:

H3a: Socio-instrumental ESM utilization serves as a moderator in the association between task conflict and job commitment, attenuating the positivity of this relationship when socio-instrumental ESM usage is at a high level.

H3b: Socio-instrumental ESM usage serves as a moderator in the connection between relationship conflict and job commitment, diminishing the degree of negativity in this relationship when socio-instrumental ESM utilization is at a high level.

H4a: Socio-instrumental ESM utilization serves as a moderator in the indirect association between task conflict and employee innovative behavior via job commitment, resulting in a reduction of the negative impact when socio-instrumental ESM use is at a high level.

H4b: Socio-instrumental ESM utilization serves as a moderator in the indirect association between relationship conflict and employee innovative behavior via job commitment, resulting in a reduction of the negative impact when socio-instrumental ESM use is at a high level.

Socio-instrumental ESM, with its capacity to facilitate open dialogues, information exchange, and task-oriented interactions among employees, possesses the potential to bolster the relationship between job commitment and innovative behavior. When ESM is used extensively among employees, it can provide them with valuable informational support, enabling them to address conflicts, ambiguities, and challenges more effectively. This heightened level of support can bolster their job commitment by reducing the negative impact of work-related stressors, ultimately empowering them to channel their commitment into innovative endeavors. Conversely, in situations where socio-instrumental ESM use is limited, employees may encounter obstacles in accessing critical information and support, potentially diminishing their job commitment and, consequently, their inclination to engage in innovative behaviors. Hence, it is reasonable to hypothesize that socio-instrumental ESM use can positively moderate the relationship between job

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commitment and employee innovative behavior, particularly when ESM utilization is high.

H5: Socio-instrumental ESM usage moderates the relationship between job commitment and employee innovative behavior, such that the strength of this relationship is amplified when socio-instrumental ESM use is at a high level.

Research methods

Data collection procedures

With the goal to analyze the proposed hypothesis of this investigation, the author used the method of surveying to obtain data from Chinese employees working in several companies that manufacturing different products. Following the guidelines of previous studies author also considered China for this research for several reasons [78]. Firstly, ESM platforms are widely adopted by Chinese companies for communication and socialization purposes. According to a recent report, China has the largest social media market and the highest level of individual engagement globally [12]. Secondly, it is noteworthy that most research on workplace conflict has been conducted in Western countries. Chinese culture denotes collectivism rather than the individualism that prevails in the Western world [40]. Chinese individuals tend to value harmony and are more likely to resolve conflicts [39]. Thirdly, in terms of technology and economics, China is an industrialized, and developed country. As a result, industrial working environments of China provide a suitable research scenario for investigating the influence of workplace conflict on worker creativity. Additionally, during survey design author has discussed the scope and objective of study with different scholars and academicians working on different information system projects. After, discussion author has employed their suggestions and recommendations in the survey items. The entire questionnaire consists four distinct parts. The first section includes a cover letter that outlining the objective of study. Second section included the basic explanation of constructs. The third section includes respondent details like demographics information, and responsibility in the industry. Final section includes questionnaire items of all the variables. Prior to data collection, author requested the several participants, including directors, managers, and employees o to take part in the research. Furthermore, prior to beginning the final data collection, all the instruments was analyzed using preliminary testing method on 65 participants, and the findings were considered to be appropriate.

We distributed 540 questionnaires to participants between February 2023 and April 2023. After, making phone calls, and reminder messages, we received 490 complete questionnaire. Several responses were removed because they filled questionnaire incorrectly or left empty. As a result, 447 replies were considered appropriate for the final data set. Table 1 illustrates the participants' sample information in detail.

Research instruments

All the items of all the constructs has developed using the procedure described in previous studies [77]. We adopted the scales of previous studies that were previously published in top Information System Journals. Initially, all the items were designed in English, a Professor from English department was invited to proofread and clear the grammatical and spelling mistakes. Further, considering the nature of respondents [107], all the constructs were translated into Chinese Language by three local Chinese professionals who have also expertise in English Language. To assess the consistency of the

Table 1 Sample demographic information

Variables	N	Percentage	Variables	N		Percentage
Gender			Experience			
Male	267	59.700	Less than- 1 year	54		12.100
Female	180	40.300	2–3 years	102		22.800
Age			4–5 years	109		24.400
Between 21-30	115	25.700	More than 5 years	189		40.700
Between 31-40	158	35.300	Responsibility			
Between 41-50	80	17.900	Directors	56	12.500	
>50 year old	94	21.000	General employees	141	31.500	
Qualification			General Managers	90	20.100	
Under-graduate	164	37.700	Assistant Managers	101	22.600	
Graduate	187	41.800	Departmental Managers	59	13.200	
Masters or Above	96	21.500				

