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HOW DOES ENTERPRISE SOCIAL MEDIA (ESM) INFLUENCE NEWCOMERS' SOCIALIZATION: A MULTILEVEL PERSPECTIVE

Research in Progress

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Abstract

Socialization plays an essential role in ensuring that newcomers to an organization enjoy greater productivity and also integrate well into their workgroups. Since the COVID-19 pandemic, enterprise social media (ESM) is increasingly being used in organizations as an informal socialization tool. However, the effectiveness of these tools in affording the necessary socialization opportunities and enabling the newcomers to better integrate within their organizational settings remains both unclear and understudied. Drawing on the extant literature on newcomer socialization within organizational behavior and the IT affordances research, this study proposes a multilevel research model to explain how various ESM affordances affect newcomers' socialization effectiveness (i.e., performance proficiency at the individual level and group cohesion at the group level). Plans for verifying the model using two quantitative sub-studies based on the multi-source and multi-wave research design are also presented. Research implications and future research plans are also discussed.

Keywords: Newcomers' socialization via ESM, ESM affordances, ESM identity, Role identity, Ego depletion, Multilevel analysis

1 Introduction

In recent times, especially post COVID-19, managers complain that newcomers' performance and group cohesion has gradually declined due to a lack of socialization, which imposed a great burden on the company (Saks and Gruman, 2021).

Newcomers' socialization in organizations has become increasingly important due to increased labor mobility (Bauer et al., 2007; Jiang et al., 2021). Socialization is defined as the process by which newcomers learn beliefs, values, social knowledge, and workplace skills that are necessary to successfully perform their new organizational roles and responsibilities (Fisher, 1986; Louis, 1980). Since the COVID-19 pandemic, companies have increasingly been relying on information technology, such as enterprise social media (ESM), to socialize newcomers (Gonzalez et al., 2013; Leidner et al., 2018). ESM is defined as "a web-based platform that allows workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; (4) view the messages, connections, text, and files communicated, posted, edited, and sorted by anyone else in the organization at any time of their choosing (Leonardi et al., 2013)." Different from traditional social media, such as Twitter and Facebook, ESM not only encourages newcomers to use the platform but also to use it to accomplish business goals more effectively (Kane, 2015; Leonardi et al., 2013). The strategic importance of ESM in the newcomers' socialization has also been theoretically emphasized (Leonardi et al., 2013; Leonardi & Vaast, 2017; Treem & Leonardi, 2013). To be specific, if a newcomer's socialization process is poorly managed, it can lead to poor

performance proficiency of the newcomers themselves and lower levels of integration of the newcomer within their respective work teams (Kammeyer-Mueller et al., 2013; Riddle et al., 2000). In particular, without the strong group cohesion, newcomers are likely to increase their tendency to leave, which will cause a series of costs to the enterprise, including the cost related to recruiting and training newcomers and the productivity loss when valuable newcomers leave. Therefore, studying how ESM influences newcomers' socialization outcomes is of strategic importance (Leidner et al., 2018). **Performance proficiency** in this study refers to the degree to which newcomers master the required skills, knowledge, and abilities required for the job (Cai et al., 2020; Chao et al., 1994). If a newcomer has experienced productivity but is not integrated within the group (i.e., there is low group cohesion), they will suffer from a lack of morale and pressure, resulting in a negative impact on both the newcomer and the long-term development of the team (Levine et al., 2019). **Group cohesion** refers to the degree to which group members share a commitment to the group and shared mutual attraction and liking (Hausknecht et al., 2009; Riddle et al., 2000). Therefore, studying how ESM influences newcomers' socialization outcomes, such as individual-level performance proficiency and group-level cohesion, is of great importance (Cai et al., 2020; Riddle et al., 2000).

