Synergy or substitution? The interactive effects of insiders’ fairness and support and organizational socialization tactics on newcomer role clarity and social integration

**Abstract**

Drawing on Fairness Heuristics Theory (Lind, 2001) and Cue Consistency Theory (Maheswaran & Chaiken, 1991; Slovic, 1966), we test a moderated mediation model that examines whether the institutionalization of organizational socialization tactics enhances or constrains the beneficial effects of supervisory and coworker-referenced justice and support on newcomer role clarity and social integration. The findings of a three-wave study of 219 French newcomers show that while institutionalized tactics strengthen the positive indirect effects of supervisory interpersonal and informational justice on role clarity, via perceived supervisor support, it also acts as a substitute that weakens the positive indirect effect of coworker-referenced interpersonal justice on social integration, via perceived coworker support. Implications of the findings for socialization research and practice are discussed.

Keywords: organizational justice, perceived social support, organizational socialization tactics, role clarity, social integration

# Synergy or substitution? The interactive effects of insiders’ fairness and support and organizational socialization tactics on newcomer role clarity and social integration

# 1 | Introduction

How newcomers transition from outsiders to adjusted insiders is receiving increasing attention because of its lasting effects on performance (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Ellis, Nifadkar, Bauer, & Erdogan, 2017). *Organizational socialization*, defined as the process by which individuals “learn the ropes” and acquire the attitudes, behaviors, and knowledge needed to participate as an organizational member (Allen, Eby, Chao, & Bauer, 2017), can be a key source of competitive advantage. Indeed, growing evidence suggests that effective socialization has important mutual benefits for both organizations and newcomers. For organizations, it helps them retain new hires and reap the benefits of adjustment (Allen & Shanock, 2013; Snell, 2006), while it helps newcomers manage the uncertainties of the onboarding process (Fang, Duffy, & Shaw, 2011).

The socialization literature highlights the role of learning and assimilation as the two main processes leading to effective socialization (Korte, 2010; Ostroff & Kozlowski, 1992). Newcomers are required to succeed across multiple domains, including learning new tasks and roles, integrating within the workgroup, internalizing the organization’s goals and values, and familiarizing themselves with its language and political and cultural characteristics (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994). Achieving success in each of these domains requires the combined contributions of different socializing forces: (a) the organization, via its formal onboarding policies—these “organizational socialization tactics” characterize the structural side of socialization and can vary in terms of their level of institutionalization, such that greater institutionalization reflects a more systematic set of practices (Jones, 1986; Van Maanen & Schein, 1979); (b) individual insiders, including supervisors, coworkers, mentors, and other experienced employees, who provide informational and psychological support to newcomers (Korte, 2010; Reichers, 1987); and (c) newcomers themselves, who actively seek information and feedback, build relationships, frame situations positively, and negotiate their job’s duties (Ashford & Black, 1996; Gruman, Saks, & Zweig, 2006).

A fine-tuned understanding of the processes leading to successful socialization requires the disentanglement of the direct effects of these antecedents, as well as an examination of the interdependencies and interactions between them (Kammeyer-Mueller & Wanberg, 2003). In particular, while socialization research has traditionally considered insiders as merely an extension of the organization’s socialization program, recent studies suggest that they can operate independently through relational mechanisms and exert unique effects on newcomer adjustment (Ellis et al., 2017; Montani, Maoret, & Dufour, 2019). What is less clear, though, is how the use of formal socialization tactics affects the ability of supervisors and coworkers to help newcomers’ adjustment. This is important because the informal interactions between newcomers and insiders are embedded in the broader organizational context, which is in part shaped by the organization’s socialization practices (Miller & Jablin, 1991).

The few empirical studies investigating the interactions between the relational and structural antecedents of socialization have yielded mixed findings. On the one hand, support has been found for a synergetic pattern whereby organizations’ formal initiatives, such as institutionalized tactics, and relational antecedents reinforce and/or complement each other’s effects (e.g., Kondakci & Haser, 2012; Lee, Veasna, & Wu, 2013; Montani et al., 2019; Simosi, 2012). On the other, researchers have observed a substitutive pattern whereby institutionalized tactics reduce the socializing effects of relational factors by providing newcomers with alternative sources of information and self-validation (e.g., Dulac & Coyle-Shapiro, 2006; Kim, Cable, & Kim, 2005; Liden, Bauer, & Erdogan, 2004). For instance, Lee and colleagues (2013) found that institutionalized tactics strengthen the effects of social support on expatriates’ adjustment and performance, whereas theoretical argumentation presented by Liden and colleagues (2004) and empirical findings of Dulac and Coyle-Shapiro (2006) suggest that institutionalized tactics weaken the effects of leader–member exchange on newcomer attitudes and behaviors. In a similar vein, Kim and colleagues (2005) conducted a study of 279 newcomer–supervisor pairs from seven organizations in South Korea in which they predicted that newcomers’ relationship building would act as a substitute to negate the effects of socialization tactics on adjustment. While their results were in line with their expectations regarding the moderating effect of the newcomer–supervisor relationship, they also found that, contrary to their predictions, newcomers’ general socializing with insiders interacted in the opposing (positive) direction with institutionalized tactics (i.e., the effect of formal socialization on person–organization fit was stronger for newcomers who interacted more frequently with different members of the organization). This latter finding suggests that institutionalized tactics and newcomer–insiders relationships interact following a synergistic pattern. Kim and colleagues (2005) speculated that this unexpected result might be explained by the collectivist culture of South Korea and suggested future research examines how the nature of the social ties that newcomers build affect the relationships among socialization tactics, proactivity, and adjustment.

These mixed findings are problematic because they hinder scholars’ and practitioners’ ability to predict when structural and relational drivers of socialization are jointly needed. Resolving this inconsistency would help organizations design more efficient onboarding programs by identifying the socialization domains for which the combined investment of the organization, via its formal practices, and the insiders, via their informal efforts, produces synergistic effects and thus provides the greatest benefit to newcomers. This paper aims to contribute to this effort by examining how organizational and relational factors interact to determine newcomer success in two critical socialization domains: (1) learning and (2) assimilation. We argue that the processes leading to newcomer learning and assimilation are determined by different cognitive and psychological mechanisms, and thus are best explained by different theoretical rationales. In particular, learning is shaped by the extent to which newcomers make sense of their new environment and integrate pieces of information from different sources (Brehmer, 1972; Ostroff & Kozlowski, 1992), whereas assimilation is driven by how they interpret the social context, their access to social capital and identification with their workgroup (Blau, 1960; Fang et al., 2011). Consequently, we draw on cue consistency theory (Maheswaran & Chaiken, 1991; Slovic, 1966) to argue that the indirect positive effects of relational fairness—through perceived supervisor support (hereafter, “PSS”) and perceived coworker support (“PCS”)—on newcomer role clarity (a learning outcome) are strengthened by institutionalized socialization tactics. Conversely, we predict that these interactions will be antagonistic in the case of social integration (an assimilation outcome) using social information processing theory (Salancik & Pfeffer, 1978).

Our model, depicted in Figure 1, contributes to the socialization literature in two ways. First, drawing on fairness heuristic theory (Lind, 2001), we introduce perceptions of justice as a means by which newcomers cope with entry uncertainty, infer perceptions of social support, and, consequently, enhance their learning and assimilation. Examining the effects of insiders’ fairness on newcomer adjustment contributes to the emerging strand of research in the role of social context during socialization (e.g., Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2013; Korte, 2010; Morrison, 2002)—an area in need of further exploration, according to Batistič and Kaše’s (2015) bibliometric review. Second, we offer a nuanced understanding of when the beneficial effects of these relational factors are limited or strengthened by organizational socialization tactics. More precisely, we provide differentiated rationales to predict when these interactions will be synergistic as in the case of role clarity and when they are substitutive as in the case of social integration. Our nuanced approach helps reconcile previous contradictory findings (e.g., Dulac & Coyle-Shapiro, 2006; Kim et al., 2005; Lee et al., 2013), by highlighting a dual opposing effect of institutionalized socialization tactics on newcomers’ ability to adjust in different socialization domains (learning versus assimilation).

<Insert Figure 1 about here>

# 2 | The interplay of relational and structural antecedents of socialization

Interactions with insiders are the primary route through which newcomers establish situational identities and make sense of organizational events (Kammeyer-Mueller et al., 2013; Nelson & Quick, 1991; Reichers, 1987). The social system they experience during early socialization determines their ability to learn, achieve assimilation, and adopt new attitudes and behaviors (Korte, 2010). In particular, relational approaches to socialization emphasize the role of direct supervisors and coworkers as pivotal socializing agents who provide newcomers with emotional and informational support (Korte, 2010; Morrison, 2002; Nelson & Quick, 1991). Direct supervisors are valuable sources of technical, normative information and performance feedback, have formal authority in newcomers’ role negotiations, and act as role models (Ellis et al., 2017; Jokisaari & Nurmi, 2009). Equally, the role of peers is becoming more prevalent as a result of flatter organizational hierarchies and the pervasiveness of teams (Chiaburu & Harrison, 2008). Direct coworkers are thus in a prime position to provide newcomers with accurate social, technical, and normative information and to influence their mental schemas and sense-making processes (Chiaburu & Harrison, 2008; Fang, McAllister, & Duffy, 2017). Therefore, it is not surprising that newcomers who enjoy high-quality relationships with their immediate supervisors and coworkers are found to display higher levels of task and role mastery, social integration, organizational commitment, and intention to remain (e.g., Bauer & Green, 1998; Jokisaari & Nurmi, 2009; Kammeyer-Mueller et al., 2013; Major, Kozlowski, Chao, & Gardner, 1995). For instance, Jokisaari and Nurmi (2009) found that a decline in PSS during the first two years following entry predicted a decrease in newcomers’ role clarity and job satisfaction.

