

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/229930650>

Employees' challenging job experiences and supervisors' evaluations of promotability

Article in *Personnel Psychology* · May 2009

DOI: 10.1111/j.1744-6570.2009.01139.x

CITATIONS

92

READS

1,674

4 authors:



Irene E. De Pater

Curtin University

51 PUBLICATIONS 2,015 CITATIONS

[SEE PROFILE](#)



Annelies E.M. van Vianen

University of Amsterdam

175 PUBLICATIONS 7,401 CITATIONS

[SEE PROFILE](#)



Myriam N Bechtoldt

EBS Universität für Wirtschaft und Recht

41 PUBLICATIONS 1,015 CITATIONS

[SEE PROFILE](#)



Ute-Christine Klehe

Justus-Liebig-Universität Gießen

93 PUBLICATIONS 2,255 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Navigating foreign waters: Migrants' coping in host country labor markets [View project](#)



Strategische Personalentwicklung: Psychologische, pädagogische und betriebswirtschaftliche Kernthemen [View project](#)

EMPLOYEES' CHALLENGING JOB EXPERIENCES AND SUPERVISORS' EVALUATIONS OF PROMOTABILITY

IRENE E. DE PATER, ANNELIES E. M. VAN VIANEN, MYRIAM N. BECHTOLDT,
AND UTE-CHRISTINE KLEHE

Department of Work and Organizational Psychology
University of Amsterdam

Promotability evaluations are important for individuals' career development and organizations' human resource management practices. Nevertheless, little empirical research has addressed predictors of promotability evaluations, and the studies that have, have often focused on current job performance and fixed, nonbehavioral predictors. This study takes a more behavioral approach, and investigates whether besides *how* one performs (i.e., job performance) *what* one performs also serves as an indicator of promotability. Specifically, we examine the relationship between employees' challenging job experiences and supervisors' evaluations of employees' promotability over and above employees' current job performance. Results from 3 field studies, sampling different types of employees via different measures, consistently showed that challenging job experiences explained incremental variance in supervisory and organizational evaluations of promotability over and above current job performance and job tenure.

Evaluations of employees' promotability are important for both the career development of individual employees and human resource management practices in organizations. From an individual career perspective, employees interested in upward mobility often depend on the evaluations by their supervisors (Thacker & Wayne, 1995; Van Scotter, Motowidlo, & Cross, 2000). If a supervisor perceives an employee as promotable, this employee will probably receive the necessary support for upward mobility. Supervisors' evaluations of employees' promotability thus are important indicators of actual promotions and career success (Van Scotter et al., 2000; Wayne, Liden, Kraimer, & Graf, 1999). From an organizational perspective, promotability evaluations are important for succession planning and human resource management. The identification of high-potential employees is a crucial step for building and developing a large

We would like to acknowledge that we benefited greatly from the comments of the three anonymous reviewers.

Correspondence and requests for reprints should be addressed to Irene E. De Pater, Department of Work and Organizational Psychology, University of Amsterdam, Roetersstraat 15, 1018 WB Amsterdam, The Netherlands; i.e.depater@uva.nl.

talent pool that enables organizations to effectively adapt and respond to changes in the environment (Conger & Fulmer, 2003; Karaevli & Hall, 2003).

Promotability has been described as “the favorability of an employee’s advancement prospects” (Greenhaus, Parasuraman, & Wormley, 1990, p. 69) and reflects “an individual’s projected performance at higher managerial levels” (London & Stumpf, 1983, p. 245). Because actual performance is a function of ability and motivation (Locke, Mento, & Katcher, 1978), we combine the above conceptualizations and define promotability as the perception of individuals’ capacities and willingness to effectively perform at higher job levels.