Currently, there are two major research streams on newcomer socialization within the organizational behavior literature, namely institutionalized and individualized socialization. Institutionalized socialization refers to the way in which organizations or groups use formal and structured procedures to socialize newcomers. By contrast, individualized socialization refers to informal and unstructured ways in which individuals are responsible for their own experiences and socialization (Fang et al., 2011; Perrot et al., 2014). Taken together, the literature emphasizes that newcomers' socialization is a process involving both individual and group levels (Bauer & Erdogan, 2011; Saks & Ashforth, 1997). Within the IS discipline, existing studies on this topic have focused on how traditional social media affects newcomers' socialization outcomes at the individual level (Cai et al., 2020; Huang, 2022). The impact of ESM on this phenomenon has been emphasized (Kane, 2015; Leidner et al., 2018). Although there are some preliminary explorations on this topic, existing research on newcomers' socialization via ESM mainly focuses on how ESM use or user behaviors implementation affects newcomers' socialization (Gonzalez et al., 2013; Hüllmann & Kroll, 2018; Moqbel & Nah, 2017). More recently, **ESM affordances**, referring to the action possibility independent of the perception and experience of the actor but relative to each actor's capabilities for action (Chen et al., 2019), have been argued to have an effect (Leidner et al., 2018; Treem & Leonardi, 2013). Given its importance, Gonzalez et al. (2015) have initially explored how internal social media (i.e., ESM) provided affordances and constraints on newcomers' socialization outcomes. Subsequently, Leidner et al. (2018) have initially and empirically explored the impact of some ESM affordances on socialization outcomes from a relatively general perspective. While the existing literature within IS has provided a great start to understanding the role of ESM affordances on newcomer socialization, there are a few shortcomings: 1) Much of the work has been conceptual in nature (Leonardi et al., 2013; Leonardi & Vaast, 2017), and 2) studies have tended to focus on a single level (Leidner et al., 2018), which still remains a limited understanding of how newcomers have socialization via ESM. Existing research on the broader newcomer socialization literature (as discussed earlier) highlights the importance of examining the phenomenon from a multi-level perspective, in an effort to gain a holistic understanding (Fang et al., 2011; Liu et al., 2021), which remains the primary focus of this study. In particular, compared to the single-level analysis, the multilevel perspective aid in unraveling the black box of newcomers' socialization process via ESM. Thus, we propose the following research question:

How do ESM affordances affect newcomers' socialization process and outcomes at both individual and group levels?

To unravel the black box of the process, we attempted to draw from the literature on general newcomers' socialization. Our review of this literature highlights the role of two different concepts¹ within the

¹ The definitions of the two core concepts, including identity (i.e., ESM identity, role identity) and ego depletion, will be given in detail in the literature review section.

process: 1) the importance of **identity** (Cable et al., 2013; Cooper et al., 2021), and especially ESM identity (Alahmad et al., 2018) and role identity (Farmer et al., 2003; Wu et al., 2015), 2) the role of **ego depletion** as newcomers are in a period of transition characterized by high levels of uncertainty, ambiguity, and anxiety in a new environment (Ellis et al., 2015; Liu et al., 2022). Thus, as we build our conceptual model, our attention has been to also understand the nature of the effect both identity and ego depletion play within the socialization process involving ESM.

Our specific multilevel research holds the view that entities are interrelated at different levels of analysis and the phenomenon unfolding at one level could be expected to impact entities at other levels. Finally, the multi-wave and multi-source research design would be applied in two quantitative studies to verify the proposed multilevel research model as the future plan.

2 Literature Review

In this section, we will first provide an overview of the literature on general newcomers' socialization followed by the newcomers' socialization in the IS field and theoretical lens, including affordance theory, identity theory, and ego depletion theory, adopted in this study. The elaboration of each section is shown below. In particular, we argue that it is reasonable and appropriate to combine these three theoretical perspectives in our context from both theoretical and practical aspects (Okhuysen & Bonardi, 2011). In practice, the newcomers' socialization via ESM is complex and requires multiple theoretical perspectives to understand (Leidner et al., 2018). Theoretically speaking, first, the phenomena concerned by these three theories are all related to our context, which has a high degree of proximity; second, it can be abstracted from the basic connotation of assumptions of these theories involve the interaction and perception between individuals and external objects/environments (Carter & Grover, 2015; Leidner et al., 2018; Yam, 2018). Thus, the assumptions of these three theories have a high degree of congruency. These theoretical perspectives formed the backdrop of our research model, as presented in Figure 1.