The importance of the social context sensitizes newcomers to signals that allow them to evaluate the quality of their relationships with significant insiders (Korte, 2010). However, during the early stages of socialization, newcomers usually face high levels of uncertainty and lack first-hand knowledge of the behavioral tendencies and the trustworthiness of insiders (Bauer et al., 2007; Nifadkar, 2018). Fairness heuristic theory (Lind, 2001) argues that, in conditions of uncertainty, individuals face a basic and ubiquitous dilemma referred to as the *fundamental social dilemma*. On the one hand, they can achieve their goals and secure their self-identities by giving personal efforts and resources to a social group. On the other hand, when they join a group, they cede authority to others, and this entails limitations of freedom and the inherent risk of exploitation and rejection. The theory suggests that, when facing this dilemma, individuals use readily available fairness information to postulate about the benevolence and trustworthiness of significant others, and then decide whether they can cooperate while protecting themselves from possible identity harm. Fair partners are perceived as valuable sources of support and suitable targets for subsequent interactions (Colquitt et al., 2013). Therefore, it is likely that newcomers use signs of relational fairness as a means to cope with entry uncertainty and to gauge the quality of their relationships with their supervisors and coworkers (Lind, 2001).

Perceptions of relational justice include an *interpersonal* facet, defined as the perceived fairness of treatment one receives in terms of politeness, dignity, and respect, and an *informational* facet, defined as the perceived fairness of explanations and social accounts concerning decision-making procedures (Bies, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Furthermore, the multi-foci approach of organizational justice (Lavelle, Rupp, & Brockner, 2007) suggests that employees develop distinct perceptions about the fairness of different foci such as the organization, supervisors, and coworkers. In particular, they assess supervisory justice based on both interpersonal and informational aspects (Bies, 2001), whereas coworker-referenced justice is mostly interpersonal in nature, as coworkers are less formally involved in the implementation of decision-making procedures and the provision of subsequent social accounts and explanations (De Cremer, 2002; Lavelle, McMahan, & Harris, 2009). During socialization, fair treatment from supervisors and coworkers carries relevant heuristics that newcomers may use to infer perceptions of social support. As noted earlier, high-quality relationships and repeated interactions with these insiders enhance adjustment. Perceptions of supervisor and coworker support are thus likely to mediate the positive effects of relational fairness on newcomer learning and social integration.

Alongside these relational processes, newcomer socialization is also shaped by organizations’ formal practices, including orientation programs, training, mentoring, and company-sponsored social events. Such practices are aimed at fulfilling newcomers’ informational needs, structuring their experiences, and molding their role orientation (Ashforth, Saks, & Lee, 1997; Bauer et al., 2007). Van Maanen and Schein (1979) posited that six bipolar tactics characterize the structural side of socialization: (1) *collective-versus-individual* and (2) *formal-versus-informal* tactics deal with the context of socialization and capture the extent to which newcomers go through common, standardized learning experiences while being formally segregated from other organizational members; (3) *sequential-versus-random* and (4) *fixed-versus-variable* tactics capture the content of information newcomers receive, including whether they are provided with an explicit sequence of stages and a fixed timetable leading to the target role; and (5) *serial-versus-disjunctive* and (6) *investiture-versus-divestiture* tactics pertain to the social aspects of socialization, and describe the extent to which experienced insiders formally serve as role models and provide acceptance to newcomers’ identity and personal characteristics.

Jones (1986) further proposed that each of these tactics could be categorized as either *institutionalized* (i.e., collective, formal, sequential, fixed, serial, investiture) or *individualized* (i.e., individual, informal, random, variable, disjunctive, divestiture). Institutionalized socialization tactics reflect a systematic and planned set of practices that provide newcomers with information and guidelines in order to reduce entry uncertainty and favor custodial role orientation (Ashforth & Saks, 1996). Individualized tactics, conversely, are unsystematic and give each newcomer a unique set of experiences that are largely informal, allow heterogeneity, and produce innovative role orientations (Jones, 1986). In general, scholars have argued that, when newcomers perceive socialization tactics as institutionalized, they feel supported by the organization, cope better with uncertainty, and achieve enhanced task and role mastery, identification, social integration, and job satisfaction (e.g., Bauer et al., 2007; Saks, Uggerslev, & Fassina, 2007; Zhu, Tatachari, & Chattopadhyay, 2017).

In addition to their direct effects on adjustment, organizational socialization tactics set the context in which the day-to-day interactions between newcomers and insiders are embedded (Miller & Jablin, 1991). By structuring newcomers’ experiences and fulfilling in part their informational needs, organizational programs can amplify or restrict the beneficial effects of supervisors’ and coworkers’ socializing efforts. In this paper, we propose that the nature of these interactions depends on the socialization domain under consideration. We argue that institutionalized tactics reinforce the positive indirect effects of supervisory- and coworker-referenced fairness through perceptions of social support (PSS and PCS, respectively) on newcomer role clarity considered a learning outcome, while acting as a substitute buffering these effects on social integration considered an assimilation outcome. Because we are interested in how the roles of the organizational system and individual insiders combine to shape newcomer socialization, we expect these moderations to specifically alter the relationships between perceptions of support and adjustment outcomes.

## 2.1 | Interactive effects on role clarity

Understanding the perimeter of responsibilities and authority, the expectations and appropriate behaviors associated with their jobs is an important facet of newcomers’ socialization (Bauer et al., 2007). The learning path leading to role clarity is paved by multiple messages newcomers receive both from individual insiders (supervisors and coworkers) and the organizational system. Supervisors have formal authority over assignments, act as role models, and provide newcomers with day-to-day information on what is expected from them (Jokisaari & Nurmi, 2009), while peers are a source of sense-making and role clarification, because they share similar frames of reference (Korte, 2010). At a broader level, organizational tactics provide newcomers with cues concerning formal procedures and guidelines, the organization’s structure and values, and how their roles relate to members from other units and departments (Van Maanen & Schein, 1979).

Cue consistency theory (Brehmer, 1972; Maheswaran & Chaiken, 1991; Slovic, 1966) suggests that individuals rely on cues from different sources and assess their consistency to make sense of their environment and adopt specific beliefs, attitudes, and behaviors. When these cues are consistent, they integrate their values and informational content, and use them jointly to construct situational representations (Slovic, 1966). However, when the cues are inconsistent, individuals tend to experience a negative bias that leads them to assign more weight to the less favorable cue(s) (Anderson, 1981). Thus, messages conveyed by different contextual cues are more impactful in terms of knowledge acquisition and judgment formation when they are congruent.

For newcomers, institutionalized tactics reflect a structured socialization process and signify that the organization is willing to invest in them, thus conveying reassuring guidelines and messages about their ability to successfully perform their new roles (Allen & Shanock, 2013; Bauer et al., 2007). These cues corroborate those of care and goodwill expressed by supervisors’ and coworkers’ fair treatment and psychological support. As learning entails a cognitive process that is influenced by cue configurations (Brehmer, 1972), consistency between the organization’s and insiders’ messages is likely to benefit newcomer role clarity. Conversely, individualized socialization tactics may be perceived as unfair because of their lack of consistency over time and across situations (Leventhal, 1980). They also reflect an absence of structure and indicate that the organization disengages from the socialization process (Saks et al., 2007). Consequently, individualized tactics communicate negative cues that contradict insiders’ fairness and support. Because newcomers might experience a negative bias when facing inconsistent cues (Anderson, 1981), it is plausible that individual socialization tactics lessen, or even negate, the positive effects of insiders’ support on newcomers’ learning outcomes, including role clarity.

In line with cue consistency theory (Maheswaran & Chaiken, 1991; Slovic, 1966), we therefore argue that the role-related cues stemming from institutionalized socialization tactics are more consistent with and complementary to fair and supportive interactions with insiders, as compared to individualized tactics. Accordingly, we expect the positive effects of PSS and PCS on role clarity to be stronger when the socialization tactics are institutionalized, resulting in synergistic interactions (Cohen, Cohen, West, & Aiken, 2003) between organizational socialization tactics and the indirect effects of supervisory- and coworker-referenced justice on newcomer role clarity.

Hypothesis 1. Organizational socialization tactics moderate the indirect effects of supervisory (a) interpersonal justice and (b) informational justice on newcomer role clarity via PSS such that the effect of PSS on role clarity is stronger when the tactics are institutionalized.

Hypothesis 2. Organizational socialization tactics moderate the indirect effect of coworker-referenced interpersonal justice on newcomer role clarity via PCS such that the effect of PCS on role clarity is stronger when the tactics are institutionalized.

## 2.2 | Interactive effects on social integration

Assimilation represents another key process leading to successful socialization (Fang et al., 2011). Feelings of *social integration*, defined as perceived approval from and identification with one’s workgroup, were found to predict newcomer performance, job satisfaction, organizational commitment, and turnover (Bauer et al., 2007). Coworkers and supervisors play an important role in shaping newcomers’ social integration (Kammeyer-Mueller & Wanberg, 2003). In particular, respectful and candid treatment (i.e., interpersonal justice) and the provision of timely and honest explanations (i.e., informational justice) signal to newcomers that they are supported, attractive, and valuable members of the workgroup (Korte, 2010; Tyler & Blader, 2003). This is because relational fairness and support are usually considered discretionary behaviors reflective of the target status and likeability (Bies, 2001). This positive socioemotional message triggers newcomers’ positive emotions and activates an interdependent self-identity (Zhu et al., 2017).