Despite the importance of promotability evaluations for both individuals and organizations, research and practice related to promotability evaluations have been driven more by practical issues such as evaluation fairness (e.g., Greenhaus et al., 1990; Hartman, Griffeth, Crino, & Harris, 1991) than by theoretical considerations. Although succession planning researchers are mainly concerned with the succession process (Garman & Glawe, 2004) rather than with the identification of talented employees, career researchers often focus on employees’ current job performance (e.g., Beehr, Taber, & Walsh, 1980; Greenhaus et al., 1990) or demographic variables (e.g., Hartman et al., 1991; Williams & Walker, 1985) as key factors in predicting promotability. For several reasons, we consider these key factors suboptimal predictors of promotability. First, performance in one’s current job does not accurately predict future performance in another role at higher job levels (Conger & Fulmer, 2003; Sessa, 2001). Practitioners have stressed that “not just how you do, but what you do” (Karaevli & Hall, 2003, p. 66) should be important for promotability evaluations. In a similar vein, researchers have included employees’ work experience as predictor of promotability evaluations but usually operationalized work experience as employees’ years of experience in a specific job (e.g., Harris, Kacmar, & Carlson, 2006; London & Stumpf, 1983). This approach does not provide an adequate operationalization of work experience (Tesluk & Jacobs, 1998) because it ignores the fact that individuals with equal amounts of tenure in the same job can differ considerably with respect to the content, quality, and breadth of their experiences (Ford, Quinones, Sego, & Sorra, 1992; Quinones, Ford, & Teachout, 1995). For predicting performance in more complex, higher-level jobs it is not enough to only consider the time spent in a specific position: “Experience should reflect the challenges and interactions that accrue above and beyond what is acquired through simple continued practice” (Tesluk & Jacobs, 1998, p. 325).

The above depicts a practical and a theoretical need to focus not only on job performance and the quantity of work performance but to also

consider the content of individuals' work experience as an antecedent of promotability evaluations. As virtually no research has looked directly at the relationship between qualitative aspects of work and promotability evaluations, the current research aims at examining the extent to which, above and beyond tenure and current job performance, the quality of employees' work experience is related to supervisory ratings of employees' promotability.

The qualitative nature or content of work experience can be assessed by measuring the types of experiences individuals have in their jobs (Quinones et al., 1995). Research suggests that among the types of work experiences people have, challenging job experiences in particular contribute to individuals' career development (Berlew & Hall, 1966; Quinones et al., 1995; Tesluk & Jacobs, 1998). Challenging job experiences refer to work activities for which existing tactics and routines are inadequate and that require new ways of dealing with work situations (Davies & Easterby-Smith, 1984). Challenging job experiences can thus be conceived of as job characteristics that provide individuals with the opportunity and motivation to learn (McCauley, Ruderman, Ohlott, & Morrow, 1994) and that may result in the development of a wide range of skills, abilities, insights, knowledge, and values (McCall, Lombardo, & Morrison, 1988) that increase individuals' capacities for effective managerial action (London, 2002; McCauley et al., 1994).

Challenging job experiences may also be an important source for promotability evaluations. First, employees' capacities to effectively perform at higher job levels can be better established if they perform challenging tasks rather than nonchallenging tasks in their current job because challenging tasks encompass the types of activities also performed at higher job levels (Davies & Easterby-Smith, 1984). Second, the types of activities that individuals perform may signal their ambition to attain a higher-level position; employees who perform challenging tasks show more willingness to perform at higher job levels than those who mainly perform nonchallenging tasks. This study therefore examines the relationship between employees' challenging job experiences and supervisory evaluations of their promotability, controlling for job performance and quantitative work experience.

This study is theoretically and empirically novel in several ways. First, we define and operationalize promotability as the perception of individuals' capacities and willingness to effectively perform at higher job levels. The inclusion of individuals' willingness in addition to their capacities in measures of promotability is vital to predict effective future performance in higher-level positions. Theoretically, it has been argued that motivation is *always* a determinant of performance (Campbell, 1990). Our conceptualization of promotability further accords with past research that has shown