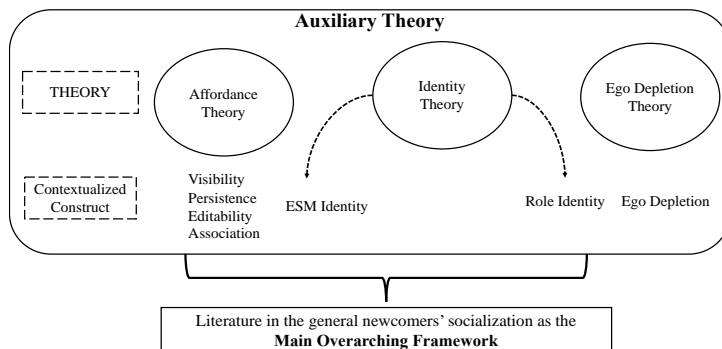


Figure 1. Theoretical Framework.

2.1 Related Works on Newcomers' Socialization

Newcomers' socialization is a process where newcomers learn beliefs, values, social knowledge, and workplace skills necessary to perform their new organizational roles and responsibilities successfully (Fisher, 1986; Louis, 1980). For decades, newcomers' socialization has received extensive research attention mainly in the field of organizational behavior (Bauer et al., 2007). Currently, there are two research streams, namely institutionalized and individualized socialization. As for institutionalized socialization, studies mainly focused on organizational support (Perrot et al., 2014), organizational communication (Monge & Contractor, 2003), and communication network characteristics (Fang et al., 2011). Regarding individualized socialization, the influence mechanism of variables related to the individual level of newcomers, such as self-efficacy (Gruman et al., 2006), newcomer values and personality (Kim et al., 2005), emotional exhaustion (Liu et al., 2021), identity (Cable et al., 2013; Cooper et al., 2021), on the socialization outcomes have been widely explored and investigated. However, with the progress of information technology and the increased integration of social media

within the workplace, more and more newcomers use ESM to accelerate their socialization within the organization (Leidner et al., 2018).

2.2 Research on Newcomers' Socialization within the IS Field

Existing studies within IS have mainly focused on how traditional social media affects newcomers' socialization outcomes at the individual level (Cai et al., 2020; Huang, 2022). More recent studies argue that ESM, as an informal socialization tool, has been increasingly implemented in organizations (Kane, 2015; Leidner et al., 2018). The capabilities of ESM platforms could enable newcomers to easily learn about their colleagues, jobs, and the organization (Leidner et al., 2018). Existing relevant literature has largely ignored the impact of ESM on newcomers' socialization, even if there are some studies, that mainly focus on how ESM use or user behaviors implementation affects newcomers' socialization (Gonzalez et al., 2013; Hüllmann & Kroll, 2018; Moqbel & Nah, 2017).

An alternate body of work has argued for the effect of ESM affordances (e.g., visibility, persistence, editability, and association, as opposed to ESM use) on newcomers' socialization (Leidner et al., 2018; Treem & Leonardi, 2013). However, these studies either conceptually describe the role of ESM affordances on newcomers' socialization or lack in providing a comprehensive understanding of the phenomenon. As a result, how ESM affordances affect newcomers' socialization outcomes has not been thoroughly investigated in this context.