Newcomers’ interactions with insiders take place within the context of broader organizational socialization programs (Liden et al., 2004; Miller & Jablin, 1991). We argue that the positive effects of supervisory- and coworker-referenced justice and support on social integration are weaker when the organization uses institutionalized tactics, for two reasons. First, institutionalized tactics enable newcomers to establish ties with various insiders from different departments and hierarchical levels, thus enhancing their social network range and status and giving them access to valuable social capital (Fang et al., 2011). For instance, serial and investiture tactics facilitate the development of being accepted amongst newcomers because of interactions with experienced insiders other than their direct coworkers and supervisors (Allen, 2006; Jones, 1986). Also, fixed and sequential tactics usually entail training activities in which instructors and other newcomers can act as sources of support and self-validation (Fang et al., 2011). Thus, institutionalized tactics provide newcomers with alternative opportunities to feel accepted, reducing their need to rely on their direct supervisors’ and coworkers’ behaviors as sole indicators of their social integration. Alternatively, these proximal insiders are the main, if not the unique, sources of self-validation and social approval when the organization relies on individualized tactics (Liden et al., 2004).

Second, institutionalized socialization tactics may lessen the extent to which newcomers view fair and supportive treatment as discretionary and indicative of their personal worth and standing. Social information processing theory (Salancik & Pfeffer, 1978) argues that context influences individuals through providing cues about the attitudes and behaviors that are considered appropriate, normal, or meaningful in a given situation. Individuals rely on these social cues to make sense of their environment, direct their own behaviors, and evaluate others’ conduct. In particular, employees create mental representations of others’ behaviors as indicative of the norms and values of the organization (Yam, Christian, Wei, Liao, & Nai, 2018), symbolizing “the way things are around here” (Zohar & Luria, 2004, p. 322). Institutionalized tactics require insiders to provide validation, support, and acceptance systematically to all newcomers as part of their formal role (Saks et al., 2007). This may indicate to newcomers that such supportive behavior is a common duty of every insider and thus does not reflect much about their own value or attractiveness. In other words, institutionalized tactics convey the message that supporting newcomers is “the way things are done in this organization”, rather than a deliberate and directed effort to reward their personal characteristics. Consequently, newcomers may assign less importance to signs of support from their direct supervisors and coworkers as an indication of their social integration. Conversely, under individualized tactics, insiders’ behaviors are more likely to be seen as discretionary and meaningful, thus reflecting the newcomer’s social inclusion. Therefore, we expect institutionalized socialization tactics to reduce the positive effects of PSS and PCS on newcomer assimilation, resulting in substituting interactions (Gardner, Harris, Li, Kirkman, & Mathieu, 2017) between organizational socialization tactics and the indirect effects of supervisory- and coworker-referenced justice on social integration.

Hypothesis 3. Organizational socialization tactics moderate the indirect effects of supervisory (a) interpersonal justice and (b) informational justice on newcomer social integration via PSS such that the effect of PSS on social integration is weaker when the tactics are institutionalized.

Hypothesis 4. Organizational socialization tactics moderate the indirect effect of coworker-referenced interpersonal justice on newcomer social integration via PCS such that the effect of PCS on social integration is weaker when the tactics are institutionalized.

# 3 | Methods

## 3.1 | Participants and procedure

We collected data over three measurement occasions from newcomers to a variety of organizations in France. Initially, 1,120 new graduates gave their consent to participate in a longitudinal study about work attitudes, and provided contact information (i.e., e-mail and postal addresses) prior to graduation. Subsequently, we contacted participants who had held a full-time job for approximately three months and invited them to respond to a web-based survey (Time 1). At Time 1, 362 out of 1,120 responded to the first survey, representing a response rate of 32.3%, which is comparable to previous studies on graduate socialization (Ashforth, Sluss, & Saks, 2007; Ashforth & Saks, 1996; Smith, Gillespie, Callan, Fitzsimmons, & Paulsen, 2017). Three months later (Time 2), 304 participants completed another web-based survey. At Time 3 (three months after Time 2), 254 usable surveys were completed, providing an overall response rate of 22.7%. No incentives were given to participants in this study. The time-lagged design allowed for temporal precedence, with the independent variables measured at Time 1, the mediator and second-stage moderator measured at Time 2, and the dependent variables measured at Time 3. Moreover, time separation is an important procedural remedy for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

We excluded 35 participants who had changed employers or supervisors between Time 1 and Time 2, or between Time 2 and Time 3. All analyses were based on the final sample of 219 newcomers who responded to all three surveys and had not changed employers or supervisors between Time 1 and Time 3. Among these participants, 33.3% worked in large organizations (comprising over 1,000 employees), 30.1% in medium-sized organizations (100–1,000 employees), and 36.6% in small organizations (fewer than 100 employees). 182 respondents provided additional details about the organization in which they work and about their occupation suggesting that our sample represents a wide range of organizations and occupations. Overall, based on our sampling strategy and the diversity of their organizations and occupations, we are confident that respondents are not nested within organizations, teams or supervisors. Of the respondents, 53% were female; 82.7% were business school graduates and 17.3% were engineering graduates. The average age at Time 1 was 24.72 years old (*SD* = 2.39), and, at Time 3, the average organizational tenure was 321.04 days (*SD* = 74.43).

## 3.2 | Measures

We translated all items into French using a standard translation-back-translation procedure (Brislin, 1980), and used a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) for all items. Complete scales are provided in the Appendix.

### 3.2.1 | Supervisory interpersonal and informational justice (Time 1)

We used Colquitt’s (2001) scales to assess newcomers’ perceptions of supervisory interpersonal and informational justice at Time 1. We measured *interpersonal justice* with four items (e.g., “My new supervisor treats me with dignity”; Cronbach’s α = .90) and we used five items to measure *informational justice* (e.g., “My new supervisor is candid in his/her communication with me”; Cronbach’s α = .88).

### 3.2.2 | Coworker-referenced interpersonal justice (Time 1)

We focused on the interpersonal facet of justice, as interactions between coworkers are mostly personal and because coworkers are less formally involved in the implementation of decision-making procedures and the provision of subsequent explanations (De Cremer, 2002; Lavelle et al., 2009). To assess newcomers’ perceptions of *coworker-referenced interpersonal justice*, we adapted four items from Colquitt’s (2001) scale to capture the perceived quality of interpersonal treatment received from coworkers. A sample item was “My new coworkers treat me in a polite manner.” The coefficient alpha for this scale was .91.

### 3.2.3 | PSS (Time 2)

To assess newcomers’ perceptions of supervisor’s support at Time 2, we adapted the seven items of the perceived organizational support scale (Eisenberger, Huntington, Hutchison, & Sowa, 1986), following that of Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades (2002). We replaced the word *organization* with the term *supervisor*. A sample item was “My new supervisor values my contributions to the organization’s well-being.” The coefficient alpha for this scale was .89.

### 3.2.4 | PCS (Time 2)

We used the seven items of the perceived organizational support scale (Eisenberger et al., 1986, 2002), but rephrased them so that they directly referred to coworkers instead of the organization. A sample item was “My new coworkers really care about my well-being.” The coefficient alpha for this scale was .89.

### 3.2.5 | Organizational socialization tactics (Time 2)

We used 17 items from Jones’s (1986) 30-item scale that measures newcomers’ perceptions of organizational socialization. We assessed sequential versus random, fixed versus variable, serial versus disjunctive, and investiture versus divestiture tactics. We did not measure collective versus individual or formal versus informal tactics because of space limitations. Also, meta-analytic findings suggest that these tactics were found to be the weakest predictors of socialization outcomes (Saks et al., 2007). We relied on individuals’ perceptions to assess socialization tactics, as previous research found that it is newcomers’ perceptions, reflecting how they “interpret and respond” (Jones, 1986, p. 263) to the tactics, rather than the tactics per se (considered objectively) that influence the socialization process (Allen & Shanock, 2013; Ashforth et al., 2007; Van Maanen & Schein, 1979).

Since we focused on the overall effect of socialization practices, we did not formulate differential predictions for each facet, but, rather, considered organizational socialization tactics as a single factor ranging from individualized to institutionalized. Consistent with prior studies, we used a composite and unidimensional measure of organizational socialization tactics (Gruman et al., 2006; Jones, 1986; Kim et al., 2005). Higher scores indicate greater institutionalized socialization. Sample items were “The way in which my progress through this organization will follow a fixed timetable of events has been clearly communicated to me” and “I have been generally left alone to discover what my role should be in this organization” (reverse scored). The coefficient alpha for this scale was .90.

### 3.2.6 | Newcomers’ role clarity and social integration (Time 3)

Following Jokisaari and Nurmi (2009), we measured the socialization outcomes at Time 3. To measure *role clarity*, we used four items from Rizzo, House, and Lirtzman’s (1970) role ambiguity scale (e.g., “I know exactly what is expected of me”; Cronbach’s α = .80). We used four items from the scale developed by Chao et al. (1994) to measure *social integration*. A sample item was “I am pretty popular in this organization” (Cronbach’s α = .74).

