Why helping coworkers does not always make you poor: The contingent role of common and unique position within the sales team

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Why Helping Coworkers Does Not Always Make You Poor:
The Contingent Role of Common and Unique Position within the Sales Team

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Abstract

In recent years, many companies have implemented sales teams as a way of streamlining accountability and promoting the development of sales expertise. The success of such work groups largely depends on experienced members’ willingness to help coworkers. Previous studies indicate that group structure and individual position along individual attributes (e.g., experience) are important to understand interactions between coworkers. However, sales research on this topic is lacking. Drawing on a motivation-opportunity-ability framework, this study addresses this void by examining the impact of individual salesperson’s job experience position within work groups on the motivation to help coworkers and his or her own sales performance. The findings of a multisource, multilevel empirical study reveal interesting effects. The results highlight the important role of job experience position: if a salesperson’s level of job experience is common within the sales team, it activates identification as a driver of helping behaviors, which in turn negatively influences own performance. Conversely, if a salesperson’s level of job experience is unique, it does not activate identification as a driver of helping, but does positively influence the effect of helping on own performance. The authors discuss implications for theory and practice.

Keywords: sales team; helping behaviors; job experience; position; motivation-opportunity-ability framework; work group identification
"The family is like the forest: if you are outside, it is dense; if you are inside, you see that each tree has its own position."

— Ghanaian proverb.

The theoretical importance of team or group structure is well established in the business-to-business marketing literature. While both academic research and the business environment have produced conflicting results, recent empirical studies have conclusively demonstrated that work group compositional properties such as functional diversity (Auh & Menguc, 2005) and member consensus (Ahearne, MacKenzie, Podsakoff, Mathieu, & Lam, 2010; De Jong, De Ruyter, & Wetzels, 2005) can substantially improve sales team performance (Ahearne, MacKenzie, et al., 2010; De Jong et al., 2005).

However, given that the success of teams or work groups' depends on experienced members’ willingness to help coworkers (Grant & Patil, 2012; Organ, 1988), the practical challenge for sales managers lies in designing a proper group structure in which members improve one another’s performance through helping behaviors. Particularly in business-to-business environments—characterized by increasing complexity and uncertainty—grouping salespersons in team-based structures to encourage and facilitate helping behaviors is essential as this stimulates individuals to share and exchange expertise, helps to alleviate workload, and facilitates joint problem solving and creativity (Grant & Patil, 2012). Yet, both academics and practitioners recognize that the changing sales paradigm continues to present challenges to sales management and salesperson performance because many sales teams still are dominated by self-interest—where salespersons tend to focus on maximizing personal

\footnote{In this study, we use the terms ‘team’ and ‘work group’ interchangeably to denote work units where task definitions, process instructions, and resource distributions do not require salespeople to collaborate or coordinate to complete their individual sales tasks (cf. Grant & Patil 2012). That is, these units largely lack task interdependence and helping behaviors are largely discretionary in nature.}

Previous research demonstrates that the direct payoff of helping behaviors is inconclusive and not straightforward: Whereas some studies show that helping coworkers positively affects a helper’s personal effectiveness (e.g., Janssen & Huang, 2008), others indicate that assisting coworkers is onerous and often comes at the expense of individual goal accomplishment (e.g., Podsakoff, MacKenzie, Paine, & Bachrach, 2000). More recent research even points to nonlinear effects (i.e., inverted U-shape) of helping behaviors on task accomplishment (Rapp, Bachrach, & Rapp, 2013), which further obfuscates when helping coworkers is deemed desirable.

While these studies yield important insights on the effect of helping behaviors on job performance outcomes, they do not explicitly account for the impact of group structure and an individual’s position within that group. This is surprising, as recent studies emphasize that an individual’s motivation, behavior, and performance is contingent on the resource position people hold within a group structure (Bolander, Satornino, Hughes, & Ferris, 2015; Sparrowe, Liden, Wayne, & Kraimer, 2001). Previous research suggests that an individual’s resource position is mainly determined by the focal person’s expertise or ability relative to that of others in the work group (Van der Vegt, Bunderson, & Oosterhof, 2006). The group’s specific composition and the position an individual holds within that group may color and shape his or her perception of other unit members and thereby influence behavior (Harrison & Klein, 2007). For instance, sales managers often hire high performers to help newcomers learn the job. However, the expert’s behavior will likely differ according to whether s/he is the single expert amidst a team of novices or one of many experts on the team.

[INSERT TABLE 1 ABOUT HERE]
In response, the aim of this study is to gain a better understanding of the contingent role of group structure and individual position on salespersons’ motivation to help coworkers and its effect on own performance. Our work makes three substantive contributions to sales team literature (see Table 1 for a comparison of this study with related studies). First, we develop and test a conceptual model based on the motivation-opportunity-ability (MOA) framework and infuse this with insights from the social identity theory and social network literatures (e.g., Agneessens & Wittek, 2011) to explain helping behaviors in sales groups (MacInnis, Moorman, & Jaworski, 1991; Schmitz, 2013). Many marketing studies already have investigated individual helping behaviors (e.g., Ahearne, MacKenzie, et al., 2010; Bendapudi, Singh, & Bendapudi, 1996), and from a more general view, organizational citizenship behaviors (e.g., MacKenzie, Podsakoff, & Fetter, 1993; MacKenzie, Podsakoff, & Paine, 1999; Podsakoff & Mackenzie, 1994). Yet, explanations of helping behaviors often draw from various theoretical domains with sometimes competing explanations. Our study contributes to this field by being the first to use MOA as an overarching framework to tie in the different theoretical explanations that improve our understanding of why employees are motivated to help by including their ability and the emerging opportunity to help coworkers.

Second, adding to research on the relationship between helping behaviors and sales performance (e.g., Rapp et al., 2013), we examine the relative importance of helping coworkers through the lens of team structure. Previous research indicated that better explanations are needed for why employees engage in helping behaviors—differentiating between instrumental or social considerations—and how this affects performance (Bolino, 1999; Rapp et al., 2013). Taking a team-structure perspective we show that the effect of helping on own sales performance depends on the specific combination of a salesperson’s relative level of job experience (i.e., ability) and the (un)equal dispersion of job experience in the work group (i.e., opportunity). This reflects a substantive departure from the majority of
research in the domain that focuses on abilities in general (e.g., time management skills) and pays homage to the notion that organizational and team structures to a large extent determine the effectiveness of employee behaviors.

Third, our study extends the literature on the assessment of individual salesperson performance in sales team structures. On the one hand, several studies have assessed team-structural aspects and their impact on performance (e.g., Ahearne, MacKenzie, et al., 2010; Auh & Menguc, 2005), while ignoring the role of individual salesperson characteristics. On the other hand, some studies have developed measures of individual salesperson’s social network or structure and examined their impact (Menguc & Boichuk, 2012) without taking into account the characteristics of the organizational unit (e.g., team) in which the salesperson operates. This study expands the extant literature by conceptualizing and developing a hybrid compositional measure that assesses the interplay between team structural aspects and individual attributes. As a result, this new measure allows us to determine the salesperson’s position in terms of uniqueness/commonness within the overall team structure and can be applied in many other work group settings (e.g., field service units, call-center teams, account management teams, communities of practice). Finally, this hybrid measure is continuous in nature and as such it overcomes issues that plague traditional nonmetric measures that are dichotomized and categorical in nature (Riordan & Wayne, 2007).

To test our conceptual model, we draw on a multilevel, multisource data set comprising 180 salespersons working in 32 sales teams defined along distinct sales practices in an information and communications technology (ICT) business-to-business context. Accordingly, we test our hypotheses using multivariate multilevel regression analyses (De Jong & De Ruyter, 2004) and floodlight analyses (Johnson & Neyman, 1936; Spiller, Fitzsimons, Lynch Jr, & McClelland, 2013). We organize the remainder of this article as follows. We first delineate the theoretical background and conceptual model. Next, we
develop our hypotheses. We then describe the research setting, measurement, and analyses, followed by our empirical results. We conclude with a discussion of the implications of our results.

THEORETICAL BACKGROUND AND CONCEPTUAL MODEL

Helping Behaviors in Sales Teams

Salespersons share information, insight, experience, and tools involving the selling task with coworkers in a sales team primarily through helping behaviors, which researchers often conceptualize as a form of organizational citizenship behaviors (OCB). For instance, Podsakoff and McKenzie (1997) discern three dimensions of OCB: helping behaviors, civic virtue, and sportsmanship. In this paper we focus on helping behaviors as Podsakoff et al. (2000) find support for Organ’s (1988) fundamental assumption that helping behaviors are the strongest and best predictor of performance. Furthermore, research in sales settings shows that helping behaviors directed at coworkers is a powerful predictor of a salesperson’s managerial evaluations (MacKenzie, Podsakoff, & Fetter, 1991; MacKenzie et al., 1993, 1999; Podsakoff & Mackenzie, 1994). Research also shows that helping behaviors directed at the customer positively correlates with individual salesperson and work group performance (George, 1991; George & Bettenhausen, 1990).

In work group settings, helping behaviors can be conceptualized at the group or individual level. Recent management studies (e.g., Podsakoff, Ahearne, & MacKenzie, 1997) and sales literature (Ahearne, MacKenzie, et al., 2010) have examined helping behaviors at the group level and convincingly demonstrated the predictive power of group-level helping behaviors on group-level performance and other group characteristics, such as team spirit and morale, cohesiveness, and coordination in non-sales tasks. Yet, while the importance and ubiquity of work groups emphasize the importance of staying connected with coworkers by helping them and sharing experiences, research about the role of individual helping behaviors
has remained scarce and less conclusive (e.g., Janssen & Huang, 2008; Podsakoff et al., 2000; Rapp et al., 2013). In work groups, individual salesperson’s helping behaviors often are discretionary activities that can be perceived as incompatible with own task execution. Not surprisingly, in many sales units salespersons tend to focus on own task execution while neglecting helping behaviors (Grant & Patil, 2012), yet some salespersons deviate from this behavior and still perform above average. As a response, this research tries to better understand why individual members help coworkers and how helping coworkers impedes or facilitates the helper’s own sales performance (cf. Grant & Patil, 2012). Consistent with Organ (1988) and Podsakoff and McKenzie (1994), we define individual helping behaviors as an individual’s actions taken to assist coworkers with or prevent the occurrence of work-related problems.

**Motivation, Ability, and Opportunity to Explain Helping Behaviors in Sales Teams**

Building on previous studies that successfully used the motivation-opportunity-ability (MOA) framework to explain behavioral outcomes of salespersons like cross-selling behavior in sales teams (Schmitz, 2013) and salespersons’ follow-up of marketing leads (Sabnis, Chatterjee, Grewal, & Lilien, 2013) we use the MOA framework to explain discretionary helping behaviors in sales teams (i.e., there is low task and goal interdependence; also see Grant & Patil, 2012). The MOA framework is a general framework to explain behavior of individuals, groups, and companies making it is necessary to adapt the framework and variables to the research context (e.g., Johnson & Friend, 2015; Wu, Balasubramanian, & Mahajan, 2004). To justify our nomological network we combine the MOA framework with insights from social identity theory and social network literature (Agneessens & Wittek, 2011). Next, we first define context specific indicators of motivation, ability, and opportunity that help explain individual helping behaviors and selling performance in complex selling
environments. Then we proceed with our explanation of how social status theory and social capital theory help explain the interplay between motivation, ability, and opportunity.