2.3 Theoretical Lens

2.3.1 Affordance Theory and ESM Affordance

Affordance theory was proposed by Gibson (1977), which points out that the interaction between users and technology can afford individual actions, thereby producing corresponding outcomes (Leidner et al., 2018). Affordances refer to the action possibility independent of the actor's experience and perception but are relative to each actor's capabilities for action (Chen et al., 2019; Gibson, 1986). In the context of ESM, different ESM affordances have been identified and proposed. Among them, four ESM affordances, including visibility, persistence, editability, and association, have most widely been used (Chen et al., 2019; Treem & Leonardi, 2013). 1) *Visibility* refers to the extent to which ESM allows individuals to show their expertise. 2) *Persistence* refers to the ability to retain information available to support employees to search and view records of communication in organizations. 3) *Editability* refers to the fact that individuals can spend much time and effort revising content before or after viewing by others. 4) *Association* refers to the possibility of establishing connections between individuals or between individuals and information. Literature has conceptually highlighted that ESM affordances could significantly affect the newcomers' socialization (Leonardi et al., 2013; Leonardi & Vaast, 2017; Treem & Leonardi, 2013). Few studies, if any, have examined the impacts of some ESM affordances on newcomers' socialization outcomes (Leidner et al., 2018). However, a systematic multilevel investigation is lacking on how the four ESM affordances influence newcomers' socialization. In this regard, this study deeply explores the potential influencing mechanism of the four ESM affordances on newcomers' socialization outcomes.

2.3.2 Identity Theory: ESM Identity and Role Identity

Identity theory states how individuals organize identity meanings, formulate them in social contexts and respond to identity-related feedback (Davis et al., 2019; Mishra et al., 2012). Identity theory has derived many core constructs related to identity, such as IT identity and role identity. IT identity, which was originally proposed by Carter (2013), could be defined as the extent to which the individual views IT use as part of self-awareness (Carter & Grover, 2015). ESM identity is derived from IT identity. Further, it has been highlighted by IS scholars that if the function of the construct could be the same at multilevel even though the structure is different, it then could be theorized as a multilevel construct (Burton-Jones & Gallivan, 2007; Morgeson & Hofmann, 1999). In the general newcomers' socialization process, existing literature shows that identity plays a crucial role in newcomers' socialization (Cable et al., 2013;

Cooper et al., 2021). Corresponding to the context of newcomers' socialization via ESM, ESM is a system that can be identified by individual newcomers and the group. To be specific, the function of ESM identity is the same in both situations, but the structure of identity is different because the latter requires interaction among team members. Therefore, ESM identity could be regarded as a multilevel construct. Existing studies mainly discuss and investigate ESM identity at an individual level (Alahmad et al., 2018; Zhu et al., 2020). However, given the significant differences in the use of ESM by different groups, the group's collective ESM identity is distinctive (Ding et al., 2019; Holtzblatt et al., 2013). As a result, we argue that it is reasonable to operationalize ESM identity at the group level. ESM identity can be defined as the degree to which group members collectively view ESM use as an integral part of self-awareness (Carter, 2013; Carter & Grover, 2015). There are three dimensions of ESM identity: 1) relatedness, 2) emotional energy, and 3) dependence. *Relatedness* refers to a feeling of connection between ESM and newcomers themselves; *Emotional energy* represents newcomers' emotional attachment to and enthusiasm for ESM; *Dependence* refers to a sense of dependence on ESM (Carter & Grover, 2015). Recently, the dark side of ESM identity has been highlighted due to its capability to increase the perception of poor control over time (Polites et al., 2018; Zhu et al., 2020). When newcomers are in a group with a high ESM identity, they are more likely to be unable to focus on the assigned task and emotionally exhausted. Thus, newcomers are more declined to feel ego depletion.

On the contrary, role identity has also been suggested to play a key role in the socialization process. Role identity is defined as the degree to which a role is part of the newcomers' self-concept (Farmer et al., 2003; Wu et al., 2015). When the newcomers have a clear role identity, they would be more likely to internalize the group's values and norms, thereby increasing self-regulation resources and decreasing ego depletion. However, two types of identity, namely ESM identity and role identity, have not been simultaneously considered, especially in the context of newcomers' socialization via ESM.

2.3.3 Ego Depletion Theory

Ego depletion theory states that performing self-control behaviors depletes an individual's self-regulation resources, thereby reducing the willpower to exercise this control in further effort (Kang et al., 2022; Muraven et al., 1998). Self-regulation resources are defined as mental energy that avoids emotional fatigue and supports maintaining the will to self-regulate while performing a task (Fang & Zhang, 2021). Ego depletion refers to a state in which normal or optimal operation is temporarily unavailable due to excessive consumption of limited self-regulation resources (Fang & Zhang, 2021; Ghasemaghaei & Turel, 2022). In the context of newcomers' socialization, it has been highlighted that newcomers are more susceptible to high levels of ego depletion as they are in a period of transition characterized by high levels of uncertainty, ambiguity, and anxiety in a new environment (Ellis et al., 2015; Liu et al., 2022). Corresponding to our research context of newcomers' socialization via ESM, how the newcomers' ego depletion affects their socialization outcomes (i.e., performance proficiency and group cohesion in this study) via ESM remains to be further described, explained, and understood.