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questionnaire, the Chinese variant was converted back into English language. Finally, by comparing the two copies of the questionnaire, it was found that both have the same significance. As a consequence, a Chinese survey was utilized for data collection purpose. Furthermore, the complete questionnaire was evaluated with a five-point Likert scale, as studies found that a 7-point and a 5-point scale produce similar findings. The measurement elements are detailed below.

Job commitment

The measurement items of job commitment is computed using seven items of [119, 69]. Example item of this scale is "I feel a responsibility to the working profession to continue in it".

Workplace conflict

Workplace conflict can be classified as task conflict and relationship conflict. The instruments of task and relationship conflict includes three items of each and scale is taken from [46]. However, due to low factor loading, we have deleted the one item of task and relationship conflict. Example item of task conflict is "People in your work group often have conflicting opinions about the project you are working on", and relationship conflict is "People often get angry while working in your group".

Employee innovative behavior

We computed employee innovative behavior as a dependent variable using six items of [105]. Three items of this scale is not used, due to low factor loading. An example question of this construct is "Took risks in terms of producing new ideas in doing job".

Social and instrumental use of social media

This included six items and was adopted using the scale of [64]. Two questions of this scale also delete, due to low loading values. An exemplary module is "My co-workers and I are involved with each other for work related advice and suggestions on an ESM network".

Control variable

Following prior studies [14, 115], age, gender, education, and experience were control variables in our analyses.

Results and analysis

Validity and reliability

In order to examine the validity and reliability of research model, author has employed different analysis methods as suggested by previous scholars [37]. Following the approach of prior literature, author analyzed the validity and reliability of the research model by employing composite reliability (CR) and Cronbach's alpha (CA)

analysis. Table 2indicates the scores of both the CR and CA which is upper than the recommended value of 0.70 [38], reflecting that study data have suitable level of reliability and validity. Moreover, the factor loading of each instrument is observed and outcomes illustrated that all the loading of all the constructs is upper than the standard value of 0.60 [32] as shown in Table 4. In same way, average variance extracted (AVE) of all the constructs is investigated, and Table 2results show that all AVE values are greater than the proposed threshold of 0.50 [7]. Altogether, all the evidence indicated that the research model had an adequate degree of validity and reliability.

Furthermore, the discriminant validity of the suggested theoretical framework was assessed by employing variety of approaches. Firstly, author has used the procedure as recommended by [32] to assess the discriminant validity of the data. Accordingly, author observed and compared the diagonal elements (AVE square root) of all the variables with inter-correlations values. Findings of Table 3indicated that all the values of AVE square root are greater than the inter-correlation values. Secondly, author applied another approach as proposed by [65]. Prior scholars suggested that co-relation of all the constructs should be less than 0.70, Table 3 results showing that all the co-relation values are less than 0.70. Finally, Table 4 findings conformed that all the item higher loaded into their specific positions and poorly loaded into other places. As a result, the outcomes of tables (2, 3 and 4) discovered that the study model has a suitable level of convergent validity, reliability, and discriminant validity.

Analysis of common method bias (CMB)

In the light of cross-sectional data obtained using same procedure, possibility of common method bias (CMB) could not be ignored [87]. Scholars noted that CMB may occur in the data set, if author employed similar procedure to collect data for all the constructs [113]. Consequently, multipronged approach to was applied by author to scrutinize the intensity of common method bias (CMB)

Table 2 Results of measurement analysis

Items	Cronbach α	Composite Reliability	AVE
3	0.853	0.830	0.630
3	0.738	0.970	0.930
6	0.956	0.900	0.570
7	0.899	0.920	0.620
6	0.925	0.910	0.630
	3 3 6	3 0.853 3 0.738 6 0.956 7 0.899	Reliability 3 0.853 0.830 3 0.738 0.970 6 0.956 0.900 7 0.899 0.920

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Table 3 Means, standard deviation, and correlations