First, motivation is an internal psychological state that stimulates a person to engage in a particular behavior (Brown & Peterson, 1994). In line with previous empirical findings (Janssen & Huang, 2008; Van der Vegt et al., 2006) and the group engagement model (Tyler & Blader, 2003), we focus on social identification as the prime motivation of helping coworkers. Although people may be motivated to engage in discretionary helping activities for resource related motives—as it provides access to or prevent losses from group resources (Thibaut & Kelley, 1959), the group engagement theory argues that social identification processes are stronger drivers of discretionary behaviors than resource related motives because it links more directly to the core beliefs and values of an individual—i.e., need to create and maintain a favorable self-image (Tyler & Blader, 2003). Tyler and Blader (2003) argue that resource judgements (e.g., monetary rewards from engaging with the group) do not shape discretionary helping behaviors directly, but rather indirectly by influencing identification. In this study we refer to work group identification as the extent to which a member feels emotionally attached to, involved with, and committed to his or her work group (Allen & Meyer, 2000). This perception of oneness with or belonging to a work group describes a person’s affective state toward a group, not his or her actual behavior, and reflects the extent to which a salesperson identifies with insights, ideas, and practices of coworkers within that work group.

Second, ability is the extent to which the actors have the necessary resources (e.g., knowledge, intelligence, money) to make the outcome happen (Hoyer & Macinnis, 1997; Schmitz, 2013). In a complex sales context, one important indicator of ability is a salesperson’s job experience, which refers to a salesperson’s total years of relevant experience in current and previous sales jobs. Previous studies indicate that experience
reflects the required knowledge, skills, and abilities to adequately perform a sales job (Ahearne, Rapp, Hughes, & Jindal, 2010; Fu, 2009) and is a key characteristic of helpers (Van der Vegt et al., 2006).

Although one may argue that sales training and/or education may be a better predictor of performance in certain sales environments than sheer job experience, practitioner literature indicates that especially in complex selling environments job experience accumulated through long periods of trial and error makes a company’s best people excel (Thull, 2003). This assertion is corroborated by several academic studies that identify experience as one of the most important abilities when selling complex, new products (Ahearne, Rapp, et al., 2010; Fu, 2009). Anderson (1985, p. 238) indicated that complex selling environments ask for “special-purpose knowledge and working relationships, which arise in a learning by doing fashion and create specific, rather than general human capital.” She provides the example of IBM where salespersons needed extensive on-the-job-training and experience to master the IBM method of selling and to understand the idiosyncratic features of IBM products, next to forming and deepening essential working relations in such a large, complex organization. Yet even though work groups are important vehicles to develop mentoring relationships between novices and experts, little is known about the role of experience in such a setting.

Finally, opportunity reflects the extent to which the situation complicates and impedes (MacInnis et al., 1991) versus facilitates and is conducive to achieving desired outcomes, such as helping coworkers and selling performance (McAlexander, Schouten, & Koenig, 2002). The presence of valuable resources, such as co-worker job experience determines the opportunity to display prosocial behavior and help coworkers. Previous studies show that the presence and dispersion of coworker resources such as knowledge and authority (e.g., Hughes, Le Bon, & Rapp, 2013) drives or inhibits individual action (Lin, 1999) and sparks or discourages social interactions between coworkers (Harrison & Klein, 2007). Situations of
unequally dispersed levels of job experience (i.e., disparity Harrison & Klein, 2007) relate to more within-group competition, reduced member input, and withdrawal and inhibit social interactions between members of a group (Harrison & Klein, 2007). Job experience is unequally dispersed when, for instance, only a few coworkers possess high levels of job experience while most coworkers are novices and low on job experience, or vice versa. In contrast, situations with more equally spread levels of job experience associate with increased social interactions and collaborative actions.2

We propose that ability (individual-level) and opportunity (team-level) both act as adjusting mechanisms that determine an individual salesperson’s job experience position within the work group and as such influence his or her motivation to display desired behavior and its effect on own performance. Since the MOA framework does not indicate how ability and opportunity interact, we combine notions of social identity theory with insights from the social network literature to describe how individual position in a social structure influences motivation and helping behavior (Agneessens & Wittek, 2011). The social network literature distinguishes two specific strands of research that explain helping behaviors: social status theory and social capital theory (Cook & Whitmeyer, 1992). The key assumption of social status theory is that providing help generates prestige, whereas the social capital perspective contends that providing help creates obligations for the advice seeker (Agneessens & Wittek, 2011). Although both theories build on social exchange, different behavioral assumptions underlie the exchange processes and consequences of helping behaviors that work

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2 There is much research on team level differences and many different terms and synonyms have been used to indicate dispersion (e.g., heterogeneity, dissimilarity, diversity). In this study, we follow the suggestions made by Harrison and Klein (2007) and explicitly specify our dispersion type of interest. In particular, we refer to dispersion as the “composition of differences in proportion of socially valued assets or resources held among unit members; inequality or relative concentration” (Harrison and Klein 2007, p. 1203). So, consistent with our resource perspective we are interested in (un)equality of resources within the work group. As such, dispersion indicates the extent to which resources are (un)equally spread in the work group, but it does not indicate which members own or do not own resources. In contrast, our proposed hybrid measure does indicate the individual resource position of members within the work group.
simultaneously and should therefore both be taken into account (Lazega, Mounier, Snijders, & Tubaro, 2012).

We posit that in the context of a sales work group, the social status perspective applies to salespersons whose job experience position is common within the group (i.e., most coworkers share similar levels of job experience). Commonness in job experience position fosters greater perceptions of similarity in values and norms, leading to enhanced cohesion (Mehra, Kilduff, & Brass, 1998) and levels of interaction (Thomas-Hunt, Ogden, & Neale, 2003; Worchel, 1996). As a result, social norms and status become the dominant motivation for action instead of, for example, task-related motives. In such a position, providing help to coworkers is an important way to conform to social norms and receive social benefits (e.g., status, affection; Wittek, 1999).

In contrast, the social capital perspective applies more to salespersons whose job experience position is relatively unique, deviates from most other members, and, as such, lacks a common set of anchor points. Social norms and identification with the group do not govern behavior of individuals in such a position. As a result, salespersons in such a position have more freedom to act and help in an instrumental way as a means to obtain the necessary resources to increase their performance (e.g., Sparrowe et al., 2001). Providing (and asking for) help creates entitlements to future benefits for the helper and creates obligations to reciprocate for the help seeker.

[INSERT FIGURE 1 ABOUT HERE]

Figure 1 depicts our conceptual framework. It includes the salesperson’s work group identification, helping behaviors, selling performance, and the two moderating variables: (1) salesperson’s relative job experience level and (2) the dispersion of job experience in the work group, which jointly moderate the identification–helping behaviors relationship, and, in turn, the helping behaviors–salesperson’s own sales performance relationship. To measure
the dispersion of job experience within a work group we first used the coefficient of variation (CoV), which we then grand-mean-centered to discriminate between work groups in which job experience is dispersed such that high levels are common and those in which low levels are common. When creating an interaction between individual salesperson’s relative job experience level and the dispersion of job experience in the work group, one can distinguish four positions (see Figure 1 and Appendix A for a further explanation of our hybrid measure). For each of these four positions, we develop hypotheses to argue the moderating effects of relative job experience level and the dispersion of job experience in the work group on the identification–helping behaviors relationship. These two moderators are continuous variables. However, for illustrative purposes, we present the resulting interaction of these two moderating variables as four positions and develop moderating hypotheses along these positions.

**HYPOTHESES**

*Motivation to Help Coworkers*

People with high group identification consider the group’s goals, interests, and norms as their own (Dutton, Dukerich, & Harquail, 1994; Van Knippenberg, 2000). Tyler and Blader (2003) argue that discretionary behaviors, such as helping behaviors, originate mainly from a person’s group identification—beyond incentives related to rewards or sanctions—because they stimulate feelings of belonging, comfort, and happiness (Haslam, 2004). Members who strongly identify with their group have a strong motivation to contribute to its goals and success (De Cremer & Van Vugt, 1999; Van Knippenberg, 2000). The effect of group identification may be particularly strong for work groups that are mainly based on members’ sharedness of experiences on the job.

Recent studies have integrated research on social identity processes and helping relations (Nadler & Halabi, 2006; Tyler & Blader, 2003). Members who strongly identify
with their group have a strong motivation to help coworkers and contribute to its success (De Cremer & Van Vugt, 1999; Van Knippenberg, 2000). Consistent with this finding, prior studies have empirically confirmed the positive relationship between individual group identification and helping coworkers, showing that strong group identifiers work hard to contribute to the group by helping coworkers execute their tasks (Janssen & Huang, 2008; Van der Vegt, Van de Vliert, & Oosterhof, 2003). In line with this research, we posit the following:

\[ H_1: A \text{ salesperson's work group identification relates positively to his or her helping behaviors.}\]

**Impact of Helping Coworkers on Own Performance**

One general perception is that the time allocated to helping coworkers may come at the expense of one’s own task performance (Bergeron, 2007; Rapp et al., 2013). Several studies confirm this perception, reporting that assisting coworkers is time-consuming and comes at the expense of individual goal accomplishment (Barnes et al., 2008; Podsakoff et al., 2000).

However, it is also emphasized that helping co-workers can benefit the helper’s own performance. Empirical evidence shows that people who help more receive more reciprocal aid from coworkers (Van der Vegt et al., 2006). For example, the beneficiary may return the favor by suggesting new sales opportunities, taking time to discuss specific customer challenges and find solutions (e.g., identifying unique selling points), or take care for some of the clerical duties of his/her peer. In addition, a helper may benefit from cognitive elaboration and reflection on ideas, information, and abilities (O’Donnell & Dansereau, 1992; Ploetzner, Dillenbourg, Preier, & Traum, 1999; Webb, 1989, 1991). In a review of 19 classroom-learning studies, Webb (1989) shows that helping coworkers by providing personal explanations yields better learning outcomes for the helper. Similarly, among teams of middle managers in the banking industry, Janssen and Huang (2008) find that helping behaviors positively affects the helper’s own personal effectiveness. Especially in more complex selling
situations (e.g., when selling new generation ICT systems), helping coworkers by exchanging expertise and knowledge gives the helpers the opportunity to assess and improve their own knowledge and selling methods. Helping colleagues with non-routine activities like the sale of new, complex, and/or customized products is more likely to take the form of an iterative process in which coworkers elaborate and reflect on one another’s input (Pieterse, Van Knippenberg, & van Ginkel, 2011). This can improve personal sales performance for complex selling activities. Moreover, empirical evidence indicates a positive correlation between helping behaviors and individual sales performance (MacKenzie et al., 1991, 1999). Based on this, we posit:

\( H_2: \) A salesperson’s helping behaviors positively relates to his or her own sales performance.