3 Research Model and Hypotheses

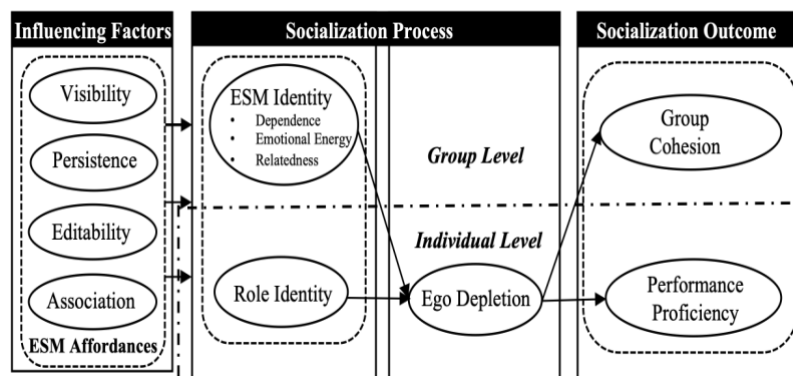


Figure 2. Proposed Research Model.

In this section, drawing on affordance theory, identity theory, and ego depletion theory, we presented the research model. In our context, we first identified and applied the four widely used ESM affordances as antecedents. Then, we conceptualized the identity (i.e., ESM identity and role identity at different levels) and ego depletion in the newcomers' socialization process. Next, the performance proficiency and group cohesion, which depicts newcomers' socialization outcomes at individual and group level respectively, was regarded as the corresponding results. The proposed model is shown in Figure 2.

3.1 Effects of ESM affordances on ESM identity

Visibility refers to the possibility of making one's knowledge visible to others. Visibility affordance can increase the accuracy of knowledge on how to do something and the metaknowledge (e.g., knowledge of "who knows whom" and "who knows what") (Leonardi, 2014, 2015; Leonardi et al., 2013). Metaknowledge could enable newcomers to be aware of the experts that can facilitate the possibility for newcomers to reduce their confusion or solve problems (Chen et al., 2019), especially within the socialization process where newcomers face high pressure and uncertainty (Liu et al., 2022). *Persistence* refers to the fact that content remains accessible in its original form (Treem & Leonardi, 2013). Given that previous information could be recorded in its original form, newcomers could better understand previous and ongoing conversations (Chen et al., 2019). Thus, it would be easier for newcomers to obtain the information in its original form and to deal with the obstacles and frustrations encountered in the newcomers' socialization process. *Editability* refers to the extent to which ESM allows individuals to modify the content. Editability allows employees to consider what they want to express and clarify their point of view (Treem & Leonardi, 2013). *Association* refers to the possibility of establishing connections between individuals or between individuals and content. The association between an individual and information offers a way for newcomers in the same group to explicitly view the connections among content and co-workers, which is conducive to keeping up with their colleagues' activities, thereby facilitating access to timely and well-sourced information via ESM (Ellison et al., 2015; Treem & Leonardi, 2013). Thus, ESM association may lead to a feeling of connection between ESM and newcomers themselves, resulting in a higher level of ESM identity. In addition, according to affordance theory, the possibilities afforded by the association regarding the usefulness and source of information could cultivate a cooperative way of working to effectively deal with confusion and problems encountered by newcomers. As a result, the confusion and problems faced by newcomers in the same group during the socialization process will be effectively dealt with to a certain extent, thus making newcomers in the same group more inclined to reply on ESM and have an emotional dependence on ESM (Chen et al., 2019; Mettler & Winter, 2016; Zhu et al., 2020). Thus, we propose that:

