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CHAPTER 2

MENTORING IN CONTEXT: A MULTILEVEL STUDY ON

DIFFERENTIATED AND GROUP-LEVEL MENTORING*

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Abstract

Purpose – Mentoring by supervisors has become an important tool to meet the objectives of contemporary organizational career management, namely enhancing employees' promotability and intentions to stay. As supervisors usually work with several employees, traditional dyadic mentoring research needs to be extended to the team context. *Design* – Applying a multilevel framework, we distinguish between individual-level differentiated mentoring (i.e., the deviation of an employee's individual perceptions from the average perception within the group) and group-level mentoring (i.e., the average perception across all group members). We explore the effects of these distinct constructs in a sample of 290 vocational job starters and their supervisors. *Findings* – We find that career motivation mediates the positive relationship between differentiated psycho-social mentoring and promotability, whereas job satisfaction mediates the positive effect of differentiated career and psycho-social mentoring on intentions to stay. At the group level, only career mentoring is positively related to promotability and intentions to stay. *Implications* – Career mentoring seems to operate mainly at the group-level, indicating that supervisors who readily provide career mentoring create a favorable career climate for all employees in their team. Thus, career mentoring may be an effective way to mass customize organizational career development. Moreover, supervisors may use differentiated psycho-social mentoring to provide additional, personalized career support. *Originality* – Our study is the first to distinguish differentiated and group-level mentoring within teams. Thereby, we extend traditional mentoring theory to group contexts and provide practitioners with a more detailed understanding of how to use mentoring by supervisors in organizational career management.

In today's dynamic and accelerated business environments, organizations' need for adaptability has resulted in flatter organizational hierarchies and frequent restructuring programs. This development has changed the nature of organizational career development such that lifelong employment and predictable career paths along hierarchical promotions cannot be automatically assumed (Voelpel et al., 2012). Instead, career development needs to become more flexible and individualized to ensure an adaptable workforce as well as to complement employees' own career self-management (Lips-Wiersma & Hall, 2007; Sullivan & Baruch, 2009). In this regard, supervisor's mentoring behaviors – both career and psychosocial mentoring – have become central in providing contemporary career development support (S. Kim, Egan, Kim, & Kim, 2013; McDonald & Hite, 2005; Rafferty & Griffin, 2006).

Career mentoring includes instrumental support for career advancement through the provision of learning opportunities and sponsorship (Ragins & McFarlin, 1990). Psychosocial mentoring entails supervisors' counseling behaviors, which enhance employees' vocational confidence (Noe, 1988). Interestingly, previous research mainly focused on isolated mentoring experiences of individual employees and did not address group-level phenomena, which are highly relevant as group-based organizational structures have become ubiquitous in today's business world (Kozlowski & Bell, 2003). That is, in order to understand the role of mentoring by supervisors for organizational career development, we need to gain a more detailed understanding of how both mentoring functions operate at different levels within team contexts. In this respect, we consider two distinct outcomes, employee's promotability and intentions to stay, which reflect the primary objectives of organizational career development, namely developing and retaining an adaptable workforce.

We propose that employees' mentoring perceptions are not only shaped by their idiosyncratic mentoring experiences but also by observing their supervisor's mentoring

behaviors toward others in the group, which implies that mentoring may operate at the both the individual and the group level (Nielsen & Daniels, 2012). At the individual (employee) level within a group, different employees establish relationships of varying quality with their supervisor (Dansereau, Graen, & Haga, 1975), such that some employees report higher or lower levels of received mentoring than others. To assess an employee's unique mentoring experience in comparison to other group members, we define *differentiated mentoring* as the deviation of an employee's individual mentoring perception from the shared mentoring perceptions within the group. Thus, differentiated mentoring characterizes the extent to which an employee experiences relatively more or less mentoring as compared to others in the group (Nielsen & Daniels, 2012). We will argue that differentiated career and psycho-social mentoring strengthen career motivation (R. Day & Allen, 2004), which in turn should foster promotability. With regards to intentions to stay, we will test competing hypotheses, because previous research suggests that differentiated career and psycho-social mentoring can both increase and decrease intentions to stay (Ito & Brotheridge, 2005).

At the group level, group members' average mentoring perceptions represent the overall mentoring climate, to which we refer as *group-level mentoring*. We argue that mentoring climates can affect career outcomes beyond differentiated mentoring when they extend the individual supervisor-employee relationship to be informative about group-level career support. Moreover, we propose that this cross-level effect will be relevant only for group-level career mentoring, but not for psycho-social mentoring.

Our research yields important contributions. With the increasing importance of mentoring by supervisors as a tool of organizational career development, it is important to understand the different mechanisms in group contexts. Thus, we introduce differential and group-level career and psycho-social mentoring as distinct theoretical constructs and explore their independent contribution to employees' individual-level promotability and intentions to

stay. Moreover, practitioners need to find a way to "mass customize" organizational career development, in that they provide individualized career assistance that is available for all employees (Lips-Wiersma & Hall, 2007). A more detailed understanding of the mentoring mechanisms in group contexts thus may help to determine an effective mix of career and psycho-social mentoring.

Mentoring in a Group Context

Supervisors play a crucial role in employee's career development by offering mentoring (Baranik et al., 2010; Greenhaus, Parasuraman, & Wormley, 1990; Rafferty & Griffin, 2006). Typically, two broad mentoring functions are distinguished (Allen et al., 2004; Kram, 1985): Career and psycho-social mentoring. Career mentoring refers to instrumental assistance for career advancement. Supervisors who provide career mentoring give their employees challenging assignments and learning opportunities, assist them in achieving their goals, and bring them in contact with influential persons within the organization (Ragins & McFarlin, 1990). On the other hand, psycho-social mentoring helps employees to develop a professional identity, confidence, and work effectiveness by providing a positive role model, counseling and coaching (Noe, 1988; Sosik & Godshalk, 2000). With the increasing importance of group contexts (Kozlowski & Bell, 2003), multilevel theorists have discussed whether leader behavior is best represented in terms of individual perceptions or in terms of a shared leadership climate, which emerges from the shared perceptions of employees who work with the same supervisor (Klein & Kozlowski, 2000). Reconciling these contrary perspectives, Nielsen and Daniels (2012) suggested that within group contexts, leader behaviors may manifest as independent theoretical concepts at both levels.

Considering the individual level within groups, supervisors maintain relationships of varying quality with different group members (Dansereau et al., 1975), such that some members may report higher, whereas others may report lower levels of career and psycho-

social mentoring. As suggested by social comparison theory (Festinger, 1954), differentiated supervisor behaviors are likely to be salient to employees in work groups (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008), such that employees may perceive differences between their own mentoring experiences and those of peers, which may affect their career attitudes. For instance, Vidyarathi and colleagues (2010) assessed employee's actual relative relationship quality with the supervisor in comparison to their colleagues using a difference measure and explored whether their relative standing would trigger social comparisons. They found that employee's *actual* relative relationship quality was indeed reflected in their *subjective* perception of their differential relationship status within the group.