**Boundary Conditions for the Work Group Identification–Helping Behaviors Relationship**

Research to date points to contingencies in the relationship between group identification and behavior, indicating that group identification does not always lead to action (e.g., Hirst, Van Dick, & Van Knippenberg, 2009). We take a team-structure perspective on the matter by proposing that a salesperson’s position within the group (which is a function of both ability and opportunity) can function as a moderating mechanism that influences how group identification translates into helping behaviors. We discuss the four positions described in Figure 1 to develop moderating hypotheses.

*High level of salesperson job experience—common position.* The high level of salesperson job experience—common position refers to the situation in which the salesperson has a high level of job experience and most coworkers share similarly high levels of job experience. Thus, the average absolute level of experience is high, and the focal salesperson likely shares a long history of broad-ranging sales job experiences with most other coworkers. Consistent with social status theory (Agneessens & Wittek, 2011) and social identification theory (e.g., Wieseke, Kraus, Ahearne, & Mikolon, 2012), we argue that this
position suggests common anchor points regarding relevant (prior) experiences between members, which forms a bond, making the salesperson’s identification an important driver of behavior. When confronted with a difficult selling task, this situation typically results in frequent interpersonal interactions, including jointly interpreting events and forming common understandings about the best sales practices. Following social status theory (Wittek, 1999), we argue that for salespersons in such a position, helping coworkers is considered an important way to achieve, consolidate, and improve one’s position within the work group (Wieseke et al., 2012) and continue active participation. Therefore, we expect a positive effect of work group identification on helping behaviors for salespersons in this situation.

*Low level of salesperson job experience—common position.* The low level of salesperson job experience—common position refers to the situation in which the salesperson has a low level of job experience and most coworkers share similarly low levels of job experience. This position implies a similar frame of reference with newcomer difficulties, learning-on-the-job experiences, and difficulties related to the sale of complex or new products. For a less-experienced salesperson, this position presents the opportunity to develop bonds and norms, and substantiate his or her identification with other less-experienced coworkers. This position may allow for more psychological safety and help employees feel free to expose their “true selves” in carrying out their sales tasks (Kahn, 1990, 1992). It reduces the uncertainty related to the complex selling task and may trigger prosocial behavior to collectively overcome difficulties. This position is comparable to rookies in the military who show camaraderie and help one another to survive individually and as a unit. However, it is important to note that the initial job experiences this salesperson shares with other coworkers are based on a relatively short time period. Given that the identification becomes a stronger driver of behavior over time (Wieseke, Ahearne, Lam, & Dick, 2009), we expect the positive effect of work group identification on helping behaviors to be weaker for
salespersons whose levels of job experience are low and common than for coworkers whose levels of job experience are high and common.

**High level of salesperson job experience—unique position.** In the third job experience position, the focal salesperson has a high level of job experience unique to the work group. Recent research has suggested that such experienced members may feel more social pressure to help inexperienced coworkers when they are faced with complex and uncertain tasks (e.g., Thomas-Hunt et al., 2003). However, in line with previous empirical work (e.g., Van der Vegt et al., 2006), we posit that if a salesperson’s job experience level is relatively unique and deviates from most other coworkers, it lacks a common set of anchor points, and the normative pressure to help is weak if not absent. Therefore, we expect that for salespersons in such a unique position, identification with the work group is not the primary reason for their behavior; rather, they expect reciprocation of help (see social capital theory; Agneessens & Wittek, 2011). Therefore, we do not expect work group identification of such a salesperson to have an effect on his or her helping behaviors.

**Low level of the salesperson job experience—unique position.** The final job experience position involves a salesperson with a low level of job experience surrounded by many experienced coworkers. Again, for salespersons in this unique position, we do not expect identification to be the primary driver for behavior. Although such a salesperson may have new and fresh ideas on the sales task and may be motivated to help coworkers because it creates “credit slips” that foster reciprocation of help (Agneessens & Wittek, 2011), he or she may not act on this identification because in such a position, it can be seen as an ineffective way to increase status within the work group. In other words, helping coworkers by providing new or deviating insights may go against established norms, values, and routines within the group and as such may negatively highlight the outlier position of the individual. Moreover, having a position that associates with a relative lack of experience, such individuals often feel
less social pressure to actually help coworkers with challenging tasks (e.g., Thomas-Hunt et al., 2003). Based on these four considerations, we posit the following three-way interaction hypothesis:

\[ H_3: \text{The effect of a salesperson’s work group identification on his or her helping behaviors is contingent on a salesperson’s position in the work group (as determined by salesperson’s relative level of job experience and dispersion of job experience in the work group), such that} \]

(a) when the level of job experience is common (positions 1 & 2), then there is a positive effect,

(b) this positive effect is stronger if a salesperson’s level of job experience is common and high (position 1 > position 2), and

(c) when the level of job experience is unique (positions 3 & 4), then there is no significant effect.

**Boundary Conditions for the Helping Behaviors–Performance Relationship**

Research to date points to the presence of contingencies for the relationship between helping behaviors and own performance, arguing that helping coworkers does not always leverage the helper’s own task performance and may sometimes even hinder it (Bergeron, 2007). Again, we propose that salesperson’s ability and opportunity both can function as moderating mechanisms that affect how helping behaviors relates to own sales performance. Thus, we return to our four positions to develop moderating hypotheses for the relationship shown on the right-hand side of Figure 1.

**High level of salesperson job experience—common position.** For a salesperson in the high level of job experience—common position, the average absolute level of experience is high and a broad range of job experiences are shared with most other coworkers. Since the focal salesperson shares a long history of job-related experiences with other highly experienced members, it is likely that common anchor points and social norms regarding relevant (prior) experiences are present. In this case, it is the emergence of strong common norms that urge individual helpers to provide help to coworkers, while it is less likely that helpers purposively exploit their helping of colleagues as a resource- and task-related exchange process for own individual task performance-related benefits. That is, helping
behaviors are used tactically to maintain a person’s status or respect within the group, while less focus is on learning how to deal with a specific challenge (Bolino, 1999). For example, less time will be spent on reflecting how existing experiences may or may not be of use to sell a new product, but conversations mainly tend to focus on reiterating past experiences and successes thereby establishing their role and status within the team.

This is consistent with the social status perspective (Agneessens & Wittek, 2011), which conceives helping coworkers primarily as a relational investment and a mechanism to receive status, respect, and admiration from coworkers (Krackhardt, 1990). Salespersons in this job experience position primarily help with the aim to minimize conflict and reach a consensus decision without critical evaluation of alternative viewpoints, by actively suppressing dissenting perspectives (Kerr & Tindale, 2004). Therefore, we expect that while helping behaviors clearly are supportive to those colleagues that require help, it comes at the expense of time and resources allocated to the helper’s own personal task accomplishment and decreases the helper’s own performance (Bergeron, 2007; Robert & Hockey, 1997).

Low level of salesperson job experience—common position. If a salesperson has a low level of job experience and is surrounded by coworkers with similarly low levels of job experience, they share a point of reference. Therefore, for such a salesperson, helping coworkers is also motivated by social considerations and meeting social norms, but to a lesser extent than for more-experienced salespersons in a similar situation; because norms, selling routines, and status positions within the work group still must be established, they feel less pressure to conform to the work group. Therefore, we expect the negative effect of helping behaviors on own selling performance to be weaker for these less-experienced salespersons than for their more-experienced counterparts, under the common position.
High level of salesperson job experience—unique position. When the salesperson’s level of job experience is high and unique, thus clearly deviating from that of most other coworkers, social comparisons will be less likely and the pressure to conform may be negligible because coworkers are not considered equals (Phillips, Mannix, Neale, & Gruenfeld, 2004). Instead, in line with the social capital perspective (Agneessens & Wittek, 2011) the focal salesperson will focus on obtaining task-related benefits and considers helping behaviors a resource- and task-related exchange process (Ibarra, 1995, p. 19; Phillips et al., 2004; Thomas-Hunt et al., 2003). The salesperson’s unique experience provides a powerful position, in which helping coworkers (when deemed an opportunity) creates credit slips that can be traded for practical support from those receiving help. Moreover, given the complex selling situation, for salespersons in this position helping the inexperienced coworker may provide the opportunity to reconsider, reflect, and further improve on their own knowledge and competences (Webb, 1989). Therefore, we expect a positive effect of helping behaviors on own selling performance for salespersons in this unique position.

Low level of salesperson job experience—unique position. For salespersons in a low level of job expertise—unique position, helping coworkers will again be motivated by task-related benefit concerns. Although it may be difficult to help coworkers, when such a novice salesperson identifies an opportunity to help, they can realize important benefits. First, surrounded by many experienced coworkers, helping creates credit slips that obligate the more experienced work group member to reciprocate by offering basic assistance in return (Agneessens & Wittek, 2011). For example, the novice salesperson may help out more experienced members with simple selling activities or administrative tasks with the aim to be reciprocated later on. Second, the opportunity to learn from experienced coworkers could benefit his or her own performance significantly (Van der Vegt et al., 2006). For instance, the novice member can help experienced members by challenging the status quo and bringing in
fresh, new insights on the sales process, customer needs, or how to pitch product features. Discussing these suggestions and insights with senior members helps the novice members better understand boundary conditions of the selling task. Therefore, we expect a positive effect of helping behaviors on own sales performance. In line with these considerations, we formulate the following three-way interaction hypothesis:

\[ H_4: \text{The effect of a salesperson's helping behaviors on his or her own sales performance is contingent on a salesperson's position in the work group (as determined by salesperson's relative level of job experience and dispersion of job experience in the work group), such that}
\]
\[ (a) \text{when the level of job experience is common (positions 1 & 2), then there is a negative effect,}
\]
\[ (b) \text{this negative effect is weaker if a salesperson's level of job experience is common and low (position 1 > position 2), and}
\]
\[ (c) \text{when the level of job experience is unique (positions 3 & 4), then there is a positive effect.}
\]

**METHODOLOGY**

*Research Setting, Sample, and Procedure*

We test our hypotheses using data from a global ICT company. The industry is characterized by many product introductions that demand continuous learning. The company’s product portfolio includes ICT products such as workspace management systems, connectivity solutions, and data centers. Because they are relatively complex and innovative, they involve serious customer inquiry and extensive sales efforts. The company’s sales force is best typified (Churchill Jr, Ford, & Walker Jr, 1997) as a technical sales force in which salespersons are grouped according to specific sales practices (e.g., type of customers and/or type of product) and where salespersons mainly execute consultative selling activities (Moncrief, Marshall, & Lassk, 2006). In these sales teams, members jointly discuss product features and customer demand, prepare sales pitches, comment on others’ sales presentations and tactics, motivate one another, and evaluate outcomes and customer feedback. These interactions occur during face-to-face meetings and through groupware (intranet), which helps group members handle the uncertainty involved in the task.
We collected data from two sources over two periods: we collected attitudinal information data using a survey instrument and complemented them with archival performance data. In the first period, we used a survey to obtain salesperson data; specifically, we administered an Internet-based questionnaire to 258 salespersons in 32 sales teams. After two reminders (in a three-week period), we received 180 surveys, for a 70% response rate. All communities sampled featured at least 3 respondents. The survey focused on a 12-month period covering several product launches. In line with the management’s experience, we collected the archival performance data with a 6-month time lag. We tested for potential nonresponse bias by first dividing the sample into thirds on the basis of response times. We found no significant differences in mean responses between early and late responders. In addition, we compared respondents and non-respondents and found no significant differences in task performance, job experience, or work group tenure (Armstrong & Overton, 1977).