### 3.2.7 | Controls

Recent literature has emphasized the importance of carefully selecting control variables and giving a sound rationale for their inclusion (Becker et al., 2016; Bernerth & Aguinis, 2016). Thus, we controlled for several variables that potentially confound role clarity and social integration. Specifically, we controlled for *proactive personality*, because proactive newcomers are more likely to engage in information-seeking, feedback-seeking, and relationship-building behaviors that allow them to reduce uncertainty and achieve higher levels of learning and assimilation (Crant, 2000; Kammeyer-Mueller & Wanberg, 2003). We measured proactive personality using six items from a shortened version of Bateman and Crant’s (1993) scale. A sample item was “I am always looking for better ways to do things” (Cronbach’s α = .71). Furthermore, studies by Major and Kozlowski (1997) and Wanberg and Kammeyer-Mueller (2000) suggest that *task interdependence* may facilitate social integration by increasing the opportunities newcomers have to interact with insiders. Therefore, we controlled for task interdependence, measured at Time 1, using a five-item scale developed by Major and Kozlowski (1997) (e.g., “I have to work with my workgroup to get my job done”; Cronbach’s α = .80). We also controlled for newcomers’ perceptions of *distributive and procedural justice* because dimensions of organizational justicetend to be highly correlated with one another (Colquitt et al., 2001). Moreover, the group engagement model (Tyler & Blader, 2003) suggests that both procedural and distributive justice shape individuals’ identity judgments and their feelings of belongingness. At Time 1, we measured distributive justice using four items from Colquitt’s (2001) scale (e.g., “My outcomes reflect the effort I have put into my work”; Cronbach’s α = .92). We used seven items from Colquitt (2001) to control for perceptions of procedural justice (e.g., “In my new organization, procedures are applied consistently”; Cronbach’s α = .83). We also considered newcomers’ *gender*, *age*, and *organizational tenure* as potential controls, as they tend to be associated with socialization outcomes (Kim et al., 2005; Smith et al., 2017). Finally, we considered *organization size* as a potential control variable, as previous research has shown that institutionalized socialization tactics are more likely to be used in larger organizations (Jones, 1986), which may indirectly influence the exposure of newcomers to socialization tactics. The demographics (i.e., gender, age, and tenure) and organization size did not exhibit significant correlations with our independent, mediating, moderating, or dependent variables. Thus, their inclusion did not alter the results of any of our hypotheses tests. We also followed the recommendations of Carlson and Wu (2012) and omitted the control variables that had no significant effect from our model testing (analyses including them are available upon request).

# 4 | Analyses and results

## 4.1 | Attrition analyses

To determine if subject attrition led to nonrandom sampling, we used a multiple logistic regression to test whether the probability of remaining in the sample at Time 3 was predicted by Time 1 and Time 2 variables (Goodman & Blum, 1996). The criterion was a dummy-coded variable that classified respondents as stayers or leavers, and the predictors were the Time 1 and Time 2 independent variables and controls. The results were nonsignificant for the attrition between Time 1 and Time 2, χ2(8) = 11.566, *p* = .172 (*ns*), but proactive personality and supervisory interpersonal justice were associated with an increased probability of responding at Time 2. The results were nonsignificant for the attrition between Time 2 and Time 3, χ2(8) = 7.951, *p* = .438 (*ns*), and none of the variables were significant. Furthermore, the results of the *t* tests also showed no significant mean differences in newcomers’ demographics. Taken together, these results suggest that, in general, the newcomers who dropped out from the study did so randomly.

## 4.2 | Confirmatory factor analyses

Prior to testing hypotheses, we conducted a series of confirmatory factor analyses to establish the convergent and discriminant validity of our variables. We assessed the fit of our data to a measurement model using Mplus Version 8 (Muthén & Muthén, 2017). In order to avoid under-identification and create a more parsimonious model (Little, Rhemtulla, Gibson, & Schoemann, 2013), we constructed parcels of items for proactive personality, procedural justice, PSS, PCS, and organizational socialization tactics. The items for the other variables of our model (e.g., supervisory interpersonal and informational justice, coworker-referenced interpersonal justice) were not parceled. Parceling improves the indicator-to-sample size ratio, leads to lower likelihood of distributional violations, decreases sources of sampling errors, and reduces potential biases that can affect parameter estimates and model fit when the ratio of subject to item is low (Little et al., 2013; Matsunaga, 2008). If we used all the original items (*N* = 219), the 3:1 subject-to-item ratio would be lower than the acceptable lower-bound limit of 5:1 (Bandalos, 2002). Moreover, parceling is appropriate in our case as we are interested in investigating latent relationships between constructs and thus item variance is not a question of interest (Little et al., 2013). As some of our constructs have facets and in order to reduce the risk of concealing the multidimensional factor structure (Bandalos, 2002), the constructs were modeled using facet-based parcels (Hall, Snell, & Foust, 1999; Little et al., 2013). Following previous research (e.g., Allen & Shanock, 2013; Saks et al., 2007), we created four-facet-based parcels (i.e., sequential vs. random, fixed vs. variable, serial vs. disjunctive, and investiture vs. divestiture) for socialization tactics (Little et al., 2013). We used the factorial algorithm (i.e., item-to-construct balance) procedure to create the parcels for the parceled variables in our model (Little, Cunningham, Shahar, & Widaman, 2002). This procedure spreads the highest and lowest loading items across parcels in order to equally balance parcels with regard to discrimination and difficulty (Little et al., 2002).

The hypothesized model included 12 factors (i.e., proactive personality, task interdependence, distributive justice, procedural justice, supervisory interpersonal justice, supervisory informational justice, coworker-referenced interpersonal justice, PSS, PCS, organizational socialization tactics, role clarity, and social integration). Examination of modification indices suggested correlated uniquenesses between items 3 and 4 from the role clarity scale and items 1 and 4 from the task interdependence scale; all other error terms were independent. A revised model was estimated, which incorporated these modifications, resulting in satisfactory model fit: χ2(877) = 1352.29, *p* < .001, SRMR = .068, CFI = .91, RMSEA = .050. The CFA results shown in Table 1 provide evidence (based on chi-square difference tests) that this model fit better than a series of alternative models in which one or more of the factor correlations were constrained to one (*p* < .001 for all). Moreover, all items loaded on their respective predicted factors, and the factor loadings were all acceptable and statistically significant. Therefore, these results support the distinctiveness of the 12 constructs in this study.

<Insert Table 1 about here>

## 4.3 | Hypotheses testing

Table 2 summarizes the means, standard deviations, and zero-order correlations among the variables used to test our hypotheses. All internal consistency estimates (Cronbach’s alpha) exceeded the minimum value of .70 recommended for research purposes.

<Insert Table 2 about here>

Our hypotheses combine mediating and moderating effects (Hayes, 2017; Sardeshmukh & Vandenberg, 2017). Taking into account the complexity of our model and the sample size, we used a regression-based moderated path analysis, following the procedure of conditional process modeling and employing nonlinear bootstrapping (Hayes, 2017; Hayes & Preacher, 2013), consistent with the procedures recommended by Edwards and Lambert (2007) and Preacher, Rucker, and Hayes (2007) to test moderated mediation models. Conditional process modeling was used to estimate the mechanism by which supervisory interpersonal justice and informational justice would affect newcomers’ role clarity and social integration through PSS, and the mechanism by which coworker-referenced interpersonal justice would influence newcomers’ role clarity and social integration via PCS. It also evaluated how the size of direct, indirect, and total effects of interpersonal justice, informational justice, and coworker-referenced interpersonal justice on socialization outcomes varies based on the values of organizational socialization tactics as a moderator (Hayes & Preacher, 2013). We used a bootstrap approach (10,000 resamples) to establish 95% bias-corrected confidence intervals (CIs) to test for the significance of the indirect effects that are also modeled across levels of a hypothesized moderator. As shown in Figure 1, the predictors (supervisory interpersonal justice, informational justice, and coworker-referenced interpersonal justice at Time 1) were related to the outcomes (newcomers’ role clarity and social integration measured at Time 3) through mediating variables (PSS and PCS measured at Time 2), and moderated by a third variable (organizational socialization tactics measured at Time 2). Hence, the model integrates some kind of “causal chain” of effects (intermediary variables) with one boundary condition (the moderating variable or interaction effect). We directly tested the process model using the PROCESS v3.0 macro developed by Hayes (2017). Standardized variables were used to facilitate the interpretation of the results (Aiken & West, 1991). Precisely, we used Model 15 to test our moderated mediation hypotheses to provide a clean estimate of the role of organizational socialization tactics in moderating the mediating relationship, above and beyond any direct moderating effect it may have on the direct effects of supervisory and coworker-referenced justice on newcomer role clarity and social integration as predicted by the literature (Lind, 2001). In none of the tests were the conditional direct effects significant. [[1]](#footnote-1)

Hypothesis 1 predicted that organizational socialization tactics would moderate the indirect positive relationships between supervisory justice and newcomers’ role clarity through PSS. We first examined the moderated mediation model with supervisory interpersonal justice as the independent variable. As shown in Table 3, the PSS × organizational socialization tactics interaction is positively and significantly related to role clarity, *b* = .229, *SE* = .067, *p* < .001, 95% CI [0.096, 0.361]; Δ*R*2 = .037, Δ*F*(1, 212) = 11.595. The index of moderated mediation (*IMM*), a formal test of moderated mediation (Hayes, 2015), is also significant, *IMM =* .071, *SE* = .032, 95% CI [0.022, 0.145]. As the CI does not include zero, and the lower bound is positive, we infer that the indirect effect of supervisory interpersonal justice on role clarity through PSS is positively moderated by organizational socialization tactics. Any two conditional indirect effects estimated at different levels of organizational socialization tactics are significantly different from each other. Yet, Yzerbyt, Muller, Batailler, and Judd (2018) recently showed the misconceptions of relying solely on this single index and recommended the use of the joint-significance method, which “constitutes the best compromise between Type I error rate and power” (p. 940). Therefore, following this recommendation, we also evaluated the statistical significance of both coefficients making up the index: the effect of PSS on role clarity, *b* = .316, *SE* = .052, *p* <.001, 95% CI [0.212, 0.420], and the effect of PSS × organizational socialization tactics interaction on role clarity, *b* = .229, *SE* = .067, *p* < .001, 95% CI [0.096, 0.361]. Yzerbyt et al. (2018) further advised that “a conditional indirect effect would be supported only when both coefficients are found to be different from zero” (p. 938).