At the same time, supervisors shape a certain work climate at the group level, which is represented by the average level of mentoring that group members perceive. In other words, mentoring at the group level emerges from the shared mentoring perceptions of individual team members (Bliese, 2000). Consistent supervisor behaviors can potentially translate into more general work climates, which shape the interpretation of work context (González-Romá, Peiró, & Tordera, 2002). For instance, when employees are exposed to a supervisor who consistently reinforces organizational procedures, they infer a general favorable procedural justice climate (Naumann & Bennett, 2000). In a similar vein, shared group-level mentoring will create a mentoring climate.¹

These different manifestations raise the question of the relative importance of differentiated and group-level mentoring for employees' promotability and intentions to stay. Traditional approaches imply that mentoring primarily operates at the individual level as it enables individualized experiences that support protégés' career progress. However, the effectiveness of mentoring is contingent upon how employees evaluate their mentoring experience (Eby, Butts, Durley, & Ragins, 2010). In this respect, mentoring effectiveness suffers particularly when employees doubt whether they can meet their mentor's expectations

(Ensher & Murphy, 2011) or feel that their supervisors does not fulfill their mentoring responsibilities towards them (Haggard, 2012). As the group creates an evaluative framework to assess one's personal mentoring quality, differentiated mentoring may affect employee's personal career and job attitudes and, in turn, promotability and intentions to stay. Moreover, given the important role of mentoring by supervisors in contemporary organizational career development, it is also crucial to understand whether mentoring climates can affect employee outcomes beyond the individual mentoring experience. Psycho-social mentoring mainly concerns the unique relationship between the supervisor and the employee rather than characterizing the organization (Allen et al., 2004; Baranik et al., 2010), such that psycho-social mentoring climates may not contribute beyond the positive effects of differentiating psycho-social mentoring. In contrast, career mentoring meaningfully extends the dyadic supervisor-employee relationship in that it paves the way for a variety of organizational experiences in form of challenging assignments and access to developmental and networking opportunities (Baranik et al., 2010), such that group-level mentoring will have an additional, cross-level effect on employees' career outcomes at the individual level.

Individual-Level Differentiated Mentoring

Promotability

Promotability entails supervisors' "perception of an individual's capacities and willingness to effectively perform at higher levels" (De Pater et al., 2009, p. 298). We propose that both differentiated career and psycho-social mentoring are positively related to promotability. Employees who experience more individual career mentoring have greater access to challenging assignments and career opportunities than their colleagues. As a result, they acquire a broader set of skills which improve their career capacities (Allen et al., 2004). Psycho-social mentoring is primarily important for establishing a professional identity. Individual psycho-social mentoring supports employees' work role effectiveness and the

development of a career-enhancing mindset (Kram, 1985), which are in turn predictors of promotability (De Pater et al., 2009; De Vos & Soens, 2008). Consequently, employees who receive more psycho-social mentoring will have a career advantage over their colleagues.

We propose career motivation, for which previous research has shown associations with both mentoring functions (R. Day & Allen, 2004), as the mediating process that links differentiated career and psycho-social mentoring to promotability. When career motivation is high, individuals assign high personal importance to their career, feel self-efficacious to master career challenges, and plan their further career development (Carson & Bedeian, 1994; London, 1983). According to social comparison theory (Festinger, 1954; J. V. Wood, 1996), differentiated career mentoring will serve as an indicator for one's relative career potential. Individual career mentoring will enable employees to gain more successful career experiences and be confident to cope with career challenges (R. Wood & Bandura, 1989), such that those employees who receive more career mentoring may be more motivated to advance their career. In contrast, employees receiving less individual career mentoring than their colleagues will question whether they have the necessary abilities for career advancement (R. Wood & Bandura, 1989), which may undermine their career motivation.

Besides differentiated career mentoring, we propose that differentiated psycho-social mentoring will also enhance career motivation. Counseling and coaching help employees to develop effective strategies for setting and achieving career goals which are essential aspects of career motivation. Moreover, positive affirmation conveyed in counseling is crucial to strengthen career motivation (Noe, Noe, & Bachhuber, 1990). Thus, employees who receive more psycho-social mentoring benefit from higher support to develop their professional identity and their career goals than their colleagues, resulting in enhanced career motivation (London, 1983; Noe et al., 1990).

In line with our mediation argument, we propose that career motivation is positively related to promotability (c.f., R. Day & Allen, 2004). Employees who invest time and effort in preparing for career advancement are likely to be more promotable (De Vos & Soens, 2008; Eby, Butts, & Lockwood, 2003), so that supervisors will perceive them as able and willing to advance in their career. Altogether, we propose that differentiated career and psycho-social mentoring will positively relate to supervisor-rated promotability via its association with career motivation.

Hypothesis 1: Differentiated career mentoring (Hypothesis 1a) and psycho-social mentoring (Hypothesis 1b) are positively related to promotability via career motivation.

Intentions to Stay

Whereas mentoring seems to have a generally positive effect on career success, its relationship with intentions to stay is more ambiguous because increasing employees' career potential might make them more suited for career opportunities outside the organization (Ito & Brotheridge, 2005). Thus, we also take into account potential downsides of mentoring in order to evaluate how useful mentoring by supervisors is for organizational career development. We argue that the effect of career and psycho-social mentoring on employees' intentions to stay depends on the specific, competing processes that may be activated (Ito & Brotheridge, 2005). As argued above, one such process is the promotion of career motivation; another process is an increase in job satisfaction. Contrasting both mechanisms leads us to competing hypotheses that suggest contrary effects of differentiated career and psycho-social mentoring on intentions to stay.

Research on career motivation would predict a negative indirect effect on intentions to stay. First, employees high in career motivation invest in their human capital, which increase their career marketability for the external job market (Eby et al., 2003). Second, changing

employers is an effective way to speed up personal career progress (Inkson & Arthur, 2001). Thus, employees with high career motivation might be more likely to accept employer transitions in order to achieve their career goals faster. In accordance with our previously outlined reasoning, stating that differentiated mentoring increases career motivation, we expect negative indirect effects of differentiated career and psycho-social mentoring on intentions to stay.

Hypothesis 2: Differentiated career mentoring (Hypothesis 2a) and psycho-social mentoring (Hypothesis 2b) are negatively related to intentions to stay via career motivation.