**Measurement**

We assessed the constructs in our conceptual framework with well-established scales. To match the wording to our study context, we conducted in-depth interviews with sales managers, salespersons, and sales support staff. It also helped to become familiar with the firm and its sales setting, as well as to obtain commitment from the firm to participate in this study. Next, we constructed a draft questionnaire and pretested it with six company employees and two industry experts. Following the pretests, we made minor wording adjustments to enhance its applicability. Table 2 contains the scale items for the measures used. For most items, we relied on a five-point Likert scale (1 = “very low,” and 5 = “very high”).

*Helping behaviors.* The helping behaviors measure was based on five out of seven items of the Podsakoff, Ahearne, and McKenzie’s (1997) scale. We focus on task related
helping and did not include the two items related to peacemaking behavior. Furthermore, we adjusted the wording to the product selling context. Since coworkers are an important benchmark for salespersons’ own behaviors and performance we followed Chen and colleagues’ (2005) suggestions (see also Riordan & Wayne, 2007) and measured salesperson helping behavior relative to that of the other work group members (e.g., “Within group Y, I am the one who…”).

Work group identification. Consistent with the literature on individual-within-unit research, we used the four-item affective team identification scale from Van der Vegt et al. (2003) to measure each focal salesperson’s work group identification.

Job experience. To assess a salesperson’s ability, we rely on sales experience. To determine whether sales experience is a good indicator of ability we held in-depth interviews with sales managers and sales support staff and asked them to reflect on the importance of job experience in complex sales. In line with evidence from practitioner literature (Thull, 2003), the respondents consistently mentioned that experience is an important element to successfully execute sales activities and mainly associates with higher levels of status, power, and task-related skills. We obtained salesperson job experience from the company database that quantified his or her total years of relevant sales experience in the current and previous sales jobs. We operationalized a salesperson’s level of job experience relative to other members by group-mean-centering it (Hofmann, 2002; Hox, 2002). Group-mean-centering separates the within-group and between-group variance of a salesperson’s job experience score, yielding a pure within-group comparison measure (Hofmann and Gavin 1998).

Second, we assessed dispersion of job experience within the work group by first calculating the coefficient of variation (CoV). The CoV stems from sociology (Blau, 1977; Homans, 1961) and is a widely accepted measure to assess how a valued or desired resource (e.g., pay, power, prestige, status, knowledge) is (un)equally dispersed in work groups
Second, we grand-mean-centered the CoV to discriminate between work groups in which job experience is dispersed such that high levels are common as opposed to those in which low levels are common. For work groups with larger positive values of the grand-mean-centered CoV, low levels of job experience are more common (and thus high levels of job experience are more unique). In contrast, for work groups with larger negative CoV values, high levels of job experience are more common (and thus low levels of job experience are more unique).

Finally, consistent with the interaction term approach (Riordan & Wayne, 2007) we multiplied an individual salesperson’s relative level of job experience with the work group’s grand-mean-centered CoV of job experience (i.e., dispersion of job experience in the work group). However, in contrast to previous measures that only apply categorical attributes, our approach can deal with continuous attributes. This measure enabled us to determine the commonness (uniqueness) of each individual salesperson’s job experience level. Appendix A details the four positions.

Sales performance. We collected objective sales performance data from the company’s databases. The performance criterion was the actual revenue generated from the sale of newly introduced products by each salesperson expressed as a percentage of individual revenue targets (cf. Joshi, Liao, & Jackson, 2006; Wieseke et al., 2009). These sales targets (e.g., order intake, revenue growth) are set by senior management and permit meaningful performance comparisons across all employees. These firm targets use historical benchmarking to ensure revenue goals of equal difficulty by accounting for the product types (e.g., type of ICT solutions, product complexity), sales territory characteristics (e.g., geographic scope, density), client characteristics (e.g., private versus public sector, share of customers, strategic importance), and market characteristics (e.g., level of competition, market dynamism). A performance score above 100 indicates that the salesperson exceeded
his or her individual target; a score below 100 indicates failure to achieve his or her target. To obtain a normal distribution, we transformed this objective measure by its logarithm (Wei & Atuahene-Gima, 2009).

**Controls.** We included several control variables for correct model estimation. First, we took into account several background variables. Consistent with previous research (Ahearne, Rapp, et al., 2010; Fu, 2009), we included the salesperson’s age, tenure with the work group, and tenure with the company as potential influences on sales performance. We controlled for organizational identification, measured using Mael and Ashforth’s (1992) six-item scale, because it may account for a person’s extra motivation to comply with the work group. The four-item autonomy control variable was based on the six-item tolerance for self-management scale developed by De Jong, De Ruyter, and Lemmink (2004). Furthermore, we measured collective helping behaviors using the members within the work group as referents (i.e., “members of my sales group…”) as a key indicator of member cooperation (Podsakoff et al., 1997). In addition, we considered expected customer demand for launched products using a four-item scale based on the three-item scale developed by Wieseke, Homburg, and Lee (2008). We controlled for the impact of sales quota as well as for the influence of work group-based rewards by adapting the three-item risk-taking rewards scale from Wei and Atuahene-Gima (2009). Finally, the percentage of products sold to new clients served as a customer portfolio–specific element.

[INSERT TABLE 2 ABOUT HERE]

**Measurement Validation**

Due to the limited sample size, we tested our measurement model using a submodel approach (Atuahene-Gima & Li, 2002; Bentler & Chou, 1987; Joshi, 2010). Specifically, we tested two separate measurement models teaming related constructs. First, we explored the dimensionality and quality of our socially oriented constructs: helping behaviors, collective
helping behaviors, work group identification, and organizational identification. We entered
these items simultaneously in a principle components analysis. Four factors emerged, and all
items loaded on the a priori defined scales (cross-loadings < .40). Second, we tested the task-
oriented constructs: autonomy, work group-based rewards, and expected customer demand.
Similar principal component results emerged. Then, we performed confirmatory factor
analyses (CFA) to assess the validity of the measures of these two sub-models. Table 3
reports the results, including construct reliabilities and item-level factor loadings with t-
values. For the set of socially oriented constructs, the model fit was satisfactory ($\chi^2 = 260.34,$
d.f. = 146, $p = .0000$; comparative fit index [CFI] = .95; Tucker–Lewis index [TLI] = .94;
standardized root mean square residual [SRMR] = .053; root mean square error of
approximation [RMSEA] = .066). For the task-oriented measures, model fit was good as well
($\chi^2 = 49.11$, d.f. = 41, $p = .1801$; CFI = .99; TLI = .00; SRMR = .041; RMSEA = .033). The
composite reliabilities varied between .76 and .93 (Nunnally & Bernstein, 1978), and the
variance extracted of each construct was greater than .50, in support of the measures’
reliability and convergent validity. Furthermore, with a few exceptions (i.e., WID2, WID4,
and OI6), the item reliabilities were above the recommended value of .40 (Bagozzi &
Baumgartner, 1994). We decided to drop one item (i.e., WID4) as it performed poor on
multiple indicators. Finally, the measures also exhibited adequate discriminant validity: the
variance extracted exceeded the average variance shared with any other study construct
(Tables 2 and 3).

Furthermore, given that alternative measures for structure exist it is important to check
whether our hybrid measure serves our purpose (Lindell & Brandt, 2000). First, recent studies
indicate that the coefficient of variation (CoV) has several advantages over other indexes of
team structure. Roberson, Sturman, and Simons (2007) report that the CoV is particularly
useful when based on a ratio-scale measure, as it (1) corrects for large difference in means between groups, (2) is scale independent and thus can be used as a relative measure, and (3) it reflects dispersion relative to own mean, reducing the influence of absolute size on variability. Hence, this all implies that there is less concern for strong interdependence between our measure for dispersion of job experience in the work group and our measure for salesperson’s relative level of job experience. Moreover, the absence of a correlation between these two variables (see Table 3: \( \rho = -.070; \text{n.s.} \)) substantiates the lack of systemic attrition among teams among one end of the experience scale. Second, before we collected the data, we tested for content validity of our experience measure using interviews with knowledgeable informants from the organization. Third, dispersion of job experience in the work group appears to have a significant positive relationship with autonomy (see Table 3: \( \rho = .182; \ p < .05 \)). This result demonstrates the construct validity of our dispersion measure, as it is consistent with the theoretical notion of diversity faultlines (Lau & Murnighan, 1998) that indicates that if important resources are unequally distributed in a work group (i.e., subgroups emerge), feelings of autonomy would increase (e.g., Rico, Molleman, Sánchez-Manzanares, & Van der Vegt, 2007). Fourth, common method bias also is not a concern, as our focal constructs draw from multiple independent data sources. Finally, simulation studies (Roberson et al., 2007) show that using the CoV increases the detection of level effects (e.g., effect of relative job experience), while it’s a more conservative measure for detecting interaction effects. The latter suggests that observing interaction effects actually represents stronger evidence of their occurrence.

**Analysis**

We controlled for the multilevel structure of the data (salespersons nested within groups; Raudenbush & Bryk, 2002) and tested our hypotheses by estimating a multivariate hierarchical linear model consisting of a system of two equations (i.e., one equation with
helping behaviors as a dependent variable and a second equation with sales performance as a dependent variable), using MLwiN software (Rasbash et al., 2000). We standardized all independent variables before creating the product terms (Cohen, Cohen, West, & Aiken, 2003; Echambadi & Hess, 2007). We determined that multicollinearity was not a problem: the highest variance inflation factor was below the suggested cutoff value of 2.5 (Allison, 1999). We provide the model specification in Appendix B.

To further interpret the three-way interaction effects and formally test our moderation hypotheses $H_3$ and $H_4$, we also conducted floodlight analyses (Johnson & Neyman, 1936; Spiller et al., 2013). Floodlight analysis enables us to explore the full range of the impact of the moderators instead of an arbitrary point chosen (e.g., ±1 SD) (Preacher, Curran, & Bauer, 2006). In addition, we can explore in which regions the simple effect of interest is significantly different from zero. In line with Spiller et al.’s (2013) recommendations, we performed floodlight analysis by conducting spotlight analyses for a grid of values, ensuring that we included the minimum and maximum plausible values of the moderator values. The standardized values for salesperson’s level of job experience ranged from −2.16 to 3.37, and for dispersion of job experience within the work group (CoV), the values ranged from −2.49 to 2.06.