H1a-H1d: *ESM affordances (i.e., visibility, persistence, editability, association) are positively related to newcomers' ESM identity.*

3.2 Effects of ESM affordances on role identity

Similarly, with the support of ESM *visibility*, the metaknowledge afforded by ESM could familiarize newcomers with who knows whom and who knows what. ESM *persistence* affordance leaves traces that employees may access at different times, which provides a valuable channel to learn about other colleagues' concerns and emerging issues. In addition, ESM *persistence* affordance also enables newcomers to reuse previous content created by other colleagues (Chen & Wei, 2019; Treem & Leonardi, 2013). According to identity theory, these two approaches could enhance the comparison and distinction of different roles held by newcomers and their colleagues, to gain a sense of identity in their roles. The *editability* of ESM increases the opportunities for building social relationships in the workplace (Chen et al., 2019; Ellison & Vitak, 2015). As previously mentioned, editability supports newcomers to think carefully about what they want to convey and clarify their point of view, which increases the quality of shared information and enables better communication between newcomers and their colleagues (Chen et al., 2019; Treem & Leonardi, 2013). In such a way, it could foster the role identity of newcomers (Chen et al., 2019). Moreover, the *association* among employees could connect individuals, increase the closeness between new and existing relationships, and foster a broader sense of social interdependence among newcomers and current employees (Ellison et al., 2015). As a result,

newcomers could obtain more opportunities to compare and distinguish the similarities and differences between themselves and other colleagues' roles, to obtain a relatively strong sense of role identity (Chen et al., 2019; Kammeyer-Mueller & Wanberg, 2003). Thus, we propose that:

H2a-H2d: *ESM affordances (i.e., visibility, persistence, editability, association) are positively related to newcomers' role identity.*

3.3 Effects of ESM identity and role identity on ego depletion

In the context of socialization via ESM, newcomers are more likely to enhance the usage of ESM when they are in a group with a high ESM identity (Carter & Grover, 2015; Zhu et al., 2020). The excessive use of social media is likely to cause exhaustion, and exhausted individuals would take action toward conserving their resources in a selective manner (Yu et al., 2018). In addition, the higher ESM identity of the newcomers' group leads to a poorer perception of time control of newcomers, thus decreasing the self-regulation resources (Polites et al., 2018). According to ego depletion theory, the decline of self-regulation resources will lead to ego depletion (Kang et al., 2022; Muraven et al., 1998). Thus, in our context, the newcomers' group with higher ESM identity may not have sufficient resources to support newcomers in completing the required tasks, thereby leading to the increased level of ego depletion of newcomers.

In the context of socialization via ESM, role identity could help newcomers internalize the group's values and norms (Wu et al., 2015). Thus, they could assess the adequate resources and support. As a result, the consumption of newcomers' self-regulation resources would be effectively alleviated and inhibited. According to ego depletion theory, the level of newcomers' ego depletion would be decreased accordingly. On the contrary, without the role identity, newcomers would have no criteria and sufficient resources for judging their behaviors, thereby facilitating the level of ego depletion of newcomers. Thus, we propose that:

H3: *ESM identity is positively related to newcomers' ego depletion.*

H4: *Role identity is negatively related to newcomers' ego depletion.*

3.4 Effects of ego depletion on performance proficiency and group cohesion

Energetic newcomers, i.e., newcomers with a low level of ego depletion, could be able to build good social relationships with their colleagues or group leaders as they are more in control of their attitudes and behaviors and be kind to others (Finkel & Campbell, 2001). By contrast, newcomers with a high level of ego depletion are less inclined to spend time, energy, and other self-control resources to actively establish a good social relationship with their colleagues or group leaders because relationship building requires the consumption of self-regulation resources (Xing et al., 2021). It has been pointed out that ego depletion could reduce newcomers' sense of belonging to the team (Wu et al., 2018). As a result, the higher level of newcomers' ego depletion, the lower their group cohesion.