In contrast, research on job satisfaction would suggest a positive indirect association between differentiated career and psycho-social mentoring and intentions to stay. Job satisfaction describes an individual's general affective attitude towards the job (Spector, 1997), which includes career-related job components such as the availability of developmental opportunities and promotions, and social relationships at work (e.g., Hackman & Oldham, 1975; Weiss, Dawis, & England, 1967). Employees who receive more career mentoring than their colleagues experience relatively higher job variety as well as greater access to challenging tasks and developmental opportunities, all of which are crucial determinants of job satisfaction (Hackman & Oldham, 1975; Preenen, De Pater, Van Vianen, & Keijzer, 2011). Moreover, employees who receive more psycho-social mentoring have better relationships with their supervisor (Allen et al., 2004), which result in higher job satisfaction (Hu & Liden, 2012), than those who receive less psycho-social mentoring.

Previous research has consistently reported a positive relationship between job satisfaction and intentions to stay (Hom & Kinicki, 2001; Tett & Meyer, 1993). When employees' needs are satisfied, they have less reason to leave the organization. Therefore, in

contrast to Hypothesis 2, which predicts a negative effect on intentions to stay via heightened career motivation, we propose the following alternative hypothesis:

Hypothesis 3: Differentiated career mentoring (Hypothesis 3a) and psycho-social mentoring (Hypothesis 3b) are positively related to intentions to stay via job satisfaction.

Group-Level Perceptions of Mentoring

Whereas the beneficial effects of individualized mentoring in dyadic, one-on-one relationships have been well documented (Allen et al., 2004), research has not yet theorized about the contextual effects of mentoring climates in groups, in which supervisors maintain relationships with several employees. We argue that mentoring climate has to go beyond the individual supervisor-employee relationship in order to create an added value, and that this will be the case for career mentoring but not for psycho-social mentoring.

Career mentoring enables learning and networking experiences within the company, so that broader organizational experiences beyond the relationship with the immediate supervisor become generally visible and accessible for employees (Rafferty & Griffin, 2006). In contrast to career mentoring, the essence of psycho-social mentoring reflects the supervisor's support for an individual employee and lies in establishing an affective bond between the supervisor and the employee (Allen et al., 2004). Therefore, perceptions of psycho-social mentoring are much more bound to the person of the supervisor, whereas career mentoring is apt to inform perceptions of the organization. In support of this reasoning, Eby and colleagues (2013) found in a recent meta-analysis that psycho-social mentoring has a stronger influence on the relationship quality with the supervisor than career mentoring, whereas career mentoring has a stronger impact on sense of affiliation with the organization in work place settings. In a similar vein, only career mentoring, but not psycho-social mentoring, seems to generalize to perceptions of the organization (Baranik et al., 2010). In

this regard, we propose that psycho-social mentoring affects outcomes mostly through the individual, differentiated mentoring experience, and less so as a group-level mentoring climate. In sum, we argue that group-level career mentoring will yield additional information about the organization and explain additional variance in promotability and intentions to stay beyond differentiated mentoring, but that this will not be the case for psycho-social mentoring.

Promotability

When group-level career mentoring is favorable, supervisors offer a rich learning environment (Amy, 2008; Marsick & Watkins, 2003), in which employees can acquire a broad set of career relevant competencies. When supervisors readily promote organizational experiences through networking opportunities and challenging assignments, employees are likely to conclude that these activities are valued within the organization. A development-orientated climate does not only motivate employees to apply their knowledge in practice (Egan, Yang, & Bartlett, 2004), so that they improve and broaden their skills, but also enhances employees willingness to seize career development opportunities (Nauta, Van Vianen, Van Der Heijden, Van Dam, & Willemsen, 2009). Thereby, favorable group-level career mentoring may positively influence both the capacity and willingness components of promotability. We therefore propose the following hypothesis:

Hypothesis 4: Group-level perceptions of career mentoring are positively related to promotability beyond differentiated career mentoring.

Intentions to Stay

Group-level career mentoring is likely to increase intentions to stay because it creates a stimulating working environment full of developmental opportunities, such that dissatisfaction with the working conditions is less likely to inspire turnover intentions (Nauta et al., 2009). Indeed, career mentoring has been shown to strengthen intentions to stay

through increased perceptions of support and commitment to the organization, as employees experience the organization as an attractive employer (Baranik et al., 2010; Rafferty & Griffin, 2006; Wayne, Liden, Kraimer, & Graf, 1999). Therefore, we propose:

Hypothesis 5: Group-level perceptions of career mentoring are positively related to intentions to stay beyond differentiated career mentoring.

Method

Participants and Procedure

Vocational job starters and their respective company supervisors of a German facility management company participated in the survey. Germany has a unique, standardized vocational training (apprenticeship) system, which lasts three to four years and is organized in a dual educational system. Trainees work at their employing company on about four days a week on average in order to acquire the necessary practical skills that are needed to practice the respective craft or profession. Although vocational schools ('Berufsschulen') provide complementary theoretical education, the major focus of the apprenticeship is the company-based, on-the-job training, which clearly distinguishes a German apprenticeship from academic training.

We chose this sample for three reasons: First, trainees are in an early career stage and therefore especially sensitive to career-related topics relevant to our research hypotheses (Kooij, De Lange, Jansen, Kanfer, & Dijkers, 2010). Second, workplace mentoring by trainees' supervisors has a crucial impact on early career development because trainees acquire their professional skills through their work at the company. Finally, due to the lack of qualified employees, German organizations are highly interested in developing and retaining trainees. Within the participating company, for example, 95 % of the trainees receive an offer for permanent employment. Thus, our sample was perfectly suited to test our research hypotheses.

Two researchers collected data from trainees and supervisors at the company during working hours. For practical reasons and to ensure a representative sample, we invited those individuals who could not attend the first meeting for data collection to participate at a second occasion about six months later. Overall, 73% of the company's apprentices attended one of the meetings for data collection, and 94% of these participated in the survey. Supervisors answered questionnaires about three months after the trainee survey. A total of 378 trainees completed the questionnaire. We excluded 58 trainees who could not be matched to a supervisor and those supervisors who were only responsible for one single trainee because these data could not be meaningfully used for our group-context analyses. Finally, we ensured that data from at least 60% of a supervisor's trainees contributed to the multilevel analysis. Applying these selection criteria, we obtained a sample of 230 trainees and 56 supervisors (average group size: 6.28, range 2 - 13) for the models on promotability ratings, which were not available for all trainees, and a sample of 290 trainees and 68 supervisors (average group size: 6.58, range 2-14) for the intentions to stay models.