that actual promotion decisions were a function of both ability-related and motivational variables (Ng, Eby, Sorensen, & Feldman, 2005). Second, this study extends the work of Quinones and colleagues (1995) and Tesluk and Jacobs (1998) that stressed the importance of the quality or content of one's work when considering career-related outcomes. The inclusion of the qualitative component of work experience in this study may especially improve our understanding of performance and promotability evaluations. Third, we move beyond the assessment of fixed, demographic variables and focus on behavioral factors that may influence employees' promotability in a more direct way. This behavioral approach is consistent with the increasing usage of behaviorally oriented assessment tools such as situational judgment tests (SJTs) in human resource decisions (McDaniel, Hartman, Whetzel, & Grubb, 2007). Using behavioral information for evaluating individuals' promotability may facilitate supervisors to overcome natural evaluation biases and help them to identify and advance those employees who are both willing and able to perform at higher-level positions. In addition, many organizations encourage their employees to manage their own careers (Wayne et al., 1999) and hold individual employees responsible for their own career development (Arthur, Khapova, & Wilderom, 2005; Hall & Mirvis, 1995). Insight in behavioral aspects related to favorable promotability evaluations may help individual employees understand what they can actually do, besides performing well, in order to effectively manage their own career development.

As an outline of the things to come, we begin with positioning the focus of this study in the context of extant research on promotability evaluations. We then move on to discuss the importance of the content of work experiences, especially challenging job experiences, for career-related outcomes. Based on extant research and theoretical thinking, we develop our main hypothesis regarding the impact of employees' challenging job experiences on supervisors' evaluations of employees' promotability. This hypothesis was tested in three field studies with management trainees working in the public sector (Study 1), junior-level employees working in the field of earth sciences (Study 2), and mid-level employees from a large pharmaceutical company (Study 3).

Promotability Evaluations

Promotability evaluations reflect supervisors' impressions of employees' expected performance at higher organizational levels (London & Stumpf, 1983; Williams & Walker, 1985). As objective information regarding individuals' future achievements in a higher-level position is not available, supervisors are "asked to draw inferences from current performance about suitability for higher levels" (Williams & Walker, 1985,

p. 333). Spence (1973) suggested that supervisors therefore would rely on signals that reflect employees' capacities and talents when they evaluate their employees' promotability.

Job performance and work experience are considered important indicators of promotability evaluations (London & Stumpf, 1983). Prior studies showed that job performance is indeed positively related to promotability evaluations (Greenhaus et al., 1990; Van Scotter et al., 2000; Wayne, Liden, Graf, & Ferris, 1997). Noteworthy is that job performance in itself may not be the best predictor of one's capacities for successfully performing at a higher job level (Conger & Fulmer, 2003; Sessa, 2001). The Peter Principle (Peter & Hull, 1969) even suggests that "in a hierarchy every employee tends to rise to his level of incompetence" (p. 25). An employee's incompetence may result from the higher-level job being more difficult but may also be due to the fact that the new job differs from the job in which the employee previously excelled. New jobs often require different types of knowledge, skills, and capacities that employees do not yet possess and may not be able to develop. Successful performance on challenging tasks, therefore, may be more relevant for evaluating individuals' promotability than successful performance on routine tasks (De Pater, Van Vianen, Fischer, & Van Ginkel, 2009; Humphrey, 1985).

Work experience may be used as a signal for one's promotability because it can be conceived of as a proxy for someone's level of knowledge, skills, and expertise (Becker, 1975). Nevertheless, research into the relationship between work experience (i.e., tenure) and promotability evaluations showed equivocal results. For instance, job tenure has been found to relate positively (Turnage & Muchinsky, 1984), negatively (Harris et al., 2006; Wayne et al., 1999), or not at all (Cox & Nkomo, 1992) to promotability evaluations. The main reason for these inconsistent findings is that tenure will not necessarily reflect the development of expertise and broader skills (Harris et al., 2006). The positive impact of job tenure on learning, development, and productivity may decrease over time; as job tenure increases, its value as a proxy for experience, knowledge, and perhaps productivity may weaken (Cox & Nkomo, 1992). The quality, or content, of employees' work experience may thus be a better proxy for their level of knowledge, skills, and expertise than the quantity of their work experience.