In line with methodological recommendations (Gardner et al., 2017), and to understand the form of the significant interactions, we used the Johnson–Neyman technique, also called a *floodlight analysis* (Hayes, 2017; Hayes & Matthes, 2009; Hayes & Rockwood, 2017; see also Johnson & Neyman, 1936), which analytically derives the *regions of significance* for the conditional effect of socialization tactics, providing the precise values within the range of the moderator where the indirect relation between supervisory interpersonal justice and role clarity, via PSS, is statistically different from zero and where it is not (Gardner et al., 2017). As shown in Figure 2, we found a positive significant indirect effect of supervisory interpersonal justice on role clarity through PSS, for non-centered 5-point socialization tactics values higher than 2.348. This value is a point of transition between a nonsignificant and a statistically significant indirect effect of supervisory interpersonal justice on role clarity through PSS. Therefore, Hypothesis 1a was supported.

<Insert Table 3 about here>

<Insert Figure 2 about here>

We next examined the moderated mediation model with supervisory informational justice as the independent variable. Results were comparable (see Table 4). The PSS × organizational socialization tactics interaction was positively and significantly related to role clarity, *b* = .199, *SE* = .077, *p* = .011, 95% CI [0.045, 0.352]; Δ*R*2 = .021, Δ*F*(1, 212) = 6.523. The *IMM* is also significant, *IMM =* .089, *SE* = .036, 95% CI [0.024, 0.165]. In addition, and in line with Yzerbyt et al.’s (2018) recommendations, the effect of PSS on role clarity was also significant, *b* = .326, *SE* = .055, *p* <.001, 95% CI [0.217, 0.436]. Using the Johnson–Neyman technique (Hayes, 2017; Hayes & Rockwood, 2017), regions of significance showed that, for non-centered 5-point socialization tactics values above 2.311, the indirect positive relation between supervisory informational justice and role clarity through PSS becomes significant (see Figure 3). This provides support for Hypothesis 1b.

<Insert Table 4 about here>

<Insert Figure 3 about here>

Hypothesis 2 predicted that organizational socialization tactics would moderate the indirect relationship between coworker-referenced interpersonal justice and newcomers’ role clarity through PCS. As shown in Table 5, the PCS × organizational socialization tactics interaction is not significantly related to role clarity, *b* = .057, *SE* = .076, *p* = .456 (*ns*), 95% CI [−0.093, 0.207]; Δ*R*2 = .002, Δ*F*(1, 212) = 0.556. In addition, the *IMM* is nonsignificant, *IMM* = .039, *SE* = .053, 95% CI [−0.076, 0.140]. Thus, Hypothesis 2 was not supported.

<Insert Table 5 about here>

Hypothesis 3 predicted that organizational socialization tactics would moderate the indirect positive effects of supervisory justice on newcomer social integration via PSS such that the effects would be weaker when the tactics were institutionalized. Results are displayed in Table 3 for supervisory interpersonal justice and in Table 4 for supervisory informational justice as, respective independent variables. Hypothesis 3 was not supported, as the PSS × organizational socialization tactics interaction is not significantly related to social integration: *b* = .036, *SE* = .077, *p* = .648 (*ns*), 95% CI [−0.117, 0.188]; Δ*R*2 = .001, Δ*F*(1, 212) = 0.208, and *b* = −.027, *SE* = .089, *p* = .762 (*ns*), 95% CI [−0.204, 0.150]; Δ*R*2 = .001, Δ*F*(1, 212) = 0.092, for either supervisory interpersonal justice or informational justice respectively. Moreover, the *IMM* is nonsignificant, *IMM* = .011, *SE* = .036, 95% CI [−0.048, 0.096], and *IMM* = −.012, *SE* = .052, 95% CI [−0.115, 0.091], for supervisory interpersonal justice and informational justice respectively.

According to Hypothesis 4, organizational tactics will moderate the indirect positive effect of coworker-referenced interpersonal justice on newcomers’ social integration through PCS such that the effect will be weaker when the tactics are institutionalized. As shown in Table 5, the PCS × organizational socialization tactics interaction is negatively and significantly related to social integration, *b* = –.185, *SE* = .080, *p* = .021, 95% CI [−0.343, −0.028]; Δ*R*2 = .019, Δ*F*(1, 212) = 5.381, *p* = .021. Although this finding is supportive of Hypothesis 4, the 95% CI around the *IMM* is almost entirely negative but straddles zero, *IMM* = −.129, *SE* = .067, 95% CI [−0.240, 0.025]. However, following the recommendation of Yzerbyt, et al. (2018), we evaluated the statistical significance of both coefficients making up the index: the effect of PCS on social integration, *b* = .132, *SE* = .067, *p* = .050, 95% CI [0.001, 0.265], and the effect of PCS × organizational socialization tactics interaction on social integration, *b* = –.185, *SE* = .080, *p* = .021, 95% CI [−0.343, −0.028]. Thus, the conditional indirect effect is supported as both coefficients are different from zero. We formally probed this interaction by using the Johnson–Neyman technique (Hayes, 2017; Hayes & Matthes, 2009). As shown in Figure 4, regions of significance showed that, for non-centered 5-point socialization tactics scale, the indirect relation between coworker-referenced interpersonal justice and social integration through PCS is significant below 3.167 and nonsignificant above this value. This provides support for Hypothesis 4.

<Insert Figure 4 about here>

# 5 | Discussion

Learning and assimilation are two critical processes that shape newcomer socialization (Bauer et al., 2007; Ostroff & Kozlowski, 1992). Prior research has focused on the direct effects of insiders’ behavior and organizational tactics (e.g., Bauer & Green, 1998; Jokisaari & Nurmi, 2009; Kammeyer-Mueller & Wanberg, 2003; Saks et al., 2007) and has failed to reach a consensus on how and when these factors interact to produce synergistic or substitutive effects (e.g., Kim et al., 2005; Lee et al., 2013; Liden et al., 2004). We argued that the pattern of interaction between relational and structural antecedents depends on the socialization domain considered. More precisely, our study shows that institutionalized socialization tactics strengthen the indirect positive effects of supervisory interpersonal and informational justice on role clarity (a learning outcome), through PSS. Concurrently, institutionalized tactics act as a substitute that weakens the indirect positive effect of coworker-referenced interpersonal justice on social integration (an assimilation outcome), through PCS.

These findings add to the socialization literature in the following three ways. First, in line with previous research (Kammeyer-Mueller & Wanberg, 2003; Ostroff & Kozlowski, 1992), our study helps to disentangle the effects of various socializing agents on adjustment. In particular, our findings suggest that newcomers’ role clarity is primarily shaped by the interaction between their direct supervisors’ support and organizational socialization tactics, while their social integration is mostly the product of the interplay between their peers’ support and the formal organizational tactics. Differentiating between the effects of various socializing agents is useful because it helps organizations identify which insiders are the most effective when it comes to leveraging newcomers’ learning versus assimilation. Second, this is one of the first studies to examine justice as a mean by which insiders influence newcomer adjustment. Socialization is a period in which newcomers experience high uncertainty and a reality shock (Nifadkar, 2018). Fairness heuristics theory (Lind, 2001) predicts that, under such conditions of uncertainty, individuals rely on perceived fairness to surmise the benevolence of significant others and to guide their subsequent attitudes and behaviors. Correspondingly, our results suggest that newcomers use their evaluations of supervisory- and coworker-referenced justice to infer perceptions of social support, and enhance their role clarity and social integration. This finding contributes to the much needed exploration of the role of the social context during socialization (Batistič & Kaše, 2015) by introducing justice perceptions as a way to characterize the effects of social context on adjustment, and explaining how (i.e., through perceptions of support) and when (i.e., depending on the institutionalization of organizational tactics) these perceptions shape newcomer adjustment.

Third, our study offers a nuanced understanding of the interactions between relational and structural factors during socialization. The use of institutionalized tactics does not always produce synergetic interactions with the relational drivers of adjustment: while it strengthens the beneficial effect of supervisory support on role clarity, it weakens the positive effect of coworkers’ support on social integration. This helps reconcile prior contradictory findings (e.g., Kim et al., 2005; Lee et al., 2013) by suggesting that formal organizational programs and informal relationships with insiders might combine in different and even opposing ways depending on the socialization domain (learning vs. assimilation). On the one hand, when it comes to learning their roles, newcomers seem to integrate information from their supervisors’ behavior and from the organization, in accordance with the predictions from cue consistency theory (Slovic, 1966). The consistency and complementarity between these two socializing forces benefits the level of role clarity for newcomers. De Roeck and Farooq (2018) empirically demonstrated the effect of congruence between leader ethicality and corporate social responsibility which generated synergistic interactions fostering employees’ identification. Our study extends this finding by suggesting that the same rationale applies to newcomer learning which is enhanced by consistent cues from the organization and direct supervisors.