Of the final sample, 243 trainees participated at the first occasion and 47 trainees at the second one. Most participants were male (80%) and German (70%) with a mean age of 20.01 years ($SD = 2.86$). While 33% were trained to be professional building cleaners², 59% were trained for a technical profession (e.g., electrician, industrial mechanic) and 8% for a clerical profession. On average, trainees were in their second year of apprenticeship ($M = 1.99$, $SD = 0.92$). Participants were representative for all trainees at the company in terms of apprenticeship duration ($M = 2.02$, $SD = 1.00$) but technical trainees were somewhat underrepresented (57% of the entire technical trainee population). Unfortunately, demographic information about nonparticipants was unavailable due to strict data protection regulations. Supervisors were responsible for the company-based training at the company throughout the entire duration of the apprenticeships and had several years of experience with

this job ($M = 7.21$, $SD = .6.06$). Most supervisors were male (85%) and German (84%) with a mean age of 45 years ($SD = 9.79$).

Measures

Participants rated all items on a scale ranging from 1 ("*strongly disagree*") to 5 ("*strongly agree*"). Supervisors provided promotability assessments, whereas trainees rated all other variables. We computed scale mean scores to represent each construct.

Career and psycho-social mentoring. We measured career and psycho-social mentoring with six items per construct, which we adopted from existing measures (Noe, 1988; Ragins & McFarlin, 1990). Sample items for career mentoring ($\alpha = .86$) and psycho-social mentoring ($\alpha = .88$) respectively are "My supervisor provides me with challenging assignments" and "My supervisor has encouraged me to prepare for advancement." Career and psycho-social mentoring were modeled as latent variables, such that differentiated mentoring was modeled at the individual level, whereas group-level perceptions of mentoring were modeled at the group level (see data analysis section, cf. Nielsen & Daniels, 2012).

Career motivation. Ten items from existing scales (Carson & Bedeian, 1994; R. Day & Allen, 2004) represented career motivation. A sample item is: "I have clear career goals." One item ("Given the problems I encounter in my professional career, I sometimes wonder if it is worth it," reversed coded) was excluded because it reduced the scale reliability considerably. The final nine-item scale had a reliability of Cronbach's $\alpha = .82$.

Job satisfaction. Job satisfaction was measured with three items from Hackman and Oldman (1975), such as "All in all I am satisfied with my job" ($\alpha = .80$).

Intentions to stay. We chose three items, which emphasized career-related aspects, to measure intentions to stay. We used two items from Sturges, Conway, Guest, and Liefoghe (2005). A sample item is: "I have made plans to leave this organization if it cannot offer me a rewarding career," reversed coded). We added one item that we developed specifically for

this context: "I will probably stay with this organization after my apprenticeship." Cronbach's α was $\alpha = .84$.

Promotability. Supervisors rated trainees' promotability with two items (adapted from De Pater et al., 2009), for example "This employee demonstrates the ambition to work in a higher position." The item correlation was $r = .83$ ($p < .001$).

Control variables. We identified a list of possible control variables based on previous research. However, in order to preserve statistical power, researchers should only include control variables that significantly affect the outcome variables (Becker, 2005). Therefore, we selected only those control variables from the following list that were actually relevant in our sample based on preliminary analyses. Mentoring researchers recommend controlling for demographic factors, such as ethnicity, gender, and age, and length of relationship, represented by year of apprenticeship and time spent with supervisors (e.g., Ensher, Thomas, & Murphy, 2001). Moreover, human capital, represented by educational level, is an important predictor in career development (Ng, Eby, Sorensen, & Feldman, 2005). Finally, we considered profession (cleaning, technical, clerical) and time of data collection as sample-specific variables.

Data Analysis

As we conducted multilevel analysis, we assessed the between-group variance on all variables in baseline models without predictors that served as comparison models to evaluate the path models. For the promotability models, the between-group variance was significant for career mentoring ($\tau_{00} = .10$, $p = .03$), psycho-social mentoring ($\tau_{00} = .12$, $p = .04$), marginally significant for promotability ($\tau_{00} = .09$, $p = .08$), but nonsignificant for career motivation ($\tau_{00} = .00$, $p = .73$). For the intentions to stay models, the between-group variance was significant for career mentoring ($\tau_{00} = .08$, $p = .02$), job satisfaction ($\tau_{00} = .10$, $p = .01$), intentions to stay ($\tau_{00} = .15$, $p = .04$), marginally significant for psycho-social mentoring

($\tau_{00} = .10$, $p = .06$), but nonsignificant for career motivation ($\tau_{00} = .01$, $p = .56$). Corrected ICC(1) for the outcome variables were .10, $F(55,174) = 1.46$, $p = .04$, for promotability and .11, $F(67,222) = 1.55$, $p = .01$, for intentions to stay, and indicated that employees differed in the outcome variables due to their group membership, so that multilevel analyses were appropriate.

We applied a multilevel approach to operationalize differentiated and group-level mentoring (Nielsen & Daniels, 2012) and modeled both constructs via latent variable decomposition. Within- and between-level parts of the variables are separated and modeled as independent latent variables (Muthén & Muthén, 1998-2010). The within-level part reflects the deviation of an individual's perception from the shared, average perception of a supervisor's mentoring behavior and represents differentiated mentoring. Differentiated mentoring can take on positive values when a trainee perceives more mentoring than his/her colleagues as well as negative values when a trainee perceives less mentoring than his/her colleagues. The between-level part represents group-level perceptions of mentoring, that is the average perception of all trainees rating the same supervisor. Our data supports aggregation for career mentoring (corrected ICC[1] = .09, $F[67, 216] = 1.45$, $p = .03$; ICC[2] = .31; mean $r_{wg(J)} = .78$) and psycho-social mentoring (corrected ICC[1] = .15, $F[67, 219] = 1.73$, $p = .002$, ICC[2] = .42, mean $r_{wg(J)} = .76$).

We used multilevel structural equation modeling (Preacher, Zyphur, & Zhang, 2010) to test the hypothesized relationships between differentiated career and psycho-social mentoring and the outcome variables, which represent within-level (1-1-1) mediation models. This approach combined several advantages: First, we could assess the relationships between differentiated career and psycho-social mentoring and the outcome variables (Hypotheses 1-3) while controlling for group-level career and psycho-social mentoring respectively. Second, we could examine whether mediation occurs at the individual or at the group level. For this

purpose, mediators with significant between-level variance were modeled as latent variables on both levels. Next to Sobel tests, we provide 95% confidence intervals for the indirect effect obtained via a Monte Carlo simulation (Selig & Preacher, 2008). Third, based on these models, we were able to test whether group-level mentoring has a contextual effect above and beyond differentiated mentoring and explain additional variance in the outcome variables beyond differentiated mentoring (Hypotheses 4 and 5). Enders and Tofighi (2007) recommend to test whether the direct effect of differentiated mentoring is significantly different from group-level mentoring in order to explore whether a contextual effect is meaningful.