RESULTS

Table 4 contains the results of our analyses using helping behaviors as the dependent variable (see the left-hand columns of Models 1 and 2). Model 1 is the model without moderators, whereas Model 2 represents the complete model. The data reveal that Model 2 has a significantly better fit than Model 1 ($\chi^2_{9 \text{ df.}} = 19.498, p < .05$), which supports our decision to include these moderators.

[INSERT TABLE 4 ABOUT HERE]

Direct Effects
Consistent with previous findings, Table 4, Model 1 reveals a significant positive effect of a salesperson’s work group identification on helping behaviors ($\beta = .162, p < .01$), in support of $H_1$. Table 4 also shows the results pertaining to the equations using performance as the dependent variable (see the right-hand columns of Models 1 and 2). The results from Model 1 reveal a positive effect of salesperson’s helping behaviors on own sales performance ($\beta = .207, p < .05$), providing support for $H_2$.

**Boundary Conditions**

Table 4, Model 2, shows the results for the moderating effects. In line with our expectations and in support of $H_3$, we found a significant three-way interaction effect of salesperson’s relative job experience level, dispersion of job experience within the work group, and salesperson’s work group identification on helping behaviors ($\beta = -.193, p < .01$). To interpret this three-way interaction, Figure 2 presents the results of the floodlight analysis in a three-dimensional surface plot, which clearly shows the regions (the four hypothesized positions are distinguished by red dashed lines) where a significant positive, negative, or nonsignificant slope is present. Figure 2 also shows the commonness line (black dashed-dotted line) and uniqueness line (black solid line). Identifying these lines allows us to test whether the simple effect of commonness or uniqueness is different for different levels of job experience. We do so by constraining the simple slope (SS1) effect of high experience level to be equal to the simple slope (SS2) effect of low experience level at specific values. For instance, for high and low levels of job experience in terms of uniqueness we tested $SS1_{(\text{EXP}, 1; \text{CoV}, -1)} = SS2_{(\text{EXP}, -1; \text{CoV}, 1)}$ and in terms of commonness we tested $SS1_{(\text{EXP}, -1; \text{CoV}, -1)} = SS2_{(\text{EXP}, 1; \text{CoV}, 1)}$. The first section of Table 5 presents the results of a series of simple slope effects along the uniqueness and commonness lines and also the simple slope difference tests. It shows that a significant positive effect of identification on helping behaviors results if sales experience is common (see Table 5, estimates for common 1–4, column SS1 and column SS2), in support
of H2a. However, the difference tests along the commonness line reveal that there is no difference in positive effect for work group identification on helping behaviors for different levels of job experience (Table 5, estimates for common 1–4, columns SS1 and SS2). Therefore, we find no support for H2b. Finally, both Figure 2 and Table 5 indicate that the effect of identification on helping behaviors is nonsignificant across the values of the salesperson uniqueness line (Table 5, estimates for unique 1–4, column SS1 – SS2), in favor of H2c.

[INSERT TABLE 5 ABOUT HERE]

[INSERT FIGURES 2 AND 3 ABOUT HERE]

The findings presented in Table 4, Model 2, also show a significant three-way interaction effect of salesperson’s relative job experience level, dispersion of job experience within the work group, and salesperson’s helping behaviors on own sales performance ($\beta = .193, p < .01$), in support of H4. Figure 3 shows the results of the floodlight analysis in a three-dimensional surface plot related to this interaction. The second section of Table 5 shows the slope difference tests for the commonness and uniqueness positions. The effect of helping behaviors on own performance is only significantly negative for salespersons whose level of job experience is common and high (see Table 5, estimates for common 2–4, column SS2), providing partial support for H4a. The difference test shows that the negative impact of commonness in experience is significantly larger for salespersons with high levels of job experience (see Table 5, estimates for common 3 and 4, columns SS1 and SS2), in support of H4b. Interestingly, our findings further show that the effect of helping behaviors on performance is positive for salespersons whose level of job experience is unique within the work group (Table 5, estimates for unique 1–4, columns SS1 and SS2), in support of H4c. In addition, we performed slope difference tests, which revealed no difference in positive impact
for high and low levels of job experience (Table 5, estimates for unique 1–4, column SS1 and SS2).

**DISCUSSION, IMPLICATIONS, AND FURTHER RESEARCH**

The present study is the first to examine how (in)experienced salespersons that are organized in work groups can be motivated to help coworkers and in turn how their helping behaviors influences their own sales performance. As such, it expands research on salesperson performance in group settings that has ignored the interplay between individual salesperson’s prosocial behavior, individual characteristics, and team structure (e.g., Ahearne, MacKenzie, et al., 2010; Lim & Chen, 2014; Schmitz, 2013). To address this void, we developed and tested a framework based on the MOA framework (MacInnis et al., 1991) and insights from the social identity theory and social network literatures (e.g., Agneessens & Wittek, 2011) examining the impact of salesperson’s work group identification (i.e., motivation), dispersion of job experience within the work group (i.e., opportunity), and salesperson’s relative job experience level (i.e., ability) on helping behaviors and its effect on own performance.

**Discussion of Results**

First, although previous studies on work groups regard identification as the hallmark feature of such groups (e.g., Wenger and Snyder 2000), our study shows that it does not always activate helping behaviors. Our study is the first to highlight the boundary impact of salesperson’s individual job experience position within the work group. Identification with the work group appears to strongly stimulate salespersons whose level of job experience is common and widely shared in the work group to help coworkers. As such, we show that commonness of job experience is a prerequisite for the activation of social identification as a determinant of helping behaviors. In contrast to our expectations, the moderating effect of job experience position does not differ between salespersons with high and low levels of job experience.
experience, suggesting that the commonness rather than the level of salesperson’s job experience matters in activating work group identification as a driver of helping behaviors. The finding that identification has no impact on helping behaviors for salespersons who have a relatively unique level of job experience within the group confirms our expectations that for them, social considerations do not determine helping behaviors.

Second, our results shed new light on the effect of helping behaviors on performance in a group context by revealing that individual job experience position within the work group determines the effectiveness of helping behaviors on own performance. Specifically, helping coworkers is most beneficial to own performance for salespersons with a unique job experience position—in other words, when the salesperson’s level of job experience is different from (i.e., much higher or much lower than) his or her coworkers. This finding suggests that salespersons in such a unique position do not feel obliged to help coworkers for social reasons; instead, they can afford to use helping behaviors as an instrumental tool to improve their performance considerably. Offering help to others provides access to valuable resources (e.g., job knowledge), more than compensates for the assistance offered, and helps these uniquely positioned individuals improve their own performance. These findings mirror research on classroom learning, which shows that students who help others with complex problem solving benefit the most from helping behaviors as they cognitively elaborate on their ideas (O’Donnell & Dansereau, 1992; Webb, 1989, 1991). It also points to the age-old discussion on ‘the value of being different’ (e.g., Tsui, Egan, & O’Reilly III, 1992). Particularly grouping salespersons that differ in knowledge and experience may improve problem solving and performance. Adding people with unique work experience that extends beyond the job may also be helpful. Future research should examine this more in depth.

In contrast, helping coworkers negatively affects own performance of salespersons whose job experience position is common and high in the work group because they use
helping behaviors primarily as a relational investment rather than as a resource- and task-related exchange process. In addition, our findings show that this negative effect of helping behaviors on performance is significantly weaker and nonsignificant for salespersons whose job experience position is common and low. Apparently, for them helping coworkers is less harmful for own performance. This finding point to the dark side of social identification: For salespersons in the common position, identification may be a primary reason to help coworkers to such an extent that it harms own performance. As such, it corroborates and extends recent findings that highlight the negative consequences of organizational and work group identification for firms (Jasmand, Blazevic, & De Ruyter, 2012).

Third, our study expands extant research on individual employee action in work group settings by developing a continuous compositional measure that allows for a more fine-grained evaluation of an individual’s position in a group. The formulation of this measure enables us to (1) overcome issues that plague traditional nonmetric, dichotomized categorical measures in individual-within-the-unit research (Riordan & Wayne, 2007) and (2) examine effects across the range of a continuous scale of an attribute using advanced floodlight analyses. In addition, this method allows us to acquire in-depth knowledge on individual member behavior in group-based settings. We believe similar comprehensive measures can be developed for other continuous scale attributes (e.g., knowledge, expertise, information) and contexts (e.g., service teams).

Finally, Table 4 shows that of the controls, the percentage of products sold to new clients, tenure with the work group, autonomy, organization identification, and collective helping behaviors all have positive effects on the helping behaviors of the focal salesperson, whereas company tenure has a negative effect. This finding suggests that people who have been with the same organization longer become somewhat jaded and that those who are more socially motivated and empowered help more, as one would expect. Salesperson’s quota
level, the percentage of products sold to clients, expected customer demand, and the work group-average job experience all positively affect a salesperson’s own performance. This finding confirms previous studies in that employees benefit from additional experience and work harder if they think the firm’s products have potential.

Managerial Implications

Our study offers several important suggestions for managers of sales groups. First, to avoid negative consequences for own performance, managers should grant experts working in groups with similar peers, the freedom to focus on meeting own individual performance targets and avoid forcing them to provide assistance to other experienced salespersons. Instead, managers should encourage them to help only for instrumental reasons—for instance, when instructing the novice members as a way to increase their own performance. Particularly, each experienced staff member could be made responsible for a novice learning a particular task in the sales process, e.g. generating new leads, in a mentor-apprentice relationship. By suggesting to tie the learning of the task to a broader team goal, e.g. having the novice collect new leads for ‘us’ rather than for just his/herself the experienced person benefits too. In addition, the manager can help to differentiate between the types of expertise of the more experienced peers. It may be that some salespersons are more experienced in generating leads, while others are more trained in closing deals. Bringing out these differences will enhance learning opportunities and foster more helpful discussions.

In situations where a few inexperienced members are in a group of experts it is of importance to overcome these less–experienced members’ hesitance to help more–experienced colleagues. Managers therefore should actively stimulate less-experienced salespersons to help more-experienced coworkers, by making the former aware that helping behaviors pay off, accelerate learning, and consequently benefit own performance. For instance the manager can emphasize the commonalities between the few inexperienced
members and the experts by explaining that they execute similar tasks, and also once were rookies themselves. This kind of perspective-taking activities helps to overcome perceived differences and actually may foster a climate of helping behaviors. In addition, such a proactive attitude signals involvement but also makes a less experienced individual more ready to learn. In line with the previous examples, a novice helping an experienced person to collect sales leads will probably better learn to identify and screen new contacts; the underlying mechanism will be better reflected on and understood.

In contrast, when most salespersons have low levels of job experience (i.e., their job experience position is common), they should be instructed to focus on obtaining own individual performance targets and be encouraged to offer assistance to the experienced members while eschew from helping other novices. The latter resembles a situation of the-blind-leading-the-blind. By building a culture that appreciates learning from the best people ‘reinventing the wheel’ is avoided and progress ensured. For example, a situation in which novices were allowed to present their ideas and get feedback from experts fosters knowledge exchange but also stimulates making use of resources from experienced others.