On the other hand, we found that the use of institutionalized tactics can exert unintentional negative effects by acting as a substitute hindering the capacity of coworkers to facilitate newcomer social integration. This is because institutionalized tactics provide newcomers with alternative opportunities to establish social ties and feel accepted (Allen, 2006; Fang et al., 2011) and convey social cues (Salancik & Pfeffer, 1978) that reduce the extent to which they view fair and supportive treatment as discretionary and indicative of their social standing. Therefore, socialization scholars and practitioners should be aware that, while institutionalized tactics have positive direct effects on newcomer assimilation (Allen, 2006; Saks et al., 2007), their extensive use may do harm by acting as a substitute limiting the beneficial effects of informal relational processes. From a practical standpoint, this suggests that, when it comes to newcomer assimilation, more institutionalization is not always better and organizations may need to find the right balance between formal practices and informal socialization. Whether this negative interaction encompasses a curvilinear relationship, indicating a “too-much-of-a-good-thing” effect (Pierce & Aguinis, 2013), such that once a tipping point is reached, the institutionalization of socialization tactics weakens coworkers’ ability to benefit newcomer social integration is a possibility. We opted to address this question through additional analyses. Using the quadratic term of socialization tactics as a moderator of the relationship between coworker support and social integration, we found that the effect of the quadratic effect is not significant: *b* = .133, *SE* = .069, 95% CI [−0.003, 0.270] suggesting that the “too-much-of–a-good-thing” effect did not occur here. Nonetheless, we recommend that future research investigate the specific dynamics, interactions and quadratic effects on the relationships between organizational and relational factors and each socialization domain..

## 5.1 | Practical implications

Our study provides insights for managers and organizations on how to socialize newcomers effectively. Research has shown that newcomers’ attitudes and beliefs are formed early (Ostroff & Kozlowski, 1992), highlighting the importance of instilling positive beliefs during the socialization period (Kammeyer-Mueller et al., 2013). We found that supervisory- and coworker-referenced fairness and support play an important role in shaping newcomers’ role clarity and social integration, respectively. Accordingly, organizations should promote social forms of fairness early in the socialization process. Managers and newcomers’ peers should be trained in the principles of interpersonal and informational fairness in order to portray support, communicate useful information and explanations to newcomers, and treat them with dignity and respect during the onboarding process (Skarlicki & Latham, 2005).

Onboarding is a costly investment that organizations need to optimize by maximizing its positive impact on newcomer productivity and retention (Snell, 2006). As they often have to reach compromises in terms of allocation of resources, managers should be able to make well-informed and efficient decisions that target the socialization domains where the use of institutionalized tactics generates the best return on investment. One way to do so is to consider the interplay between formal and informal antecedents of socialization (Bauer, 2011). A key finding of our study is that these interactions are synergetic in the case of newcomer role clarity, while substitutive in the case of social integration. Whereas learning seems to require complementary and coherent investments at the organizational (formal) and supervisory (relational) levels, assimilation might be a domain where organizations could supplant institutionalized socialization tactics if they encourage insiders (in particular, direct coworkers) to behave fairly and to provide support to newcomers. Investing in newcomer learning should thus be a priority. For instance, organizations could benefit from formally involving newcomers’ supervisors in learning-oriented socialization practices. As employees usually perceive supervisors as organizational representatives (Levinson, 1965), creating stronger and visible links between supervisors and institutionalized socialization tactics would improve newcomers’ perceptions of both supervisors’ and organizational support, which in turn would foster their role clarity. In a context where organizations “strive to identify business process improvements that generate real results” (Snell, 2006, p. 35), a fine-grained, domain-specific understanding of the interactions between formal and informal drivers of socialization helps in designing cost-effective and optimal onboarding programs.

## 5.2 | Limitations and directions for future research

The contributions of this research should be considered in light of its limitations. First, we relied on self-reported data, which could create common method bias. However, we used well-established and reliable scales and a time-lagged design, both of which should reduce concerns about common method variance (Podsakoff et al., 2003). Furthermore, previous research on socialization has contended that self-reports are valid sources of data (Ashforth et al., 2007). That said, future research could complement self-reported data (e.g., of newcomers’ outcomes) with alternative sources, such as supervisors, peers, or objective data.

Second, we used a time-lagged design with three separate time periods, which enhanced internal validity (Vancouver, Tamanini, & Yoder, 2010), yet our findings remain limited in terms of causal inference. Indeed, our measures of mediators (i.e., PSS and PCS) may have some endogeneity (Antonakis, Bendahan, Jacquart, & Lalive, 2010). We are thus unable to rule out the possibility that our results may be attributable to some unmeasured common cause, with a risk of biased estimates of these constructs (Antonakis et al., 2010; Clougherty, Duso, & Muck, 2016). From a theoretical perspective, we drew upon a relevant theoretical rationale to argue that the hypothesized conditional indirect effects were more likely to hold true. This reduced the risk of simultaneity and reverse causality (Antonakis et al., 2010). Methodologically, we captured predictors, mediators, moderator, and outcome variables, using reliable and valid measures, at separate points in time. Only experimentation or cross-lagged panel designs with repeated measures, or derived instrumental variables, allow inferring causality with certainty (Allen et al., 2017). However, our hypotheses were based on solid theory, thus limiting the probability of reverse causality.

Third, we measured only four of the six socialization tactics proposed by Van Maanen and Schein (1979). Although this choice was justified by previous meta-analyses (Saks et al., 2007), future studies should examine if collective and formal tactics (excluded here) operate like the tactics considered in this study. Fourth, because we focused on role clarity and social integration, we omitted other socialization outcomes such as task mastery and internalization of values (Chao et al., 1994). Future research should examine how structural and relational factors interact to shape these adjustment components. The rationale provided in this paper could help in this endeavor. For instance, we showed that role clarity benefits from consistency between the cues conveyed by institutionalized tactics and supervisory support. We would expect a similar pattern in the case of task mastery because it is also an outcome of the learning process. Finally, the sample in this study was relatively homogenous, consisting of graduates transitioning from university to their first full-time job. We introduced some diversity by including two distinct types of graduates (business and engineering) who worked in a variety of organizations. Nevertheless, our findings might not generalize to other populations such as experienced newcomers, blue-collar workers, or expatriates.

Our findings suggest that the extent to which supervisors and coworkers treat newcomers fairly and support them shapes their role clarity and social integration. Future research could examine the effects of fairness and support provided by other organizational insiders, such as mentors and other newcomers. Also, because the socialization process takes place at different levels (workgroup, department, division/unit, and organization), multilevel models are warranted (Allen et al., 2017; Batistič, & Kaše, 2015). For example, it would be fruitful to examine how unit-level phenomena such as justice climate (Whitman, Caleo, Carpenter, Horner, & Bernerth, 2012) interacts with individual-level perceptions to shape adjustment.

Examining how the interactions between organizational socialization tactics and insiders’ conduct affect newcomer role clarity and social integration constitutes a step forward toward an integrative model of socialization. Previous research has emphasized the interactions between newcomers’ proactive behaviors and organizational socialization tactics (e.g., Gruman et al., 2006); a promising avenue for future studies would be to examine three-way interactions between the organizational (e.g., socialization tactics, organizational structure), the individual (e.g., newcomers’ proactive behaviors, individual differences), and the relational (e.g., support from supervisors and coworkers) paths.

# 6 | Conclusion

Recent research emphasizes the benefits of adopting interactionist and integrative perspectives to socialization (Allen et al., 2017; Gruman et al., 2006). Overall, our study contributes to this line of research by clarifying the interactions between insiders’ behaviors (i.e., that of direct supervisors and coworkers) and organizational formal socialization practices. Our results suggest that institutionalized socialization tactics interact with supervisory fairness and support in a synergistic fashion to shape newcomer role learning, while it interacts with coworker-referenced fairness and support following a substitutive pattern to determine newcomer social integration.

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# Tables

**Table 1**. Results of Confirmatory Factor Analyses

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | **χ2** | ***df*** | **Δ *χ*2** | **Δ *df*** | **SRMR** | **CFI** | **RMSEA** |
| Hypothesized twelve-factor model | 1352.29\*\* | 877 | – | – | .068 | .91 | .050 |
| Eleven-factor models Combining supervisory interpersonal justice and supervisory informational justice | 1741.17\*\* | 888 | 388.88\*\* | 11 | .085 | .84 | .066 |
| Combining supervisory interpersonal justice and coworker-referenced interpersonal justice | 2036.81\*\* | 888 | 684.52\*\* | 11 | .085 | .79 | .077 |
| Combining supervisory informational justice and perceived supervisor support (PSS) | 1666.22\*\* | 888 | 313.93\*\* | 11 | .076 | .85 | .063 |
| Combining supervisory interpersonal justice and PSS | 1794.70\*\* | 888 | 442.41\*\* | 11 | .092 | .83 | .068 |
| Combining coworker-referenced interpersonal justice and perceived coworker support (PCS) | 1607.91\*\* | 888 | 255.62\*\* | 11 | .074 | .87 | .061 |
| Combining PSS and PCS | 1834.86\*\* | 888 | 482.57\*\* | 11 | .098 | .82 | .070 |
| Combining role clarity and social integration | 1456.56\*\* | 888 | 104.27\*\* | 11 | .070 | .89 | .054 |
| Ten-factor modelCombining supervisory interpersonal justice, supervisory informational justice, and coworker-referenced interpersonal justice | 2421.01\*\* | 898 | 1068.72 \*\* | 21 | .100 | .72 | .088 |
| Combining supervisory interpersonal justice, supervisory informational justice, and PSS | 2142.37\*\* | 898 | 790.08\*\* | 21 | .097 | .77 | .080 |
| Eight-factor model |  |  |  |  |  |  |  |
| Combining supervisory interpersonal justice, supervisory informational justice, coworker-referenced interpersonal justice, PSS, and PCS | 3163.69\*\* | 915 | 1811.40\*\* | 38 | .112 | .58 | .106 |
| One-factor model | 4396.37\*\* | 943 | 3044.08\*\* | 66 | .125 | .36 | .130 |

*Note*. *N* = 219. SRMR = standardized root-mean-square residual; CFI = comparative fit index; RMSEA = root-mean-square error of approximation.