Challenging Job Experiences

Despite widespread consensus with regard to the importance of challenging job experiences for career advancement (e.g., Berlew & Hall, 1966; Mainiero, 1994; McCall et al., 1988), empirical evidence for the relationship between challenging job experiences and career-related

outcomes is scarce (Cianni & Romberger, 1995; Lyness & Thompson, 2000). Moreover, the few studies that have examined the relationship between job challenge and career-related outcomes mainly used qualitative or retrospective methods. For instance, McCall et al. (1988) and Van Velsor and Hughes (1990) used retrospective interviews in which they asked successful managers to recall key events in their careers that had importantly changed their managerial development. Interviewees most often reflected on how specific challenging assignments had helped them to develop specific skills and how successful performance had given them the impetus to progress in their career. Although retrospective methods have significant limitations concerning the accuracy of the measures (Anderson, 1995), these studies at least suggest that challenging job experiences provide employees with opportunities to learn and to develop their managerial skills (McCauley et al., 1994). This learning and development may lead to improved job performance, which may in turn result in more favorable promotability evaluations.

Job challenge may also directly influence promotability evaluations, over and above the impact of improved job performance. Studies on person perception indicate that people tend to interpret another person's behaviors in terms of general personal dispositions (Jones & Nisbett, 1987). Based on these inferred dispositions, people form a general evaluation of this person (Srull & Wyer, 1989). Extending these findings, a manager may infer that subordinates possess certain motivations and capacities based on the types of tasks they perform in their jobs. This assumption is supported by signaling theory (Bliege Bird & Smith, 2005; Spence, 1973), which suggests that when supervisors have to predict employees' future achievements based on their current behaviors, supervisors will rely on signals, that is, on observable characteristics and qualities of employees that are under their discretion and that reflect their capacities and talents. Performing challenging tasks can be conceived of as a signal indicating employees' levels of ability (Humphrey, 1985), willingness to exert effort (Van Scotter et al., 2000), and possibly their ambition for reaching higher-level positions. Therefore, we propose that the performance of challenging tasks will affect supervisors' evaluations of employees' promotability over and above the impact of employees' current job performance.

Overview of Present Research

We examined the relationship between employees' challenging job experiences, their current job performance, and supervisory evaluations of their promotability in three studies. In Study 1, we used formal job analysis to examine employees' work content. Experts rated which work activities could be considered as challenging, and supervisors evaluated

employees' performance and promotability. In Study 2, employees themselves indicated the extent to which they had challenging experiences in their job, and supervisors evaluated their employees' performance and promotability. In Study 3, employees again indicated the extent to which they had challenging job experiences and, this time, we employed the organization's formal ratings of employees' job performance and promotability, thus using a direct antecedent for actual promotions as the criterion. By including job performance in our model, we assessed the role of job challenge independent from employees' job performance. That is, we investigated whether the relationship between promotability and job challenge exists because high performers are given more challenging tasks or whether there is an independent effect of having challenging job experiences.

One assumption underlying our studies is that the extent to which employees have challenging experiences in their jobs depends in a large part on their own initiatives and task choices. This assumption is consistent with theories and research on contextual performance that consider behaviors such as taking initiative to solve work problems, tackling difficult assignments enthusiastically, and looking for challenging assignments to be part of the volitional or motivational factor of contextual performance (Borman & Motowidlo, 1993; Van Scotter & Motowidlo, 1996; Van Scotter et al., 2000). Alternatively, one could argue the reverse in that promotability evaluations might affect employees' challenging experiences. That is, supervisors might have already assessed their employees' promotability on the basis of which they might have assigned them challenging tasks. In order to explore this alternative explanation, we also measured employees' decision latitude, which refers to the degree to which employees have discretion over which tasks they perform within their jobs. We reasoned that if supervisors' impressions of employees' promotability might have caused them to assign specific types of tasks, the relationship between challenging job experiences and promotability would be especially strong when employees' decision latitude would be low. If, as we assumed, the extent to which employees have challenging job experiences influences their promotability evaluations, decision latitude will not impact the relationship between challenging job experiences and promotability ratings.