Newcomers with high levels of ego depletion are more likely to have limited cognitive resources, thereby reducing the newcomers' performance proficiency to a large extent (Deng et al., 2016). In addition, it has been pointed out and empirically verified that ego depletion could lead to poor performance (Deng et al., 2016; Schmeichel et al., 2003). Thus, we propose:

H5: *Newcomers' ego depletion is negatively related to group cohesion.*

H6: *Newcomers' ego depletion is negatively related to newcomers' performance proficiency.*

4 Methodology

4.1 Data Collection

Based on the current framework, we intend to conduct two independent quantitative studies to verify the proposed multilevel research model, thereby cross-validating the findings. Considering that newcomers are those who have been at a new job in a new company for 13 months or less (Bauer et al., 2007), we intend to invite approximately 500 employees with less than 13 months of job tenure and their

department managers in each target company to participate in an online questionnaire survey. The liaison in each target company could assist us in distributing two types of questionnaires to newcomers and department managers, respectively. In Study 1, our objective is to use a multi-source, multi-wave design to collect data in a software development company in Northern China. In Study 2, we plan to conduct data collection with similar methods as in Study 1 at 5 companies in different industries. To be specific, we intend to collect three waves of data every other month for both two studies. In wave 1, the newcomers are to be asked to complete the demographic information and evaluate the four ESM affordances, ESM identity, role identity, and control variables at the individual level. In wave 2, newcomers continued to be invited to fill in the questionnaire about ego depletion. In wave 3, the department managers are invited to evaluate the employees' performance proficiency and group cohesion and control variables at the group level. In particular, we will aggregate scores on ESM affordances and ESM identity from newcomers to the corresponding group level.

4.2 Measurement Development

The established measurement scales are to be adapted to measure constructs in our model. A five-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5), would be used as an anchor to measure all items. In particular, following the recent research on the measurement scale of ESM affordance in top IS journals, ESM affordances in our study would be measured using items derived from Rice et al. (2017). ESM identity would be measured by items adapted from Carter (2013). Role identity would be adaptively measured by items from Callero (1985) and Farmer et al. (2003). Ego depletion would be measured by items from Fang and Zhang (2021) and Ghasemaghahi and Turel (2022). Performance proficiency would be scaled by items from Cai et al. (2020), whereas group cohesion would be adaptively measured by items from Riddle et al. (2000) and Hausknecht et al. (2009). Several control variables, including age, gender, education level, experience of using ESM, and total hours of ESM usage per day, would be incorporated at the individual level in this study. Meanwhile, we controlled two personality traits, namely neuroticism and extraversion, of the big five personality traits at the individual level because Xiao and Mou (2019) have empirically verified that these two personality traits (i.e., neuroticism and extraversion) could significantly affect the outcome of users' use of social media. In addition, group size and team interdependence would also be controlled at the group level. Particularly, group size could be captured by the number of team members (Zheng et al., 2022). Team interdependence would be adaptively measured by using items from Wei and Wu (2013).

5 Limitations and Potential Implications

Like any other study, there are several limitations to this research which may inspire future related research. First, although the paired data collection has been adopted, the objective measurement should be further incorporated. For example, the field experiment might be beneficial in obtaining relevant objective data on ESM affordance; Second, some other possible mediators should also be incorporated and investigated in the newcomers' socialization via ESM; Finally, given that the impacts of ESM may vary based on the national culture, it would be interesting to compare the similarities and differences of newcomers' socialization process via ESM under the Eastern and Western cultures (Sarker et al., 2007). This study contributes to the literature in the following aspects. First, this study contributes to understanding the nature of the effect of ESM on newcomers' socialization and how socialization impacts unfold at multiple levels (that is, individual and work group-level), which responds to the call of Leidner et al. (2018) to describe and delineate the underlying process of newcomers' socialization. Second, this study contributes to the affordance theory by contextualizing the ESM affordances and exploring its influence mechanism on newcomers' socialization outcomes at both individual and group levels. Third, this study further contributes to identity theory by exploring the newcomers' socialization process via ESM from the unique and novel perspective of identity at different levels, including ESM identity (i.e., group level) and role identity (i.e., individual level). Finally, this study contributes to ego depletion theory by identifying and incorporating ego depletion into the context of newcomers' socialization.

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