\* *p* < .05; \*\* *p* < .01.

Table 2. Means, standard deviations, and zero-order correlations

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable  | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1. Gender (T1) | – | – | – |  |  |  |  |  |  |  |  |  |  |
| 2. Age (T2) | 25.13 | 2.38 | .05 | – |  |  |  |  |  |  |  |  |  |
| 3. Tenure (days) (T2) | 201.11 | 48.29 | –.02 | –.00 | – |  |  |  |  |  |  |  |  |
| 4. Organization size a (T1) | – | – | –.01 | –.01 | .14\* | – |  |  |  |  |  |  |  |
| 5. Proactive personality (T1) | 3.71 | 0.51 | –.09 | .03 | –.06 | –.01 | (.71) |  |  |  |  |  |  |
| 6. Task interdependence (T1) | 4.02 | 0.79 | .03 | –.01 | –.02 | .06 | .12 | (.80) |  |  |  |  |  |
| 7. Distributive justice (T1) | 3.25 | 0.91 | .05 | –.05 | .02 | –.02 | .14\* | .18\*\* | (.92) |  |  |  |  |
| 8. Procedural justice (T1) | 3.36 | 0.69 | .11 | .02 | –.03 | –.02 | .15\* | .20\*\* | .51\*\* | (.83) |  |  |  |
| 9. Supervisory interpersonal justice (T1) | 4.52 | 0.72 | .08 | –.12 | .02 | –.08 | –.01 | .13 | .44\*\* | .37\*\* | (.90) |  |  |
| 10. Supervisory informational justice (T1)  | 3.77 | 0.84 | .02 | –.14\* | .04 | –.07 | .09 | .15\* | .43\*\* | .51\*\* | .53\*\* | (.88) |  |
| 11. Coworker-referenced interpersonal justice (T1) | 4.51 | 0.64 | .15\* | –.05 | .11 | –.07 | –.03 | .18\*\* | .18\*\* | .21\*\* | .54\*\* | .22\*\* | (.91) |
| 12. Perceived supervisor support – PSS (T2) | 3.70 | 0.76 | .00 | –.01 | .11 | –.10 | .03 | .18\*\* | .27\*\* | .30\*\* | .29\*\* | .49\*\* | .15\* |
| 13. Perceived coworker support – PCS (T2) | 3.68 | 0.75 | .05 | .00 | .12 | –.03 | .06 | .14\* | .25\*\* | .35\*\* | .26\*\* | .24\*\* | .59\*\* |
| 14. Organizational socialization tactics b (T2) | 3.17 | 0.71 | .16\* | .07 | –.00 | –.07 | .04 | .15\* | .37\*\* | .42\*\* | .22\*\* | .33\*\* | .25\*\* |
| 15. Role clarity (T3) | 4.01 | 0.61 | .01 | .08 | –.03 | –.00 | .17\* | .09 | .18\*\* | .25\*\* | .13 | .21\*\* | .15\* |
| 16. Social integration (T3) | 3.81 | 0.66 | .14\* | –.04 | .03 | –.00 | .05 | .11 | .19\*\* | .31\*\* | .21\*\* | .26\*\* | .29\*\* |

(Table continues)

Table 2 (*continued*)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variable  | *M* | *SD* | 12 | 13 | 14 | 15 | 16 |
| 12. Perceived supervisor support – PSS (T2) | 3.70 | 0.76 | (.89) |  |  |  |  |
| 13. Perceived coworker support – PCS (T2) | 3.68 | 0.75 | .17\*\* | (.89) |  |  |  |
| 14. Organizational socialization tactics b (T2) | 3.17 | 0.71 | .38\*\* | .24\*\* | (.90) |  |  |
| 15. Role clarity (T3) | 4.01 | 0.61 | .43\*\* | .16\* | .41\*\* | (.80) |  |
| 16. Social integration (T3) | 3.81 | 0.66 | .36\*\* | .32\*\* | .41\*\* | .42\*\* | (.74) |

*Note*. *N* = 219. For Sex, 1 = female, 2 = male. T1 = Time 1, T2 = Time 2, T3 = Time 3. Alpha coefficients are reported in parentheses along the diagonal.

\* *p* < .05; \*\* *p* < .01.

a We used the logarithm (*ln*) for organization size to correct for the normal distribution and central tendency of the measure.

b Higher scores indicate institutionalized socialization tactics.

Table 3. Results for moderated mediation model with supervisory interpersonal justice

|  |  |
| --- | --- |
|  | *Dependent Variables* |
|  | PSS (mediator) | Role clarity | Social integration |
|  | b(*SE*) | 95% CI | b(*SE*) | 95% CI | b(*SE*) | 95% CI |
| (Constant) | –.16(.36) | [–0.87, 0.54] | 3.39(.25)\*\* | [2.90, 3.89] | 3.67(.29)\*\* | [3.09, 4.24] |
| *Controls* a |  |  |  |  |  |  |
| Proactive personality | .04(.09) | [–0.14, 0.23] | .15(.06)\* | [0.02, 0.28] | .03(.08) | [–0.12, 0.18] |
| *Main effects* |  |  |  |  |  |  |
| Supervisory interpersonal justice | .31(.07)\*\* | [0.17, 0.44] | –.01(.05) | [–0.12, 0.09] | .09(.06) | [–0.03, 0.21] |
| Perceived supervisor support (PSS) |  |  | .31(.05)\*\* | [0.21, 0.42] | .21(.06)\*\* | [0.09, 0.33] |
| Socialization tactics |  |  | .22(.05)\*\* | [0.11, 0.32] | .27(.06)\*\* | [0.15, 0.40] |
| *Interaction effects* |  |  |  |  |  |  |
| PSS x Socialization tactics |  |  | .23(.06)\*\* | [0.10, 0.36] | .04(.07) | [–0.12, 0.19] |
| *R2* | .09 | .32 | .23 |
| *F* | 10.31(2, 216)\*\* | 16.87(6, 212)\*\* | 10.52(6, 212)\*\* |

*Note*. N = 219. All coefficients are unstandardized B weights of centered variables. 95% CI: bias-corrected confidence intervals. \**p* ≤ .05, two-tailed. \*\**p* ≤ .01, two-tailed.

a. Following the recommendations by Carlson and Wu (2012), we omitted the control variables that had no significant effect from our model testing. The inclusion of these variables did not change the results and effects. Thus, we report results without these control variables (analyses including them are available upon request).

Table 4. Results for moderated mediation model with supervisory informational justice

|  |  |
| --- | --- |
|  | *Dependent Variables* |
|  | PSS (mediator) | Role clarity | Social integration |
|  | b(*SE*) | 95% CI | b(*SE*) | 95% CI | b(*SE*) | 95% CI |
| (Constant) | .09(.33) | [–0.55, 0.73] | 3.38(.25)\*\* | [2.88, 3.87] | 3.71(.29)\*\* | [3.14, 4.28] |
| *Controls* a |  |  |  |  |  |  |
| Proactive personality | –.02(.09) | [–0.19, 0.15] | .16(.06)\* | [0.02, 0.29] | .02(.07) | [–0.13, 0.17] |
| *Main effects* |  |  |  |  |  |  |
| Supervisory informational justice | .44(.05)\*\* | [0.34, 0.55] | –.03(.05) | [–0.12, 0.07] | .06(.06) | [–0.05, 0.18] |
| Perceived supervisor support (PSS) |  |  | .32(.05)\*\* | [0.22, 0.43] | .21(.06)\*\* | [0.08, 0.33] |
| Socialization tactics |  |  | .22(.05)\*\* | [0.11, 0.32] | .26(.06)\*\* | [0.14, 0.39] |
| *Interaction effects* |  |  |  |  |  |  |
| PSS x Socialization tactics |  |  | .20(.07)\*\* | [0.05, 0.35] | –.03(.09) | [–0.20, 0.15] |
| *R2* | .24 | .32 | .23 |
| *F* | 34.90(2, 216)\*\* | 34.90(6, 212)\*\* | 10.78(6, 212)\*\* |

*Note*. N = 219. All coefficients are unstandardized B weights of centered variables. 95% CI: bias-corrected confidence intervals. \**p* ≤ .05, two-tailed. \*\**p* ≤ .01, two-tailed.

a. Following the recommendations by Carlson and Wu (2012), we omitted the control variables that had no significant effect from our model testing. The inclusion of these variables did not change the results and effects. Thus, we report results without these control variables (analyses including them are available upon request).