Construct	Mean	SD	1	2	3	4	5	6	7	8	9	10
1.Task Conflict	3.700	0.850	0.790									
2.Relationship Conflict	2.600	0.780	266**	0.960								
3.Socio-Instrumental Use of ESM	3.630	1.000	.578**	400**	0.750							
4.Job commitment	4.030	0.620	.228**	273**	.249**	0.780						
5. Employee innovative behavior	3.650	0.730	.364**	229**	.441**	.300**	0.790					
6Responsability	NA	NA	.057	018	.099	043	.008	NA				
7 Experience	NA	NA	.060	005	.103*	.080	.135**	112*	NA			
8 Education	NA	NA	166**	.110*	112*	020	083	.124**	074	NA		
9- Age	NA	NA	.083	083	.173**	015	.103*	502**	.349**	330	NA	
10- Gender	NA	NA	053	.095*	.029	048	007	.119*	163**	.015	045	NA

N = 233, significance at: *= p < .05, ** = p < .01, *** = p < .001, ESM Enterprise social media, M Mean, S.D Standard deviation

Table 4 Item, cross loading

Constructs	Items	SIUESM	JC	EINO	RC	TC
Socio-Instrumental Use of ESM (SIUESM)	SIUESM01	.884	063	032	.019	.047
	SIUESM02	.853	.031	031	.038	.027
	SIUESM03	.812	.035	024	.055	.032
	SIUESM04	.805	.076	055	055	.007
	SIUESM05	.794	030	.125	.016	080
	SIUESM06	.716	019	.105	135	.066
Job commitment (JC)	JC01	.065	.843	007	.014	130
	JC02	102	.828	038	026	.101
	JC03	.120	.799	070	.017	034
	JC04	.144	.776	083	069	128
	JC05	222	.706	.023	.090	.212
	JC06	.076	.676	.095	.065	.053
	JC07	063	.657	.152	099	017
Employee innovative behavior (EINO)	EINO01	014	.053	.849	040	131
	EINO02	103	.003	.848	148	148
	EINO03	.079	019	.835	.130	063
	EINO04	021	016	.776	026	.161
	EINO05	.011	.031	.753	.088	.195
	EINO06	.107	032	.686	.038	.031
	RC01	009	.011	.008	.978	012
Relationship Conflict (RC)	RC02	007	.010	.020	.959	014
	RC03	.005	026	007	.951	040
Task Conflict (TC)	TC01	054	.136	048	002	.864
	TC02	.196	058	042	.059	.781
	TC03	.036	085	.049	142	.724

in the dataset. At first, we handle the CMB via responders' stage using a backward item to make participants pay attention during questionnaire completing. In the second stage, we have adopted the methodology described in this study by [59], and assess the existence of CMB possibility of in the current study. Accordingly, analysis result illustrated that substantive factors have value

of 66.5% of the variance and the method factors 1.2% of the variance, showing that CMB is not a serious issue in this study. Further, findings reflected that the five-factor model (χ^2 =880.44, df=237, χ^2 /df=3.715, CFI=0.913, TLI=0.899, RMSEA=0.078) has better fit values as compared to one-factor model (χ^2 =4351.01, df=247, χ^2 /df=17.615, CFI=0.447, TLI=0.383, RMSEA=0.193)

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as shown in Table 5 [12]. In addition, our calculation of the variance inflation factor (VIF) showed that no VIF value exceeded the designated threshold of 3.3 [85], and thus, we can conclude that CMB was not a nuisance in our study. Therefore, having taken into account the comprehensive analyses made, we can state that our study is completely free from CMB.

Hypothesis testing Mediation analysis

For mediation analysis, we applied, bootstrapping method as recommended by [38]. Mediation assessment is a statistical approach that determines if the connection between the two factors is influenced by a third variable, commonly referred to as a mediator. Specifically, in this study we also proposed the role of job commitment as a mediator variable. Results of Table 6 indicated that job commitment mediated the connection between task conflict and employee innovative behaviour (LCI:=0.016, UCI:=0.070), zero is not included, thereby H1 is validated by the present study. Job commitment also mediated the connection between relationship conflict and employee innovative behaviour (LCI:=-0.053, UCI:=-0.015) because confidence intervals did not contain zero's. As a result, both H1, and H2 are validated by this research.