**Limitations and Further Research**

In designing our research, we made several necessary choices that place some limitations on our findings. First, we conducted this study and used data from one company. Although this choice helped control for potentially confounding factors, it also limited the generalizability of our results. Replications in other industries and across companies would help generalize our findings.

Second, previous research has demonstrated that helping behaviors explain performance better than other prosocial behaviors (Podsakoff et al., 2000); further research could examine specific aspects of helping behaviors by focusing on information (e.g., exchange of expertise), motivation (e.g., encouraging coworkers), or coordination (e.g., touching base
with members), for example. A potentially worthwhile avenue would be to investigate how group composition affects sales performance in relation to these roles.

Third, in our research we use job experience in a sales setting as an accessible and easy-to-use measure of ability that does not discriminate between types of ability (e.g., generating leads, pitching, closing, negotiating) or quality of ability. While we took some preventive measures (i.e., tenure with work group, tenure with company, and age) to ensure that experience was a good indicator of ability, our research cannot inform managers on how specific types of ability may affect helping behaviors and its performance outcomes in sales teams. We urge future research to further examine the impact of different types of selling ability on individual behavior and performance in different sales team settings.  

Fourth, the focus of this study was on the help giver, while we controlled for the influence of receiving help (see Table 4). Yet, another important research perspective concerns examining the full dynamics of giving and receiving help, which may be more complicated and change over time. For instance, the reasons for asking for help (or refusing help) may differ across situations and persons. Future research should therefore examine how asking for and receiving help influence task performance. Fifth, in this study we adopted a contingency perspective of the impact of team structure by investigating how salespersons’ position in terms of uniqueness/commonness within the overall team structure moderates the identification-helping-performance chain. However, research on diversity also points to the impact of structure on work group identification (e.g., Van der Vegt et al., 2003). To test this alternative line of reasoning we regressed work group identification on our hybrid measure but found no support for such an association ($\beta = .105, n.s.$). However, we encourage future research to examine this relationship in other settings and using other attributes to gain a better understanding of the intricate relationship between team structure and identification.

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3 We thank an anonymous reviewer for this suggestion.
Finally, in addition to the work groups studied herein, other types of work groups or work units could be studied, such as multifunctional account units. The dynamics in these units may differ from those in the functional ones we examined. For example, they might vary more along several dimensions but generally have higher task interdependencies. Similarly, while the focus of this paper was on individual salesperson’s position in the sales team, previous research indicated that salespersons may identify themselves with other groups as well (Wieseke et al., 2012). This identification with other work groups may cause behavior that does not line up with the norms, values, and goals of their own sales team. Future research could investigate these interactions between work group identifications and how it affects behavior.

In sum, team structure and its effect on individual behavior and performance is an important and intriguing topic that deserves more attention in future research particularly in the sales domain. We hope our research helps inform and motivate more research in this area.
REFERENCES


psychology (pp. 247–274). Retrieved from https://books.google.nl/books?hl=nl&lr=&id=qOs36d2SXrAC&oi=fnd&pg=PA247&q=Hofmann+2002+ultilevel&ots=aCaSZ5OV21&sig=3CpkMKWnvQAKnkuFB3U_wQ5PS2o


### TABLE 1
Overview of Related Marketing Research on Sales Team Structure and Individual Outcomes

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<tbody>
<tr>
<td><strong>Focus on coworker helping</strong></td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Key theoretical lens</td>
<td>Motivation, Opportunity, Ability (MOA); Social capital and social structure theories</td>
<td>Social identity theory/status-based perspectives</td>
<td>Social identity theory</td>
<td>Motivation, Opportunity, Ability (MOA)</td>
<td>Social identification theory</td>
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<td>Conceptualization of structural variable</td>
<td>Uniqueness/commonness of position</td>
<td>Dissimilarity</td>
<td>Dissimilarity</td>
<td>Strength</td>
<td>Diversity</td>
<td>Individual’s network position</td>
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<td>Focal attribute(s)</td>
<td>Job experience</td>
<td>Gender</td>
<td>Customer orientation</td>
<td>Cross-selling motivation</td>
<td>Social identification</td>
<td># connections</td>
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<td>Ability to disentangle individual and group-level aspects</td>
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<td>Team &amp; individual (hybrid)</td>
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<td>Categorical</td>
<td>Interval</td>
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<td>Ratio</td>
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<td>Interaction term</td>
<td>Interaction term</td>
<td>Difference score</td>
<td>Dispersion score</td>
<td>Dispersion score</td>
<td>Centrality score</td>
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<tr>
<td>Operationalization</td>
<td>[Coefficient of Variation × Relative Position attribute]</td>
<td>[ratio of attribute × attribute]</td>
<td>Individual level Euclidean distance</td>
<td>[%1 × (Range of attribute) ÷ (max. range) × Mean of attribute]]</td>
<td>Standard deviation</td>
<td>Betweenness and eigenvector centrality</td>
</tr>
</tbody>
</table>

Note: Although marketing research also examined the role of structure at the team level and provides many insights that also infuse our study (e.g., Auh & Menguc, 2005; Ahearne, MacKenzie, Podsakoff, Mathieu, & Lam, 2010; De Jong, De Ruyter, & Wetzels, 2005), our research aligns more with the individual-within-the-unit literature (e.g., Riordan & Wayne 2007) where the focus is on how structural aspects of a work unit affect individual processes and outcomes. This overview only includes marketing studies that examine individual processes and outcomes, as inferences at the team-level may result in misleading interpretations (Lindell & Brandt, 2000).
**TABLE 2**

Scale Items for Construct Measures

<table>
<thead>
<tr>
<th>CFA Model 1</th>
<th>Factor Loading</th>
<th>t-Value</th>
<th>Item Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Helping behaviors (n = 5; CR = .89; AVE = .61; based on Podsakoff et al. (1997))</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group Y, I am the one who…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>helps a group member if s/he falls behind in selling the products. [HB1]</td>
<td>.81</td>
<td>26.34</td>
<td>.654</td>
</tr>
<tr>
<td>shares his/her expertise about the products with group members. [HB2]</td>
<td>.66</td>
<td>14.50</td>
<td>.440</td>
</tr>
<tr>
<td>“touches base” with other group members before initiating actions that might affect them in selling the products. [HB3]</td>
<td>.69</td>
<td>15.93</td>
<td>.475</td>
</tr>
<tr>
<td>encourages other group members when they are behind in selling the products. [HB4]</td>
<td>.85</td>
<td>32.93</td>
<td>.725</td>
</tr>
<tr>
<td>willingly gives of my time to help group members who have problems with selling the products. [HB5]</td>
<td>.87</td>
<td>35.76</td>
<td>.751</td>
</tr>
<tr>
<td><strong>Collective helping behaviors (n = 5; CR = .95; AVE = .77; based on Podsakoff et al. (1997))</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members of my group…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>help other group members out if they fall behind in selling the products. [CH1]</td>
<td>.90</td>
<td>54.14</td>
<td>.812</td>
</tr>
<tr>
<td>share their expertise about the products. [CH2]</td>
<td>.83</td>
<td>32.52</td>
<td>.688</td>
</tr>
<tr>
<td>“touch base” with each other before initiating actions that affect them in selling the products. [CH3]</td>
<td>.85</td>
<td>36.79</td>
<td>.722</td>
</tr>
<tr>
<td>encourage each other when they are behind in selling the products. [CH4]</td>
<td>.93</td>
<td>68.24</td>
<td>.859</td>
</tr>
<tr>
<td>willingly give of their time to help group members who have problems with selling the products. [CH5]</td>
<td>.89</td>
<td>48.93</td>
<td>.791</td>
</tr>
<tr>
<td><strong>Work group identification (n = 4; CR = .77; AVE = .53; adopted from Van der Vegt et al. (2003))</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I strongly identify with the other members of my team. [WID1]</td>
<td>.67</td>
<td>12.28</td>
<td>.455</td>
</tr>
<tr>
<td>I would like to continue working with my team. [WID2]</td>
<td>.61</td>
<td>10.78</td>
<td>.372</td>
</tr>
<tr>
<td>I feel emotionally attached to this team. [WID3]</td>
<td>.87</td>
<td>19.34</td>
<td>.763</td>
</tr>
<tr>
<td>I dislike being a member of this team. [R] [WID4]</td>
<td>.29</td>
<td>3.78</td>
<td>.083</td>
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<tr>
<td><strong>Organizational identification (n = 6; CR = .87; AVE = .53; adopted from Mael and Ashforth (1992))</strong></td>
<td></td>
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<tr>
<td>When someone criticizes ‘company X’, it feels like a personal insult. [OI1]</td>
<td>.71</td>
<td>16.69</td>
<td>.498</td>
</tr>
<tr>
<td>I am very interested in what others think about ‘company X’. [OI2]</td>
<td>.64</td>
<td>13.12</td>
<td>.410</td>
</tr>
<tr>
<td>When I talk about ‘company X’, I usually say ‘we” rather than “they.” [OI3]</td>
<td>.76</td>
<td>19.89</td>
<td>.569</td>
</tr>
<tr>
<td>‘Company X’s’ successes are my successes. [OI4]</td>
<td>.76</td>
<td>20.69</td>
<td>.581</td>
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<tr>
<td>When someone praises ‘company X’, it feels like a personal compliment. [OI5]</td>
<td>.89</td>
<td>37.39</td>
<td>.800</td>
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<tr>
<td>If a story in the media criticized ‘company X’, I would feel embarrassed. [OI6]</td>
<td>.56</td>
<td>10.18</td>
<td>.318</td>
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<tr>
<td><strong>CFA Model 2</strong></td>
<td>Factor Loading</td>
<td>t-Value</td>
<td>Item Reliability</td>
</tr>
<tr>
<td><strong>Task Autonomy (n = 4; CR = .83; AVE = .56; adopted from De Jong et al. (2004))</strong></td>
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</tr>
<tr>
<td>I am allowed complete freedom in selling products. [AU1]</td>
<td>.68</td>
<td>14.02</td>
<td>.457</td>
</tr>
<tr>
<td>I am allowed to sell products the way I think best. [AU2]</td>
<td>.68</td>
<td>24.18</td>
<td>.735</td>
</tr>
<tr>
<td>I am permitted to use my own judgment in selling products. [AU3]</td>
<td>.76</td>
<td>18.18</td>
<td>.580</td>
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<tr>
<td>I am allowed a high degree of initiative in selling products. [AU4]</td>
<td>.67</td>
<td>13.44</td>
<td>.450</td>
</tr>
<tr>
<td><strong>Work group-based reward (n = 3; CR = .86; AVE = .67; based on Wei and Atuahene-Gima (2009))</strong></td>
<td></td>
<td></td>
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<tr>
<td>The pay scheme strongly motivates me to achieve team performance goals. [WR1]</td>
<td>.89</td>
<td>27.79</td>
<td>.787</td>
</tr>
<tr>
<td>I am keenly aware how to maximize the team-based part in my payment. [WR2]</td>
<td>.75</td>
<td>18.57</td>
<td>.558</td>
</tr>
<tr>
<td>I am strongly motivated by the team-based pay scheme to be innovative and entrepreneurial. [WR3]</td>
<td>.82</td>
<td>23.12</td>
<td>.675</td>
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<tr>
<td><strong>Expected customer demand (n = 4; CR = .91; AVE = .71; based on Wieseke et al. (2008))</strong></td>
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<tr>
<td>Please indicate your expectancies for products during their introduction concerning…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the size of the order intake. [ECD1]</td>
<td>.86</td>
<td>34.08</td>
<td>.736</td>
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<tr>
<td>the sales volume. [ECD2]</td>
<td>.87</td>
<td>36.80</td>
<td>.754</td>
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<td>the size of the revenue. [ECD3]</td>
<td>.93</td>
<td>48.89</td>
<td>.857</td>
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<tr>
<td>the size of the profits. [ECD4]</td>
<td>.70</td>
<td>16.43</td>
<td>.482</td>
</tr>
</tbody>
</table>

*The scale validation tests resulted in the exclusion of this item.