Table 5. Results for moderated mediation model with coworker-referenced interpersonal justice

|  |  |
| --- | --- |
|  | *Dependent Variables* |
|  | PCS (mediator) | Role clarity | Social integration |
|  | b(*SE*) | 95% CI | b(*SE*) | 95% CI | b(*SE*) | 95% CI |
| (Constant) | –.43(.29) | [–1.02, 0.15] | 3.34(.27)\*\* | [2.80, 3.89] | 3.68(.29)\*\* | [3.12, 4.26] |
| *Controls* a |  |  |  |  |  |  |
| Proactive personality | .12(.08) | [–0.04, 0.27] | .18(.07)\*\* | [0.03, 0.32] | .03(.08) | [–0.12, 0.19] |
| *Main effects* |  |  |  |  |  |  |
| Coworker-referenced interpersonal justice | .69(.06)\*\* | [0.57, 0.82] | .04(.07) | [–0.11, 0.19] | .10(.08) | [–0.06, 0.26] |
| Perceived coworker support (PCS) |  |  | .03(.06) | [–0.10, 0.15] | .13(.06)\* | [0.00, 0.26] |
| Socialization tactics |  |  | .33(.05)\*\* | [0.22, 0.44] | .32(.06)\*\* | [0.20, 0.43] |
| *Interaction effects* |  |  |  |  |  |  |
| PCS x Socialization tactics |  |  | .05(.07) | [–0.09, 0.20] | –18.(.08)\* | [–0.34, –0.03] |
| *R2* | .36 | .20 | .24 |
| *F* | 61.18(2, 216)\*\* | 8.77(6, 212)\*\* | 11.61(6, 212)\*\* |

*Note*. N = 219. All coefficients are unstandardized B weights of centered variables. 95% CI: bias-corrected confidence intervals. \**p* ≤ .05, two-tailed. \*\**p* ≤ .01, two-tailed.

a. Following the recommendations by Carlson and Wu (2012), we omitted the control variables that had no significant effect from our model testing. The inclusion of these variables did not change the results and effects. Thus, we report results without these control variables (analyses including them are available upon request)

# Figure Legends

# Figure 1. Conceptual model of the hypothesized relationships

Figure 2. Conditional indirect effect of supervisory interpersonal justice on role clarity at values of the moderator socialization tactics through the mediator PSS

Figure 3. Conditional indirect effect of supervisory informational justice on role clarity at values of the moderator socialization tactics through the mediator PSS

Figure 4. Conditional indirect effect of coworker-referenced interpersonal justice on social integration at values of the moderator socialization tactics through the mediator PCS

# Appendix: List of items used in the empirical study

All items were rated using a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

## Proactive Personality (from Bateman & Crant, 1993)

1. I am always looking for better ways to do things.
2. No matter what the odds, if I believe in something I will make it happen.
3. I excel at identifying opportunities.
4. If I believe in an idea, no obstacle will prevent me from making it happen.
5. I love being a champion for my ideas, even against others’ opposition.
6. If I see something I don’t like, I fix it.

## Task Interdependence (Major & Kozlowski, 1997)

1. I have to coordinate my job activities with those of my workgroup.
2. I have to work with my workgroup to get my job done.
3. The tasks I perform require me to check with or collaborate with others in my workgroup.
4. Other workgroup members depend on my work in order to complete their own tasks.
5. The work I do is a result of the combined efforts of several individuals.

## Distributive Justice (Colquitt, 2001)

The following items refer to the outcomes you receive in your new organization.

1. My outcomes reflect the effort I have put into my work.
2. My outcomes are appropriate for the work I have completed.
3. My outcomes reflect what I have contributed to the organization.
4. My outcomes are justified, given my performance.

## Procedural Justice (Colquitt, 2001)

The following items refer to the decision-making procedures used in your new organization.

1. In my new organization, I am able to express my views and feelings during decision-making procedures.
2. In my new organization, I have influence over the outcomes arrived at by those procedures.
3. In my new organization, procedures are applied consistently.
4. In my new organization, decision-making procedures are free of bias.
5. In my new organization, decision-making procedures are based on accurate information.
6. In my new organization, I am able to appeal the outcomes arrived at by those procedures.
7. In my new organization, decision-making procedures upheld ethical and moral standards.

## Supervisory Interpersonal Justice (Colquitt, 2001)

The following items refer to your new direct supervisor.

1. My new supervisor treats me in a polite manner.
2. My new supervisor treats me with dignity.
3. My new supervisor treats me with respect.
4. My new supervisor refrains from improper remarks or comments.

## Supervisory Informational Justice (Colquitt, 2001)

The following items refer to your new direct supervisor.

1. My new supervisor is candid in his/her communications with me.
2. Whenever needed, my new supervisor explains the decision-making procedures thoroughly.
3. My new supervisor’s explanations regarding the procedures are reasonable.
4. My new supervisor communicates details in a timely manner.
5. My new supervisor seems to tailor his/her communications to my specific needs.

## Coworker-referenced Interpersonal Justice (adapted from Colquitt, 2001)

The following items refer to your new direct coworkers (those with whom you interact regularly at work).

1. My new coworkers treat me in a polite manner.
2. My new coworkers treat me with dignity.
3. My new coworkers treat me with respect.
4. My new coworkers refrain from improper remarks or comments.

## Perceived Supervisor Support (adapted from Eisenberger et al., 1986)

1. My new supervisor values my contributions to the organization’s well-being.
2. My new supervisor really cares about my well-being.
3. My new supervisor is willing to extend him/herself in order to help me perform my job to the best of my ability.
4. My new supervisor fails to appreciate any extra effort from me. (R)
5. My new supervisor cares about my general satisfaction at work.
6. My new supervisor takes pride in my accomplishments at work.
7. My new supervisor would ignore any complaint from me. (R)

## Perceived Coworker Support (adapted from Eisenberger et al., 1986)

1. My new coworkers value my contributions to the organization’s well-being.
2. My new coworkers really care about my well-being.
3. My new coworkers are willing to extend themselves in order to help me perform my job to the best of my ability.
4. My new coworkers fail to appreciate any extra effort from me. (R)
5. My new coworkers care about my general satisfaction at work.
6. My new coworkers take pride in my accomplishments at work.
7. My new coworkers would ignore any complaint from me. (R)

## Organizational Socialization Tactics (from Jones, 1986)

*Sequential versus random:*

1. There is a clear pattern in the way one role leads to another or one job assignment leads to another in this organization.
2. Each stage of the training process has, and will, expand and build upon the job know- ledge gained during the preceding stages of the process.
3. The movement from role to role and function to function to build up experience and a track record is very apparent in this organization.
4. This organization put newcomers through an identifiable sequence of learning experiences.
5. The steps in the career ladder are clearly specified in this organization.

*Fixed versus variable:*

1. I can predict my future career path in this organization by observing other people's experiences.
2. I have a good knowledge of the time it will take me to go through the various stages of the training process in this organization.
3. The way in which my progress through this organization will follow a fixed timetable of events has been clearly communicated to me.
4. I know when to expect a new job assignment or training exercise in this organization.

*Serial versus disjunctive:*

1. Experienced organizational members see advising or training newcomers as one of their main job responsibilities in this organization.
2. I am gaining a clear understanding of my role in this organization from observing my senior colleagues.
3. I have received guidance from experienced organizational members as to how I should perform my job.
4. I have access to people who have previously performed my role in this organization.
5. I have been generally left alone to discover what my role should be in this organization. (R)

*Investiture versus divestiture:*

1. Almost all of my colleagues have been supportive of me personally.
2. I haven’t had to change my attitudes and values to be accepted in this organization.
3. I feel that experienced organizational members have held me at a distance until I conform to their expectations. (R)

## Role Clarity (from Rizzo et al., 1970)

1. I know exactly what is expected of me.
2. I know what my responsibilities are.
3. I feel certain how I will be evaluated for a raise or promotion.
4. I received clear explanations of what has to be done.

## Social Integration (from Chao et al., 1994)

1. Within my workgroup, I would be easily identified as “one of the gang.”
2. I believe most of my coworkers like me.
3. I do not consider any of my coworkers as my friends. (R)
4. I am pretty popular in this organization.

Figure 1. Conceptual model of the hypothesized relationships

Organizational Socialization Tactics (T2)

Coworker-referenced Interpersonal Justice

(T1)

(T1)

Supervisory Informational Justice (T1)

(T1)

Supervisory Interpersonal Justice

(T1)

(T1)

**H3**

**(-)**

**H1**

**(+)**

**H4**

**(-)**

**H2**

**(+)**

Social Integration

(T3)

Role Clarity

(T3)

Perceived Coworker Support (T2)

(T2)

Perceived Supervisor Support (T2)

(T2)

Figure 2. Conditional indirect effect of supervisory interpersonal justice on role clarity at values of the moderator socialization tactics through the mediator PSS a

*Note*. *a*. Values are at 10th, 25th, 50th, 75th, and 90th percentiles of the moderator.

Figure 3. Conditional indirect effect of supervisory informational justice on role clarity at values of the moderator socialization tactics through the mediator PSS a

*Note*. *a*. Values are at 10th, 25th, 50th, 75th, and 90th percentiles of the moderator.

Figure 4. Conditional indirect effect of coworker-referenced interpersonal justice on social integration at values of the moderator socialization tactics through the mediator PCS a

*Note*. *a*. Values are at 10th, 25th, 50th, 75th, and 90th percentiles of the moderator.

1. Detailed results are available upon request from the authors. [↑](#footnote-ref-1)