Table 5 Confirmatory factor analysis

Models	X ²	df	REMSA	TLI	CFI
One-factor model	4351.01	247	0.193	0.383	0.447
Two-factor model	4151.49	246	0.189	0.410	0.474
Three- factor model	2477.61	244	0.143	0.660	0.699
Four- factor model	1533.65	241	0.110	0.801	0.826
Five-factor model	880.44	237	0.078	0.899	0.913

Four-factor model: combined employee innovative behavior and Socio-Instrumental Use of ESM; Three-factor model combined employee innovative behavior, Socio-Instrumental Use of ESM and Job commitment; two-factor model: combined employee innovative behavior, Socio-Instrumental Use of ESM, Job commitment and relationship conflict;

RMSEA Root Mean Square Error of Approximation

CFI Comparative Fit Index

TLI Tucker-Lewis Index

Moderation analysis

In addition, Fig. 2 also indicated the moderating role of social and instrumental use of ESM. The Results of Fig. 2 indicated that social and instrumental use of ESM moderate the linkage between task conflict and job commitment (B=0.169; t=5.139; p<0.001) because interaction terms reflected significant values, H3a is validated by the current study. Results also indicated that social and instrumental use of ESM significantly moderates the link between relationship conflict, and job commitment (B=-0.104; t=-3.134; p<0.001), H3b is also supported by current data. Finally, social and instrumental use of ESM also moderate the relationship between job commitment, and employee innovative behaviour (B=0.236; t=4.323; p<0.001), H5 is validated by this study.

In addition, scholars suggested the graphical procedure to extent the moderation role. Furthermore, prior studies also proposed a graphical approach to expand the moderating role. Consequently, we adopted the methodology of [2] to graphically visualize the moderation role of social and instrumental use of ESM. Figure 3 indicated that social and instrumental use of ESM significantly moderates the relationship between task conflict and job commitment. Figure 4 also reflected that social and instrumental use of ESM significantly moderates the connection between relationship conflict and job commitment. Lastly, Fig. 5 also demonstrate that social and instrumental use of ESM significantly moderates the connection between job commitment and employee innovative behaviour.

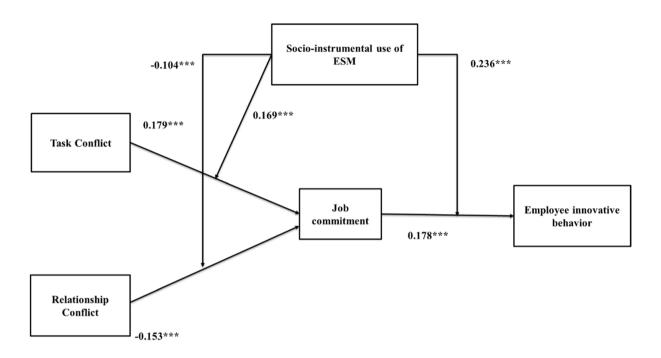
Moderated mediation analysis

We next examined the moderated mediation model presented in the Table 7, and computed the conditional indirect impacts of task and relationship conflict on employee innovative behavior through job commitment over various levels (at 1 SD and +1 SD) moderator social and instrumental usage of ESM. Table 7 shows that the conditional indirect effect of task conflict on employee innovative behavior through job commitment is insignificant when social and instrumental use of ESM is higher (+1 SD) (magnitude indirect effect = 0.007, 95% CI [-0.18, 0.032]) than when

Table 6 Bootstrap results for mediating relationships

IV	MV	DV	Effects	Boot SE	Boot Lower limit 95% CI	Boot Upper limit 95% CI
Task Conflict	Job commitment	Employee innova- tive behavior	.039	.013	.016	.070
Relationship Conflict	Job commitment	Employee innova- tive behavior	.030	.009	053	015

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Control: Gender (0.006); age (-0.012); Experience (0.069*); Responsibility (-0.016)

Note: ***p<0.001, p*<0.05

Fig. 2 Structural model results. control: gender (0.006); age (-0.012); experience (0.069*); responsibility (-0.016). Note: ***p < 0.001, p* < 0.05

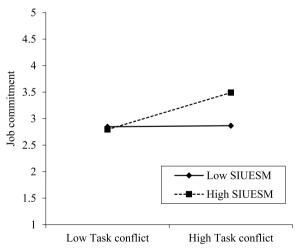


Fig. 3 Moderating role of SIEM (Social and Instrumental use of ESM) in the relationship between task conflict and job commitment)