Study 1

Study 1 examined the relationship between the proportion of time employees spend on challenging tasks and their promotability as rated by their supervisors. We reasoned that the more time employees spend on challenging tasks, the more they signal their ambition to and capability of

dealing with high responsibilities, new situations, and high work demands. Hence, we hypothesized, the proportion of time employees spend on challenging tasks will be positively related to supervisors' promotability evaluations over and above employees' current job performance and job tenure.

Methods Study 1

Participants

Respondents were 55 governmental employees (12 men, 43 women) who were in a 2-year trainee program of the Dutch national government. During these 2 years, they were trained on the job in various departments to develop skills and experience in policy making and in the development, execution, and management of large projects. At the time of the study, respondents were assigned to the Ministry of Housing, Spatial Planning and the Environment (15), Ministry of Foreign Affairs (8), Ministry of General Affairs (3), Ministry of Internal Affairs (4), Ministry of Economic Affairs (5), Ministry of Finance (2), Ministry of Education, Culture and Science (4), Ministry of Social Affairs and Employment (5), Ministry of Justice (5), Ministry of Transport, Public Works, and Water Management (2), and the Ministry of Agriculture, Nature and Food Quality (2). Twenty-three of the respondents held a bachelor's degree, 32 held a master's degree. On average, participants were 25.44 years old ($SD = 1.62$) and mean tenure was 7.95 months ($SD = 5.78$).

Procedure

Trainees filled out the management and staff-version of the Work Profiling System (WPS, Saville & Holdsworth, 1993), a behavior-based instrument for job analysis. The WPS asks respondents to carefully read the descriptions of 31 categories of tasks¹ and to choose the 8 to 12 task categories that they consider to be most important for their current job. The WPS subsequently asks the respondents to indicate how much time they usually spend on each of the tasks belonging to the task categories they indicated to be most important.

¹Examples of task categories (a) "Communicating: public relations, build up a relationship network, keep in close touch with contacts, maintaining public relations, representing the organization, speaking in public, building relationship networks, dealing with opponents, and so on," (b) "Working with people: evaluating, educating, and training; selecting individuals for positions and promotions, evaluating work, behaviors, and needs; having patience, developing education and training programs, and so on," and (c) "Managing business: devise plans; short term, long term, setting priorities, setting goals, making schedules, changing plans, changing policies and so on."

Two academically credited experts² on job analysis independently rated which of the 31 WPS task categories could be labeled as challenging. Before judging the categories, the experts received a definition of challenging tasks and a description of job aspects that are considered to contribute to individuals' development (as described in the Job Challenge Profile [JCP]; McCauley, Ohlott, & Ruderman, 1999). Both experts rated 9 task categories as challenging and 18 task categories as nonchallenging (initial interrater agreement was 89%). On four task categories no consensus was reached. After discussing these categories, the experts agreed on rating them as nonchallenging.

The trainees handed a performance- and promotability-evaluation form to their supervisors, who were asked to fill it out and to return it directly to the researchers. We received a completed evaluation form for 49 of the 55 respondents.

Measures

Proportion of time spent on challenging tasks. Trainees indicated which of the task categories outlined in the WPS they considered to be most important for their jobs. On average, they selected 11.87 ($SD = .34$) of the 31 task categories. Based on the expert ratings, we dummy-coded the challenging task categories as 1 and the nonchallenging task categories as 0.

For each of the important task categories, trainees indicated the time they usually spent on tasks belonging to that category on a 6-point scale ranging from 0 = *no time at all* to 5 = *over 50%*.³ The time respondents spent on all their tasks was calculated by computing the total time spent on all tasks belonging to the task categories they indicated to be most important for their jobs. The time spent on challenging tasks was calculated by computing the sum of the time trainees spent on the tasks belonging to the task categories that were evaluated as being challenging. To rule out the influence of overall differences in total time spent on the tasks, we used the proportion of the total time that trainees spent on challenging tasks (i.e., time spent on challenging tasks divided by time spent on all tasks) as the variable in the further analyses.⁴

²The academically credited experts earned their PhD in the field of work and organizational psychology and worked with function analysis systems in their professional careers.