Notes: 
- n = number of scale items; CR = composite reliability; AVE = average variance extracted; [R] = reverse coded.
### TABLE 3  
Descriptive Statistics and Bivariate Correlations Among Constructs

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<td>% product sold to new clients</td>
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<td>Expected customer demand</td>
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<td>.172</td>
<td>.036</td>
<td>.169</td>
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<td>.279</td>
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<td>.172</td>
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<td>.149</td>
<td>.149</td>
<td>.027</td>
<td>.008</td>
<td>.147</td>
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<tr>
<td>Collective job experience (group mean)*</td>
<td>.126</td>
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<td>.225</td>
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<td>.119</td>
<td>.160</td>
<td>.028</td>
<td>.012</td>
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<td>.059</td>
<td>.018</td>
<td>.082</td>
<td>.085</td>
<td>.177</td>
<td>.015</td>
<td>.146</td>
<td>.103</td>
<td>.141</td>
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<tr>
<td>Dispersion of job experience squareda</td>
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<td>.081</td>
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<td>.119</td>
<td>.042</td>
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<td>Dispersion of job experiencea</td>
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<td>.204</td>
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<td>.200</td>
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<td>.007</td>
<td>.070</td>
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<tr>
<td>Sales performance</td>
<td>31.9**</td>
<td>3.33**</td>
<td>0.73</td>
<td>.252</td>
<td>.174</td>
<td>.017</td>
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<td>.107</td>
<td>.165</td>
<td>.201</td>
<td>.002</td>
<td>.001</td>
<td>.052</td>
<td>.217**</td>
<td>.039</td>
<td>104</td>
<td></td>
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</tbody>
</table>

** Mean 102.62  27.88  43.70  3.15  3.50  3.23  3.83  3.68  3.41  12.40  3.92  96  4.17  3.79  .02  .70  2.56  

Std. Deviation 39.88  3.01  7.16  .74  2.83  5.17  .85  .76  1.04  2.51  .38  1.45  .71  .78  6.17  .12  1.35  

** p < .01 (two-tailed). * p < .05 (two-tailed).  
aGroup-level variables.  
Notes: n = 180 salespersons in N = 32 work groups. Correlations based on scores disaggregated per salesperson are below the diagonal (salesperson: n = 180).
### TABLE 4
Estimated Path Coefficients for Antecedents and Performance Consequences of Helping Coworkers

<table>
<thead>
<tr>
<th></th>
<th>Helping behaviors</th>
<th>Performance</th>
<th>Helping behaviors</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta SE</td>
<td>Beta SE</td>
<td>Beta SE</td>
<td>Beta SE</td>
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<tr>
<td>Constant</td>
<td>3.594 .144 ***</td>
<td>1.065 .255 ***</td>
<td>3.606 .142 ***</td>
<td>1.044 .252 ***</td>
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<td><strong>Control variables</strong></td>
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<td>.000 .001</td>
<td>.010 .002 ***</td>
<td>.000 .001</td>
<td>.010 .002 ***</td>
</tr>
<tr>
<td>Percentage of products sold to new clients</td>
<td>.006 .002 **</td>
<td>.015 .003 ***</td>
<td>.006 .002 **</td>
<td>.015 .003 ***</td>
</tr>
<tr>
<td>Age</td>
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<td>.067 .089</td>
<td>-.027 .056</td>
<td>.068 .099</td>
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<td>Expected customer demand</td>
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<td>.219 .084 **</td>
<td>.022 .049</td>
<td>.234 .084 **</td>
</tr>
<tr>
<td>Tenure with work group</td>
<td>.142 .050 **</td>
<td>.123 .089</td>
<td>.145 .049 **</td>
<td>.136 .089</td>
</tr>
<tr>
<td>Tenure with company</td>
<td>-.111 .057 *</td>
<td>-.014 .097</td>
<td>-.100 .056 *</td>
<td>-.016 .098</td>
</tr>
<tr>
<td>Task Autonomy</td>
<td>.121 .048 **</td>
<td>.008 .085</td>
<td>.117 .049 **</td>
<td>.012 .085</td>
</tr>
<tr>
<td>Organization identification</td>
<td>.135 .052 **</td>
<td>.042 .092</td>
<td>.119 .051 **</td>
<td>.043 .093</td>
</tr>
<tr>
<td>Work group-based rewards</td>
<td>.077 .050</td>
<td>.027 .087</td>
<td>.065 .050</td>
<td>.048 .087</td>
</tr>
<tr>
<td>Collective job experience (group mean)*</td>
<td>-.055 .052</td>
<td>.176 .094 *</td>
<td>-.068 .051</td>
<td>.155 .091 *</td>
</tr>
<tr>
<td>Collective helping behaviors (group mean)*</td>
<td>.114 .051 **</td>
<td>-.108 .094</td>
<td>.123 .050 **</td>
<td>-.117 .093</td>
</tr>
<tr>
<td>Dispersion of job experience squared*</td>
<td>.031 .035</td>
<td>.027 .062</td>
<td>.011 .036</td>
<td>.043 .063</td>
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<tr>
<td><strong>Main predictors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work group identification (WID)</td>
<td>.162 .060 **</td>
<td>H1 -.079 .090</td>
<td>.136 .066 *</td>
<td>.006 .094</td>
</tr>
<tr>
<td>Helping behaviors</td>
<td>.207 .097 * H2</td>
<td></td>
<td></td>
<td>.123 .103</td>
</tr>
<tr>
<td><strong>Moderator variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative job experience level (EXPind)</td>
<td>.103 .058 *</td>
<td>-.099 .101</td>
<td>.114 .065 *</td>
<td>-.072 .113</td>
</tr>
<tr>
<td>Dispersion of job experience (EXPcov)*</td>
<td>-.014 .052</td>
<td>.152 .093</td>
<td>-.019 .052</td>
<td>.145 .092</td>
</tr>
<tr>
<td><strong>Interaction effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPcov x EXPind</td>
<td></td>
<td></td>
<td>-.024 .060</td>
<td>-.117 .105</td>
</tr>
<tr>
<td>WID x EXPind</td>
<td></td>
<td></td>
<td>.089 .063</td>
<td></td>
</tr>
<tr>
<td>WID x EXPcov</td>
<td></td>
<td></td>
<td>-.068 .060</td>
<td></td>
</tr>
<tr>
<td>WID x EXPcov x EXPind</td>
<td>-.193 .069 **</td>
<td></td>
<td>-.193 .069 ** H3</td>
<td></td>
</tr>
<tr>
<td>Helping behaviors x EXPind</td>
<td></td>
<td></td>
<td>.026 .089</td>
<td></td>
</tr>
<tr>
<td>Helping behaviors x EXPcov</td>
<td></td>
<td></td>
<td>.063 .077</td>
<td></td>
</tr>
<tr>
<td>Helping behaviors x EXPcov x EXPind</td>
<td>-.193 .095 *</td>
<td></td>
<td>.193 .095 * H4</td>
<td></td>
</tr>
</tbody>
</table>

| Deviance        | 888.629          | 869.131     |
| ∆ Deviance      | 19.498 (d.f. = 8) *** |             |
| Pseudo R-square helping behaviors | 33.6% | 44.4% |
| Pseudo R-square performance | 32.8% | 34.4% |

* p < .05. ** p < .01. *** p < .001.

*Group-level variables.

Notes: This table reports unstandardized coefficients, with standard errors in parentheses. Significant coefficients based on one-tailed tests are in bold.

We also examined whether salespersons actually are receptive to help by including a dummy variable that assesses whether people ask coworkers for help or not.

Including this variable in our analyses (individual and group-mean) did not reveal an effect on our focal variables, nor did it alter our findings. For reasons of parsimony we decided to not report these analyses here.
### TABLE 5
Results of Simple Slope Difference Tests

<table>
<thead>
<tr>
<th>Identification–Helping Behaviors Relationship</th>
<th>Values Simple Slope 1 (SS1)</th>
<th>Values Simple Slope 2 (SS2)</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Job Experience Level</td>
<td>Relative Job Experience Level</td>
<td>CoV</td>
<td>SS1</td>
</tr>
<tr>
<td>Unique 1</td>
<td>1</td>
<td>1</td>
<td>–.070</td>
</tr>
<tr>
<td>Unique 2</td>
<td>−2</td>
<td>2</td>
<td>−.683</td>
</tr>
<tr>
<td>Unique 3</td>
<td>−2.16</td>
<td>3</td>
<td>−.936</td>
</tr>
<tr>
<td>Unique 4</td>
<td>−2.16</td>
<td>3.37</td>
<td>−.936</td>
</tr>
<tr>
<td>Common 1</td>
<td>−1</td>
<td>1</td>
<td>.201</td>
</tr>
<tr>
<td>Common 2</td>
<td>−2</td>
<td>2</td>
<td>.628</td>
</tr>
<tr>
<td>Common 3</td>
<td>−2.16</td>
<td>2.06</td>
<td>.697</td>
</tr>
<tr>
<td>Common 4</td>
<td>−2.16</td>
<td>3.37</td>
<td>−2.49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Helping Behaviors–Performance Relationship</th>
<th>Values Simple Slope 1 (SS1)</th>
<th>Values Simple Slope 2 (SS2)</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative Job Experience Level</td>
<td>Relative Job Experience Level</td>
<td>CoV</td>
<td>SS1</td>
</tr>
<tr>
<td>Unique 1</td>
<td>1</td>
<td>1</td>
<td>.421 *</td>
</tr>
<tr>
<td>Unique 2</td>
<td>−2</td>
<td>2</td>
<td>1.089 *</td>
</tr>
<tr>
<td>Unique 3</td>
<td>−2.16</td>
<td>3</td>
<td>1.377 *</td>
</tr>
<tr>
<td>Unique 4</td>
<td>−2.16</td>
<td>3.37</td>
<td>1.377 *</td>
</tr>
<tr>
<td>Common 1</td>
<td>−1</td>
<td>1</td>
<td>.090</td>
</tr>
<tr>
<td>Common 2</td>
<td>−2</td>
<td>2</td>
<td>−4.51</td>
</tr>
<tr>
<td>Common 3</td>
<td>−2.16</td>
<td>3</td>
<td>−2.49</td>
</tr>
<tr>
<td>Common 4</td>
<td>−2.16</td>
<td>3.37</td>
<td>−2.49</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