Career motivation was group-mean centered and modeled only at individual level due to the lack of group-level variance. At the individual level, categorical control variables were uncentered (Nezlek, 2011), whereas continuous control variables were grand-mean centered because to partial out possible between-level differences (Enders & Tofighi, 2007).

Results

Before conducting the main analysis, we explored the association between the control and the outcomes variables (Becker, 2005). Neither profession nor type of educational degree was related to promotability or intentions to stay ($.20 < F < 2.77$, $.06 < p < .93$; Bonferroni post-hoc group comparisons showed no significant group differences). When controlling for the nested data structure, participants at the first occasion received more favorable promotability ratings ($b = -.29$, $p = .04$), and older trainees ($b = .06$, $p = .01$) and participants at the first occasion ($b = -.30$, $p = .06$) reported higher levels of intentions to stay. Table 2.1 shows descriptive statistics and zero-order correlations for all variables included in the main analyses. Maasen and Bakker (2001) suggested that even moderate correlations (e.g., $r = .31$) may lead to suppression effects, which may be interpreted inaccurately. As career and psycho-social mentoring were strongly correlated ($r = .59$, $p < .001$), we ran separate models

for each function to avoid negative suppression effects due to multicollinearity (c.f., Smith, Amiot, Callan, Terry, & Smith, 2012 for a similar approach).

Individual-Level Differentiated Mentoring

Promotability. Figure 2.1A represents the relationship between differentiated career mentoring and promotability. The model fit was excellent ($\chi^2[1] = .08, p = .78; CFI = 1.00, TLI = 1.31, RMSEA < .001, SRMR_{within} = .01, SRMR_{between} = .02$). Hypothesis 1a, proposing a positive relationship between differentiated career mentoring and promotability via career motivation, received no support. Although the paths connecting differentiated career mentoring with career motivation ($b = .10, p = .03$) and career motivation with promotability ($b = .22, p = .02$) were significant, the indirect effect was not ($ab = .02, p = .14, 95\% CI [.00; .06]$). The predictors reduced the proportion of unexplained individual-level variance (Snijders & Bosker, 1994) for career motivation ($R^2_{within} = .21$) and for promotability ($R^2_{within} = .13$).

Figure 2.1B represents the model that links differentiated psycho-social mentoring to promotability and that fitted the data very well ($\chi^2[1] = .02, p = .89; CFI = 1.00, TLI = 1.35, RMSEA < .001, SRMR_{within} = .003, SRMR_{between} = .001$). In line with Hypothesis 1b, differentiated psycho-social mentoring had a positive indirect effect on promotability via its association with career motivation ($ab = .04, p = .046, 95\% CI [.01; .09]$). The individual-level predictors explained additional variance in career motivation ($R^2_{within} = .24$) and promotability ($R^2_{within} = .05$).

Table 2.1

Means, Standard Deviations, and Zero-Order Correlations

	Mean (SD)	1	2	3	4	5	6	7	8
1. Measurement point ^a									
2. Age	20.01 (2.86)	.02							
3. Career mentoring	2.96 (0.84)	-.11	.05	(.86)					
4. Psycho-social mentoring	3.49 (0.83)	-.05	-.03	.59**	(.88)				
5. Career motivation	4.07 (0.57)	-.03	.08	.16**	.24**	(.82)			
6. Job satisfaction	3.85 (0.94)	-.11	-.00	.32**	.32**	.39**	(.80)		
7. Promotability ^b	2.81 (0.92)	-.11	.07	.20**	-.02	.07	-.09	(.82)	
8. Intentions to stay	2.68 (1.15)	-.10	.14*	.28**	.23**	.20**	.53**	.15*	(.84)

Note. $N = 290$. Cronbach's α for scales indicated in brackets on the diagonal.

^acoded 0 = first measurement point, 1 = second measurement point; ^bfor two-item measures correlations are reported instead of Cronbach's α .

* $p < .05$, ** $p < .01$.