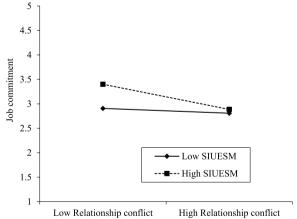


Fig. 4 Moderating role of SIEM (Social and Instrumental use of ESM) in the relationship between relationship conflict and job commitment)

it is low (-1 SD) (magnitude indirect effect=0.099, 95% CI [0.053, 0.162]), H4a is rejected. Table 6 also indicates that the effect of relationship conflict on employee innovative behavior through job commitment is insignificant when social and instrumental use of ESM is higher (+1 SD) (magnitude indirect

effect = -0.017, 95% CI [-0.043, 0.0002]) than when it is low (-1 SD) (magnitude indirect effect = -0.087, 95% CI [-0.137, 0.052]), H4b is rejected.

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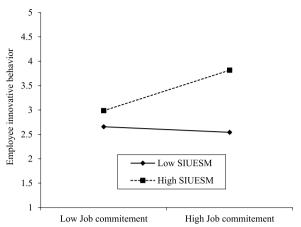


Fig. 5 Moderating role of SIEM (Social and Instrumental use of ESM) in the relationship between job commitment and employee innovative behavior)

Discussion implications and future research Discussion of findings

The hypotheses under examination in this study illuminate the complex interplay between conflict, job commitment, socio-instrumental ESM usage, and employee innovative behavior within contemporary organizational contexts. Our study first hypothesis posits that job commitment mediates the relationship between task conflict and employee innovative behavior, with job commitment enhancing the positive connection between task conflict and innovative behavior. This proposition aligns with existing research suggesting that well-managed task conflict can foster creative thinking [4]. Our findings affirm this hypothesis, indicating that individuals with higher job commitment are more likely to leverage task conflict constructively for innovative purposes. This aligns with the idea that job commitment motivates employees to engage proactively with challenges, viewing them as opportunities for growth and innovation [70].

Current study further suggests that job commitment mediates the negative connection between relationship conflict and employee innovative behavior, with strong job commitment mitigating the detrimental impact of relationship conflict. Extensive research has shown that relationship conflict can impede innovation [22]. Our study supports this hypothesis, underscoring that robust job commitment serves as a protective factor, enabling individuals to withstand the disruptive effects of relationship conflict and maintain their involvement in innovative behaviors. This is in line with [70] argument that job commitment can act as a stabilizing force, allowing employees to focus on tasks despite interpersonal tensions.

Further, socio-instrumental ESM utilization as a moderator in the associations between task conflict and relationship conflict with job commitment, respectively. Our findings corroborate these hypotheses, revealing that high socio-instrumental ESM use positively moderates these relationships. Socio-instrumental ESM platforms provide an environment conducive to effective communication and support [26]. In such contexts, conflicts may be less likely to erode job commitment, as ESM facilitates information exchange and interpersonal interactions, bolstering individuals' coping mechanisms. This resonates with the argument that social media can offer a valuable resource for individuals facing workplace challenges [66].

Additionally, our study extends the analysis by considering socio-instrumental ESM utilization as a moderator in the indirect relationships between task conflict and relationship conflict with employee innovative behavior, mediated by job commitment. Our results validate these hypotheses, demonstrating that high socio-instrumental ESM utilization positively moderates these indirect relationships. This highlights the instrumental role of ESM in mitigating the adverse effects of conflicts on job

Table 7 Moderated mediation analysis

Task Conflict on Employee innovative behaviour	Boot indirect effects	Boot SE	Boot Lower limit 95% CI	Boot Upper limit 95% Cl	
-1 (Low)	.007	.012	018	.032	
Mean	.053	.016	.026	.094	
+1 (High)	.099	.027	.053	.162	
Relationship Conflict on Employee innovative behaviour	Boot indirect effects	Boot SE	Boot Lower limit 95% CI	Boot Upper limit 95% CI	
-1 (Low)	017	.011	043	.002	
Mean052		.015	086	028	
+1 (High)087		.021	137	052	

CI Confidence Interval; Bootstrap sample size = 5000

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commitment and, consequently, on employee innovative behavior. It underscores the potential of ESM to serve as a buffer, preserving employees' commitment and their creative contributions amid workplace challenges.

Finally, our hypothesis proposes that socio-instrumental ESM usage positively moderates the relationship between job commitment and employee innovative behavior. Our findings did not support this hypothesis, emphasizing that extensive ESM engagement did not amplifies the positive link between job commitment and innovative behaviors. This reinforces the idea that ESM can act as a catalyst for channeling individuals' commitment into creative endeavors within the workplace [80, 81, 84]. This resonates with the argument that ESM platforms can enhance communication and collaboration, facilitating innovative initiatives [41].