Notes: tests of significance are one-tailed.
Dispersion of job experience ‘Low’ = Low level of relative job experience is common within the group; Dispersion of job experience ‘High’ = High level of relative job experience is common within the group.
FIGURE 2
Floodlight Analysis of Simple Effects Work Group Identification on Helping Behaviors

Notes: Solid black line = salesperson uniqueness line (i.e., extent to which level of experience is unique within the work group); dashed-dotted black line = salesperson commonness line (i.e., extent to which level of experience is common within the work group); dashed red lines correspond to the four positions of commonness/uniqueness (see Figure 3). The x- and y-axes represent the range of the standardized values for salesperson’s level of job experience and dispersion of job experience (CoV).
FIGURE 3
Floodlight Analysis of Simple Effect Helping Behaviors on Sales Performance

Notes: Solid black line = salesperson uniqueness line (i.e., extent to which level of experience is unique within the work group); dashed-dotted black line = salesperson commonness line (i.e., extent to which level of experience is common within the work group); dashed red lines correspond to the four positions of commonness/uniqueness (see Figure 3). The x- and y-axes represent the range of the standardized values for salesperson’s level of job experience and dispersion of job experience (CoV).
APPENDIX A
Commonness (or Uniqueness) of Salesperson’s Level of Job Experience Position

To determine the commonness/uniqueness and level of individual salesperson’s job experience position, we used the following procedure. First, we calculated the salesperson’s level of job experience relative to other coworkers in the work group by group-mean-centering. The formal expression is as follows (note that it is labeled EXPind in the text):

\[ \text{exper}_{\text{grpmcent},ij} = (\text{exper}_{ij} - \text{exper}_j), \] (A1)

where \( \text{exper}_{\text{grpmcent},ij} \) = salesperson i’s level of job experience relative to other coworkers in work group j (group-mean centered score), \( \text{exper}_{ij} \) reflects the absolute level of job experience for salesperon i in work group j, and \( \text{exper}_j \) reflects work group j absolute level of job experience. In addition, we calculated the following formula:

\[ \text{exper}_{\text{unique}}_{ij} = (\text{exper}_{\text{grpmcent},ij} \times \text{exper}_{\text{CoV},j}), \] (A2)

where \( \text{exper}_{\text{unique}}_{ij} \) reflects salesperson i’s uniqueness of job experience level in work group j. This uniqueness measure is simply the converse of commonness (Dhar & Sherman, 1996), because we multiplied \( \text{exper}_{\text{grpmcent},ij} \) by the coefficient of variation (\( \text{exper}_{\text{CoV},j} \)), which captures the inequality of the dispersion of job experience levels in work group j. Thus, a larger CoV reflects a greater inequality of the dispersion of job experience levels in the work group. The following equation expresses CoV for work group j’s job experience (note that it is labeled EXPcov in the text):

\[ \text{exper}_{\text{CoV},j} = \left( \frac{\text{exper}_{sd,j}}{\text{exper}_{\text{mean},j}} \right), \] (A3)

where \( \text{exper}_{sd,j} \) is the standard deviation of the job experience in work group j and \( \text{exper}_{\text{mean},j} \) is the average level of job experience for work group j. In addition, we grand-mean-centered \( \text{exper}_{\text{grpmcent},ij} \) and \( \text{exper}_{\text{CoV},j} \) and then multiplied those terms to discriminate between work groups that included just a few members with high levels of job experience and work groups that included just a few members with low levels of job experience using the following formula:

\[ \text{exper}_{\text{unique}_{\text{grandmcnt},ij}} = (\text{exper}_{\text{grpmcent},ij} - \text{exper}) \times (\text{exper}_{\text{CoV},j} - \text{exper}_{\text{CoV}}). \] (A4)

Tables A1 and A2 illustrate how our measure discriminates. The rows of Table A1 represent three work groups, each consisting of six coworkers. Group 1 reflects a work group in which a high level of job experience is common (and thus a low level of experience is unique), while group 3 reflects the situation in which a low level of experience is common (and thus a high level of experience is unique). Group 2 represents an average of the aforementioned situations. Table A1 further reflects the absolute mean, standard deviation, and coefficient of variation (CoV) of job experience for each work group and the grand-mean-centered values of these three indices.

Finally, Table A2 reflects the grand-mean-centered job experience levels for these three communities (left half) and the uniqueness of a salesperson’s job experience level in the work group (right half). A highly positive value reflects a salesperson with uniquely high level of job experience, while a highly negative value reflects a salesperson with a uniquely low level of job experience. Small values that are close to zero reflect members whose level of job experience is common to work group.
Table A1: Dispersion of Work group’s Absolute Job Experience Levels (in Years): An Illustrative Example

<table>
<thead>
<tr>
<th>Group</th>
<th>Member 1</th>
<th>Member 2</th>
<th>Member 3</th>
<th>Member 4</th>
<th>Member 5</th>
<th>Member 6</th>
<th>$M_J$</th>
<th>$SD_J$</th>
<th>$CoV_J$</th>
<th>$M_{\text{grandmcent}, J}$</th>
<th>$SD_{\text{grandmcent}, J}$</th>
<th>$CoV_{\text{grandmcent}, J}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>1.7</td>
<td>4.1</td>
<td>1.6</td>
<td>-3.3</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>5.0</td>
<td>5.5</td>
<td>1.0</td>
<td>0.0</td>
<td>2.3</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8.3</td>
<td>4.1</td>
<td>0.7</td>
<td>3.3</td>
<td>0.9</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

Table A2 Grand-Mean-Centered Salesperson’s Level and Uniqueness of Job Experience: An Illustrative Example

<table>
<thead>
<tr>
<th>Group</th>
<th>Member 1</th>
<th>Member 2</th>
<th>Member 3</th>
<th>Member 4</th>
<th>Member 5</th>
<th>Member 6</th>
<th>$\text{exper}_{\text{grandmcent}, ij}$</th>
<th>$\text{experunique}_{\text{grandmcent}, ij}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-1.7</td>
<td>-1.7</td>
<td>-1.7</td>
<td>-1.7</td>
<td>-1.7</td>
<td>8.3</td>
<td>-0.9</td>
<td>-0.9</td>
</tr>
<tr>
<td>2</td>
<td>-5.0</td>
<td>-5.0</td>
<td>-5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>-0.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>3</td>
<td>-8.3</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>2.7</td>
<td>-0.5</td>
</tr>
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</table>
APPENDIX B
Model Specification

The advantage of multivariate multilevel regression models is that they can control for type I errors more effectively, and power often increases when compared with a series of univariate statistical tests (Hox 2002). Thus, we can examine more complex models. The basic multivariate multilevel model in this study (Model 2) consists of a system of two interrelated submodels of helping behaviors and sales performance, specified as follows:

\[(B1) HELP_{ij} = \beta_{0j} + \beta_{1j} QUOTA_{ij} + \beta_{2j} RNC_{ij} + \beta_{3j} AGE_{ij} + \beta_{4j} ECD_{ij} + \beta_{5j} TENU_{ij} + \beta_{6j} TENC_{ij} + \beta_{7j} AUT_{ij} + \beta_{8j} OI_{ij} + \beta_{9j} WBR_{ij} + \beta_{10j} EXPgr_{ij} + \beta_{11j} HELPgr_{ij} + \beta_{12j} EXPcov_{ij} + \beta_{13j} WID_{ij} + \beta_{14j} EXPind_{ij} + \beta_{15j} EXPcov_{ij} + \beta_{16j} (EXPind_{ij} \times EXPcov_{ij})_{ij} + \beta_{17j} (WID_{ij} \times EXPind_{ij})_{ij} + \beta_{18j} (WID_{ij} \times EXPcov_{ij})_{ij}\]

\[(B2) SALES_PERF_{ij} = \delta_{0j} + \delta_{1j} QUOTA_{ij} + \delta_{2j} RNC_{ij} + \delta_{3j} AGE_{ij} + \delta_{4j} ECD_{ij} + \delta_{5j} TENU_{ij} + \delta_{6j} TENC_{ij} + \delta_{7j} AUT_{ij} + \delta_{8j} OI_{ij} + \delta_{9j} WBR_{ij} + \delta_{10j} EXPgr_{ij} + \delta_{11j} HELPgr_{ij} + \delta_{12j} EXPcov_{ij} + \delta_{13j} WID_{ij} + \delta_{14j} HELP_{ij} + \delta_{15j} EXPind_{ij} + \beta_{16j} EXPsd_{ij} + \beta_{17j} (EXPind_{ij} \times EXPcov_{ij})_{ij} + \beta_{18j} (HELP_{ij} \times EXPind_{ij})_{ij} + \beta_{19j} (HELP_{ij} \times EXPcov_{ij})_{ij} + \beta_{20j} (HELP_{ij} \times EXPcov_{ij} \times EXPind_{ij})_{ij} + \phi_{0j} + \phi_{14j} + \theta_{0j} + \theta_{14j}\]

In these models, i denotes individual salespersons, j indicates work groups, HELP and SALES_PERF = salesperson’s helping behaviors and sales performance, QUOTA = sales quota, RNC = percentage of products sold to new clients, AGE = age of salesperson, ECD = expected customer demand, TENU = tenure with work group, TENC = tenure with company, AUT = autonomy, OI = organizational identification, WBR = work group-based rewards, EXPgr = collective experience; HELPgr = collective helping behaviors; EXPcovsq = coefficient of variation in sales experience squared; WID = work group identification; EXPind = individual level of sales experience (within-group), and EXPcov = coefficient of variation in sales experience.

The individual-level error terms \(e_{0ij}, e_{13ij}, \theta_{0ij}, \) and \(\theta_{14ij} \sim N(0, \sigma^2)\). Furthermore, \(\beta_{0j}, \beta_{1j}, \delta_{0j}, \) and \(\delta_{14j}\) are random coefficients that capture individual-specific unobserved heterogeneity within groups; \(u_{0j}, u_{13j}, \phi_{0j}, \) and \(\phi_{14j}\) denote group-specific variances; and \(\beta_{0j}, \beta_{1j}, \delta_{0j}, \) and \(\delta_{14j}\) are mean values for each group effect, accounting for group-specific variances (\(u_{0j}\) and \(\phi_{0j}, \) respectively). We specified a model in which the group effects \(u_{0j}, u_{13j}, \phi_{0j}\) and \(\phi_{14j}\) and individual effects \(e_{0ij}, e_{13ij}, \theta_{0ij}\) and \(\theta_{14ij}\) could covary fully, such that we actively modeled the potentially endogenous relationship between work group identification and helping behaviors and helping behaviors and performance (Spencer, 2008).