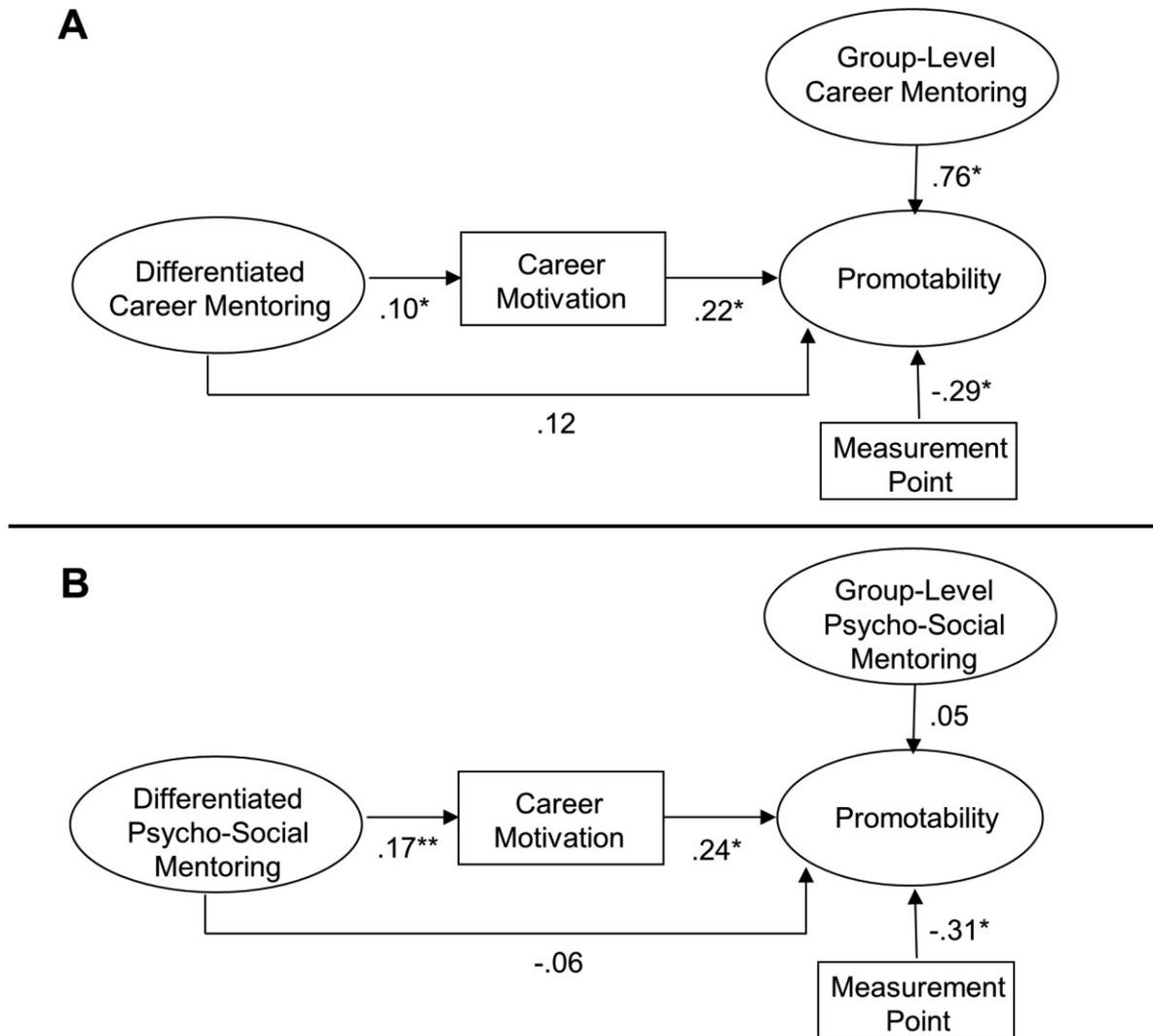


Figure 2.1. Multilevel 1-1-1 mediation model for promotability regressed on (A) career mentoring (Hypothesis 1a) and (B) psycho-social mentoring (Hypothesis 1b).

* $p < .05$, ** $p < .01$.

Intentions to stay. Figure 2.2A shows the relationships between differentiated career mentoring and intentions to stay. Although not hypothesized a priori, we added a path connecting job satisfaction and career motivation because model fit indices indicated serious misspecification otherwise ($\chi^2[5] = 30.73$, $p < .001$; $CFI = .83$, $TLI = .48$, $RMSEA = .14$, $SRMR_{within} = .08$, $SRMR_{between} = .04$). As this link is in line with previous research (Goulet & Singh, 2002; S. Kim et al., 2013), we included it in the final model, which showed excellent model fit ($\chi^2[4] = 3.29$, $p = .51$; $CFI = 1.00$, $TLI = 1.02$, $RMSEA < .001$, $SRMR_{within} = .02$, $SRMR_{between} = .01$). Hypothesis 2a, which proposed a negative indirect relationship between differentiated career mentoring and intentions to stay via career motivation, was not supported ($ab = -.01$, $p = .25$, 95% CI [-.04; .01]). The direct association between differentiated career mentoring and career motivation was not significant ($b = .05$, $p = .29$). Instead, differentiated career mentoring was only indirectly linked to career motivation via its association with job satisfaction ($ab = .07$, $p = .001$, 95% CI [.03; .13]). Nevertheless, although only marginally significant, the negative association between career motivation and intentions to stay ($b = -.23$, $p = .06$) was in line with our general reasoning. Hypothesis 3a, proposing a positive indirect effect of differentiated career mentoring on intentions to stay via job satisfaction, received support ($ab = .25$, $p < .001$, 95% CI [.14; .37]). Overall, the individual-level predictors explained variance in career motivation ($R^2_{within} = .33$), job satisfaction ($R^2_{within} = .09$), and intentions to stay ($R^2_{within} = .36$).

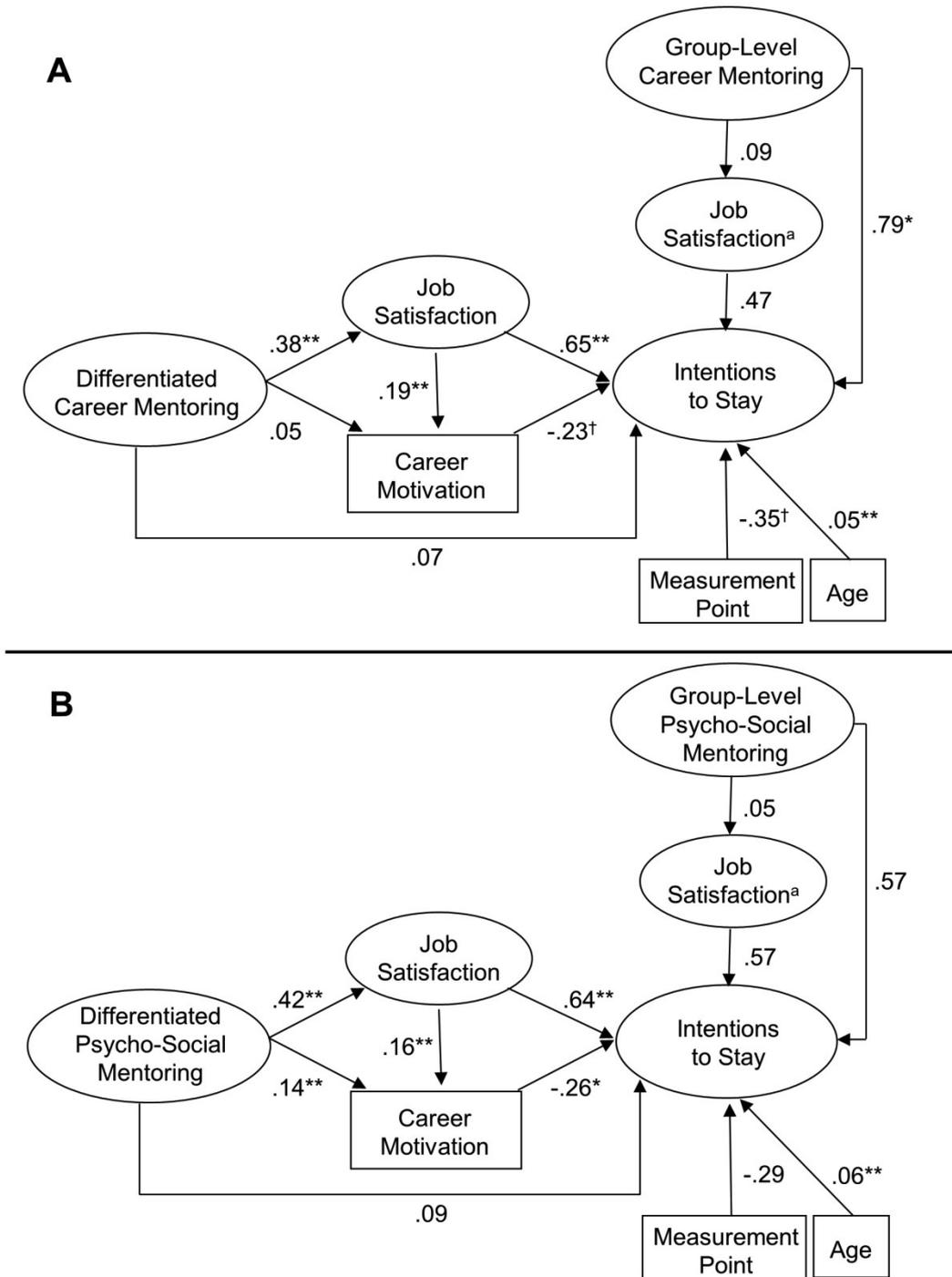


Figure 2.2. Multilevel 1-1-1 mediation model for intentions to stay regressed on (A) career mentoring (Hypothesis 2a and 3a) and (B) psycho-social mentoring (Hypothesis 3a and 3b).