In conclusion, our study advances our understanding of the intricate relationships among conflict, job commitment, socio-instrumental ESM usage, and employee innovative behavior within contemporary organizations. These findings contribute not only to theoretical foundations but also offer practical insights for organizations seeking to cultivate innovation among their workforce. By recognizing the pivotal roles of job commitment and socio-instrumental ESM, organizations can strategically harness these factors to foster a more innovative and adaptive workforce, ultimately enhancing their competitiveness in the ever-evolving business landscape.

Theoretical implications

Our results make numerous contributions to the exiting literature on conflict and innovative behavior of employees' relationship and also the moderating role of socio-instrumental use of ESM. First, the study's findings shed light on the intricate dynamics of task and relationship conflict within organizations. By uncovering their interplay and influence on employee innovative behavior through job commitment, the research contributes to a more nuanced understanding of how different forms of conflict affects employee outcomes. Prior research also treated task and relationship conflict as distinct constructs. This study also reveals highlighted how task and relationship conflict related to employee innovation behavior through job commitment. This challenges traditional nature of workplace conflict that emphasize the negative effects of relationship conflict and underscores the need for a more holistic approach to studying conflict within employees [46].

Second, this research introduces job commitment as a mediating factor between task and relationship conflict and employee innovative behavior. This theoretical advancement provides insights into the underlying processes through which conflict influences innovative behavior. The mediating role of job commitment aligns with prior research suggesting that employees' affective commitment to their organization can mediate the relationship between workplace conflict and employees innovative behavior [69]. By extending this concept to the context of conflict and innovative behavior, the study enriches the theoretical framework of stress and commitment in organizational psychology.

Third, the study's findings reveal the moderating influence of socio-instrumental ESM use on the connection between conflict and employee innovative behavior. This theoretical advancement underscores the role of technology and communication tools in shaping the impact of workplace conflict. This implication aligns with the growing recognition of the importance of technology in contemporary work environments. Prior research often focused on interpersonal dynamics and leadership as moderators of conflict outcomes. By highlighting the role of social media, the study contributes to a broader understanding of how technology-mediated communication can alter the effects of conflict [57].

Finally, the research findings underscore the potential positive influence of task conflict and adverse effect of relationship conflict. This theoretical implication challenges the prevailing view that conflict is inherently detrimental to organizational outcomes. While prior research has often emphasized the negative aspects of workplace conflict, this study aligns with the emerging perspective that task conflict can stimulate open discussions, and have significant effect on job commitment [5]. It suggests that managers should not only focus on conflict avoidance but also on effective conflict resolution strategies to harness the creative potential of their employees.

Practical implications

This research offers several recommendations for team management. First, organizations should adopt conflict management and resolution strategies that differentiate between task and relationship conflict. Recognizing the distinct effects of these conflict types on employee innovative behavior, managers should be equipped with tools and training to address them effectively. Research has shown that conflict resolution training can lead to more positive outcomes in team performance and satisfaction [21]. By tailoring conflict management approaches to the specific nature of the conflict, organizations can foster a more conducive environment for creativity and innovation.

Second, given the moderating role of socio-instrumental ESM use, organizations should encourage and facilitate the effective use of social media for collaborative work. Employees should be educated on how to use these platforms for both task-oriented and

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relationship-building purposes. Social media platforms offer a unique opportunity for enhancing communication and collaboration within teams [57]. Managers should explore ways to leverage these tools to facilitate idea sharing and innovative thinking, especially in situations where task conflict may be present.

Third, to mitigate the potentially negative effects of conflict, organizations should focus on building and maintaining employees' job commitment. Strategies for enhancing job satisfaction and organizational commitment should be integrated into HR practices. Research has shown that job satisfaction can mediate the relationship between stressors and work outcomes [91]. By fostering a sense of commitment to the organization, managers can help employees navigate the challenges posed by conflict and remain engaged in their work.

Finally, organizations should strike a balance between conflict management and promoting creativity. While it's essential to address disruptive conflicts promptly, organizations should also encourage constructive task conflicts that stimulate innovation. Task conflict can lead to divergent thinking and generate creative solutions [5]. Therefore, organizations should not discourage all forms of conflict but rather encourage healthy debates and discussions that can lead to novel ideas and improved processes.

By implementing these practical and managerial implications, organizations can create a work environment that fosters both conflict resolution and creative thinking. This balanced approach ensures that conflicts are not entirely avoided but rather channeled constructively to drive innovation and improve overall team dynamics.

Limitations and future research

Despite the broad implications of our study there are few limitations as well. First, the cross-sectional research design approach adopted in this study, t is not possible to prove causal relationships between the variables and to track changes during the time. This means that while associations between conflict, job commitment, social media use, and innovative behavior can be identified, the direction of causality remains uncertain, and the study cannot capture how these variables evolve or interact across different time points. Additionally, this design is susceptible to alternative explanations or confounding factors that may influence observed relationships. To tackle this challenge future research should make use of longitudinal designs which helps to understand the dynamics of these factors over time or experimental designs which can demonstrate causal associations offering a wider perspective of these dynamics in an organizational setting.

Second, this study relies on self-report measures, where participants provide information about their experiences, attitudes, and behaviors through questionnaires or surveys. While self-report measures are common in research, they are susceptible to various limitations. A major problem is the appearance of response bias that is caused by the participants' answers that they consider to be socially acceptable or in line with what they believe they are expected to answer. This can contribute to inaccuracies in data, as participants may not fully disclose their true feelings or behaviors due to social desirability concerns. Furthermore, self-report measures may not capture the full complexity of the variables under investigation. In this context, participants may not be fully aware of the underlying psychological processes related to conflict, job commitment, social media use, and innovative behavior. Conclusively, the future studies could seek to incorporate more objective measures, such as the behavioral observations or physiological data to support the self-report data. This multi-method strategy may help to increase the study's validity and reliability by providing the researcher with a broader and more precise view of the studied phenomena.

Third, the findings of this study are grounded in a particular cultural or societal (Chinese) context, and therefore, it's important to exercise caution when attempting to apply these results to different cultural or social settings. Social and cultural factors can significantly influence the dynamics between conflict, job commitment, and innovative behavior [34]. Factors such as leadership styles, organizational structures, and cultural norms can vary widely between organizations and regions, which may impact how conflict is managed and how job commitment relates to innovative behavior. Consequently, generalizing the study's findings to other contexts may not be straightforward. To overcome this limitation, future research should aim to replicate the study in diverse societies to assess the extent to which these relationships hold across various countries, cultural backgrounds, and organizational structures. This can help establish the external validity of the findings and provide insights into the nuances of these relationships in different contexts.

Finally, while the investigation demonstrates the mediating effect of job commitment and the moderating influence of social media use, it doesn't delve into detail into the underlying processes. In the future, researchers can look into the accurate psychological and behavioral mechanisms through which these variables operate. For example, how does social media use impact stress appraisal, and how does job commitment influence creative problem-solving processes? Addressing these

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questions can provide a more comprehensive understanding of the studied relationships.

Conclusion

Our empirical findings unveil a nuanced landscape. We observe that job satisfaction acts as a partial mediator in the relationship between task conflict, relationship conflict, and employee innovative behavior. Notably, task conflict exhibits a direct positive relationship with innovative behavior, while relationship conflict demonstrates a direct negative relationship. These results challenge the conventional wisdom by highlighting the divergent effects of these two types of conflict on employees' creative contributions, underscoring the need for a refined understanding. Moreover, our research illuminates the contrasting moderating role of socio-instrumental ESM utilization of employees. Specifically, we find that taskoriented and relationship-oriented ESM use exert opposing influences on the relationship between relationship conflict and job commitment. Furthermore, we discover that only within specific thresholds of social media use does relationship conflict indirectly enhance employee innovative behavior through its impact on job satisfaction. In sum, this study not only enriches the existing literature on conflict management, job commitment, and innovative behavior but also contributes to our understanding of the multifaceted effects of socio-instrumental ESM utilization. Our findings underscore the importance for managers to navigate and address task conflict and to promote job commitment as a means to foster employee innovative behavior. Furthermore, they emphasize the need for thoughtful governance of social media use among employees as it interacts with conflict dynamics and ultimately influences innovative outcomes.

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Data availability

The datasets used and/or analysed during the current study available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the ethical principles stated in the Declaration of Helsinki. All study protocols were approved by ethics committee of Hefei University of Technology, China. An informed consent was obtained from the adolescents and from their parent(s) or legal guardian(s).

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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