^aestimated because of significant between-level variance (Preacher, Zyphur, & Zhang, 2010).

[†] $p < .10$, * $p < .05$, ** $p < .01$.

Figure 2.2B displays the model that links differentiated psycho-social mentoring to intentions to stay. Again, we added the path between job satisfaction and career motivation as the model would have been misspecified otherwise ($\chi^2[5] = 22.24, p < .001; CFI = .90, TLI = .67, RMSEA = .11, SRMR_{within} = .06, SRMR_{between} = .06$). The resulting model had excellent model fit ($\chi^2[4] = 2.44, p = .66; CFI = 1.00, TLI = 1.04, RMSEA < .001, SRMR_{within} = .02, SRMR_{between} = .01$). Hypothesis 2b was not supported as the negative indirect effect of differentiated psycho-social mentoring via career motivation was not significant ($ab = -.04, p = .10, 95\% CI [-.09; .00]$). However, we again obtained a negative relationship between career motivation and intentions to stay ($b = -.26, p = .04$). In line with Hypothesis 3b, the positive indirect effect of differentiated psycho-social mentoring via job satisfaction was significant ($ab = .27, p < .001, 95\% CI [.14; .41]$). The individual-level predictors explained variance in career motivation ($R^2_{within} = .34$), job satisfaction ($R^2_{within} = .11$), and intentions to stay ($R^2_{within} = .35$).

Group-Level Mentoring

Promotability. Expanding the analysis to the group level, we explored whether group-level perceptions of career mentoring explained additional variance in promotability beyond differentiated career mentoring at the individual level (Hypothesis 4, Figure 2.1A). In line with our hypothesis, the difference between the group- and individual-level direct effect parameters was marginally significant ($\gamma_{01} - \gamma_{10} = .65, p = .054$). The model explained 42% of the between-level variance in promotability. Taken together, the results indicate that supervisors' general tendency to provide career mentoring to all, rather than some individual members of the group, was positively associated with promotability.

Intentions to stay. We found support for Hypothesis 5 as group-level career mentoring explained additional variance in intentions to stay beyond differentiated career mentoring at the individual level ($\gamma_{01} - \gamma_{10} = .71, p = .04$, Figure 2.2A). The model reduced the

amount of unexplained between-level variance in intentions to stay ($R^2_{\text{between}} = .56$). Thus, career mentoring unfolded its positive association with intentions to stay via two levels. At the individual level, differentiated career mentoring was indirectly and positively related to intentions to stay via job satisfaction. At the group level, trainees reported higher levels of intentions to stay when they worked with a supervisor who generally engaged in career mentoring.

Supplementary analysis. In contrast to group-level perceptions of career mentoring, we did not expect that group-level perceptions of psycho-social mentoring would explain variance in promotability or intentions to stay beyond differentiated psycho-social mentoring. Indeed, the difference between the group- and individual-level direct effect parameters was neither significant for promotability ($\gamma_{01} - \gamma_{10} = .11, p = .66$, Figure 2.1B) nor for intentions to stay ($\gamma_{01} - \gamma_{10} = .49, p = .35$, Figure 2.2B).

Discussion

Given the importance of mentoring by supervisors in contemporary organizational career development and the increased importance of teams, we explored how career and psycho-social mentoring operates at distinct levels within group contexts in their relationship with promotability and intentions to stay. At the individual level, we considered differentiated mentoring, that is, the deviation of an employee's perceived mentoring from the average shared mentoring perceptions within the group. We suggested that differentiated mentoring for both functions would have a positive indirect effect on promotability via career motivation. However, this hypothesis was only supported for differentiated psycho-social mentoring. For intentions to stay, neither differentiated career nor psycho-social mentoring had a negative indirect effect through career motivation. Instead, we found a positive indirect effect for both differentiated mentoring functions on intentions to stay mediated by job satisfaction. At the group level, we included the shared perceptions of career and psycho-

social mentoring, reflecting the average level of mentoring within the group. As hypothesized, only group-level career, but not group-level psycho-social mentoring, explained additional variance in promotability and intentions to stay beyond differentiated mentoring.

Theoretical Implications and Future Research

Our framework extends traditional mentoring theory to group contexts. Integrating multilevel and mentoring theory reveals that career and psycho-social mentoring operate at different levels. It is noteworthy that the positive effects of career mentoring mainly reside at the group level. Thus, when supervisors engage in career mentoring, they contribute to a favorable development-orientated organizational climate, as learning and career opportunities within the organization become visible and accessible to employees (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011; Nauta et al., 2009). This finding corroborates research showing that career mentoring contributes to perceptions about the organization in general (Baranik et al., 2010; Kraimer et al., 2011; Wayne, Shore, & Liden, 1997) and highlights the central role of the supervisor in this regard.

In contrast to career mentoring, group-level psycho-social mentoring did not have additional predictive value above differentiated mentoring, illustrating that this mentoring function mainly operates at the individual level. As shown by previous research, psycho-social mentoring provides the fundament of the relationship between the employee and the supervisor (Allen et al., 2004; Eby et al., 2013) as supervisors need to individually consider the unique career situation of the employee to provide effective career assistance. Given the supervisor's personal investment, employees attribute positive perceptions to the supervisor may not transfer to the general work environment (e.g., Baranik et al., 2010; Rhoades & Eisenberger, 2002).

Furthermore, we contribute to our knowledge about promotability which has received surprisingly little research attention. This is surprising since employee's promotability allows organizations to flexibly react to dynamically changing business requirements (Nauta et al., 2009; Voelpel et al., 2012). Interestingly, only differentiated psycho-social, but not career mentoring, had an indirect relationship via career motivation with promotability, suggesting that especially those aspects of career motivation affected by differentiated psycho-social mentoring are relevant for promotability. A content-related comparison of both mentoring functions suggests that career mentoring facilitates career *experiences*, whereas psycho-social mentoring supports *reflection* upon one's career. These reflection processes may enhance the cognitive aspects of career motivation, such as goal setting and planning, which are dominant drivers of promotability (De Vos & Soens, 2008).

Moreover, we demonstrate that aspects of the work climate as represented by group-level career mentoring are apt to foster promotability. This is an important extension of previous research which has primarily focused on individual experiences that influence promotability (De Pater et al., 2009; Greenhaus et al., 1990). In times when organizations cannot promise stable, long-term employment, their responsibility to facilitate employees' employability increases (Lips-Wiersma & Hall, 2007). Therefore, it is important to identify further contextual factors, such as organizational learning climate, which help organizations to provide career support to the entire workforce.

Notably, only the contextual effect of group-level, but not differentiated career mentoring seemed to be related to promotability; an unexpected finding given that mentoring theory usually highlights that mentored employees have unique experiences (e.g., in comparison to nonmentored employees) that account for their career advantages (e.g., Allen et al., 2004). A possible explanation may be that when supervisors readily provide sponsorship, challenging assignments, and networking opportunities, many team members

acquire instrumental career skills. As such, employees may not only benefit from their own experiences but possibly also from the skills and experiences of their colleagues with whom they interact on a daily basis. In this case, it may be less crucial whether employee's own career mentoring through the supervisor is below or above what their colleagues receive.

For intentions to stay, we put forward two competing hypotheses based on findings showing that mentoring can aid as well as jeopardize retaining qualified employees. Our results support a positive influence of differentiated career and psycho-social mentoring via job satisfaction (Hypothesis 3) rather than a negative indirect effect via career motivation (Hypothesis 2). In this respect, our research complements findings suggesting a positive relationship between mentoring and intentions to stay (Allen et al., 2004) by introducing job satisfaction as crucial mediating mechanism. It is important to note, however, that our participants could assume to receive a permanent-employment offer after finishing their apprenticeship. Kraimer and colleagues (2011) showed that under such favorable career conditions, intentions to stay are increased by career support. However, when there is a lack of career opportunities, intentions to stay are decreased as employees may be inclined to seek career opportunities outside of the organization. Potential career opportunities might thus be an important moderator to take into account in future mentoring research.

Although not operating as a mediator, career motivation appeared to be negatively associated with intentions to stay. This observation is in line with previous research (Inkson & Arthur, 2001; Nauta et al., 2009), as highly career motivated employees are likely to consider external job opportunities instead of pursuing lengthy intra-organizational career paths. The lack of mediation suggests that there are other drivers of career motivation, besides situational variables such as mentoring, which may account for the negative relationship with intentions to stay. London (1983) proposed that personal characteristics, such as need for achievement, internal locus of control, or openness to experience, are also

important determinants of career motivation, which may be predictive of intentions to leave the organization (Eby et al., 2003).

Practical Implications

Our results indicate that mentoring provided by supervisors is an efficient instrument to deal with the requirements of contemporary organizational career management. Most importantly, group-level career mentoring enhances promotability and intentions to stay for all employees beyond differentiated career mentoring. Thus, organizations could train supervisors to provide their employees with challenging tasks as well as networking within the organization in daily business. While maintaining a general level of career support through group-level career mentoring, differentiated psycho-social mentoring can be used as a special incentive for high-potential employees or to provide assistance to those struggling with career progress. Hence, a thoughtful combination of group-level career mentoring and differentiated psycho-social mentoring enables organizations to provide career support for the general workforce and add individualized career assistance for specific employees.

Furthermore, our findings are based on data from blue collar workers who generally receive less formal off-the-job training than other occupational groups (Osterman, 1995). Blue collar workers, however, need to stay promotable as their work complexity increases constantly (Osterman, 1995). Moreover, organizations tend to ignore that blue collar workers' career needs go beyond monetary rewards (Hennequin, 2007). Mentoring, because of its positive relationship with promotability, can thus compensate for the lack of formal training as it increases promotability of blue collar workers, prepares them to deal with challenging job demands, and satisfies their career needs.

Strengths and Limitations

Our sample of vocational trainees was perfectly suited to explore how supervisors influence career development. Given that our participants had just started their careers, we

trust that the observed relationships are driven by trainees' mentoring perceptions and not by previous job experiences. In this respect, we do acknowledge that a potential limitation of this sample is that our participants were quite young in comparison to the general workforce. We are, however, confident that our conclusions will also hold for an older population. First, from a theoretical perspective, mentoring has been proposed to enable continuous learning across the (work-) lifespan (Voelpel et al., 2012). Mentoring also contributes to a stimulating work environment that allows employees to apply their skills, and which becomes more and more important with increasing age (Kooij et al., 2010). Second, our findings are consistent with empirical research on mentoring that was conducted with samples of older employees (e.g., R. Day & Allen, 2004; Greenhaus et al., 1990; Sturges et al., 2005).

A further strength of our study lies in our methodological approach. Our multilevel framework reveals the distinct routes of differentiated and group-level mentoring within a group context. Using latent variable decomposition does not only enable an adequate operationalization of differentiated and group-level mentoring (Enders & Tofighi, 2007) but also corrects for measurement bias (Muthén & Muthén, 1998-2010). Nevertheless, alternative operationalizations could be applied in future research to complement our findings. In this respect, respondents might be asked to compare themselves to their colleagues to assess differentiated mentoring. Likewise, researchers could adopt a referent-shift approach to measure group-level mentoring and directly inquire how the group as a whole perceives the supervisor.

Furthermore, multilevel structural equation modeling (Preacher et al., 2010) enabled us to investigate the mediating mechanisms at the individual level that link differentiated mentoring to the outcome variables. Future research could focus on career mentoring at the group level and different organizational outcomes. For instance, as group-level career mentoring makes organizational career opportunities more accessible, it is possibly related to

constructs that describe the organization as a whole, such as perceived organizational support (Wayne et al., 1997). Due to the focus on learning and skill development, group-level career mentoring might also be an important antecedent of organizational learning climate (Marsick & Watkins, 2003).

Finally, we acknowledge that only experimental research can demonstrate causality between variables. Although theory suggests a causal effect of mentoring on career outcomes, those employees with high career potential who actively pursue their personal career development might be especially prone to receive mentoring from their supervisors (Sturges et al., 2005). Importantly, however, promotability ratings by supervisors were collected about three months after the trainee survey, so that this time-lagged approach boosts our confidence in the directionality of the effects. Future longitudinal and experimental research can provide stronger indications for a causal effect of mentoring.

Conclusion

Integrating the group context in mentoring research reveals that career and psycho-social mentoring operate via multiple mechanisms at different levels: Our research suggests that career mentoring influences promotability and stay intentions mainly at the group level, whereas psycho-social mentoring operates at the individual level. A better understanding of the group-level and differentiated effects enables organizations to fine-tune mentoring by supervisors to optimally accommodate the requirements of contemporary organizational career development.

Footnotes

¹Importantly, mentoring climates characterize the everyday work experience for team members and are distinct from formal mentoring interventions in groups, in which protégés who normally do not work together discuss their career developments outside their daily work settings (Emelo, 2011; Mitchell, 1999).

²Whereas unskilled cleaners usually have limited career options, there is a lack of *qualified* building cleaning professionals who deal with more complex requirements of facility management. Thus, this sample may be unique, but adequate for our research hypothesis.