³Although we are aware that the scale was not an interval scale, we used the scale values for our calculations. Using the interval means did not lead to different results.

⁴Respondents indicated the 8 to 12 task categories that were most important for fulfilling their jobs. Each of these categories comprises of several tasks (with a minimum of two tasks and a maximum of eight tasks). Because the number of tasks per category varies, and the number of categories that are important for a specific employee may also differ,

Decision latitude. The influence employees have on which tasks they perform in their job was measured by asking respondents what percentage of their work activities they initiated themselves as opposed to the percentage of their work activities assigned to them by their supervisors.

Job tenure. Trainees indicated their job tenure in months.

Promotability was measured with two items tapping the evaluation of trainees' ambition and capabilities for attaining a higher management position in the future. Supervisors were asked to indicate "To what extent does this employee have the capabilities to successfully perform in higher-level jobs" and "To what extent does this employee have the ambition to perform in higher-level jobs" on a scale from 1 = *not at all* to 7 = *very much*. Internal consistency of the scale was .73.

Job performance was measured with two items tapping supervisors' evaluation of trainees' achievement and work attitudes. Supervisors were asked to indicate: "To what extent are you satisfied with the performance of this employee" and "To what extent are you satisfied with the job attitudes of this employee" on a scale from 1 = *not at all* to 7 = *very much*. Internal consistency of the scale was .76. The evaluation of trainees' job performance was related yet a clearly distinct construct from their promotability evaluation ($r = .37, p < .05$).⁵

Results Study 1

Table 1 shows the means, standard deviations, and intercorrelations of the main variables in this study. We proposed that the proportion of time employees spent on challenging tasks would be positively related to supervisors' promotability evaluations over and above employees' current job performance and controlling for tenure. We used multiple regression analysis to examine this relationship. The proportion of time that trainees spent on challenging tasks was added into the regression in Step 2, after having entered job tenure and current job performance in Step 1. Together, tenure and job performance explained 18% of the variance in trainees' promotability, $R^2 = .18, F(2, 46) = 4.87, p < .05$. As shown in Table 2 (Step 1), tenure was not related to trainees' promotability. Trainees' job performance was positively related to their promotability ($\beta = .39, p < .05$).

respondents might differ in the amount of total time they indicated to spend on all their tasks. Therefore, we used the proportion of time spent on challenging tasks as a measure of the dependent variable instead of the absolute time respondents spent on challenging tasks.

⁵We combined data from Study 1 and Study 2 to explore the factor structure of the items used to measure supervisors' evaluations of employees' job performance and promotability. Principal components analysis with direct oblimin rotation showed that the performance related items loaded on the first component (eigenvalue = 2.27) that explained 56.76% of the variance. The two items that related to promotability loaded on the second component (eigenvalue = 1.06) that explained 26.46% of the variance. All factor loadings were greater than .90.

TABLE 1
Means, Standard Deviations, and Intercorrelations Among Study 1 Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Tenure	7.95	5.78	–				
2. Decision latitude	30.24	18.84	.03	–			
3. Time spent on challenging tasks ^a	.50	.12	.25	.13	–		
4. Job performance ^b	5.91	.73	–.25	.03	.11	–	
5. Promotability ^b	5.07	.88	.09	.19	.38	.37	–

Note. *N* = 55.

^aTime spent on challenging tasks represents the proportion of their time respondents spent on challenging tasks.

^bFor current performance and promotability, *N* = 49. Correlations with an absolute value above .37 are significant at the .05 level (two-tailed).

TABLE 2
Regression of Trainees' Promotability on Job Tenure, Job Performance, and
Proportion of Time Spent on Challenging Tasks

Variable	<i>B</i>	SE <i>B</i>	β
Step 1:			
Tenure	.03	.02	.19
Job performance	.47	.16	.39*
Step 2:			
Tenure	.02	.02	.10
Job performance	.42	.16	.36*
Time spent on challenging tasks ^a	1.92	.93	.31*

Note. *N* = 49.

^aTime spent on challenging tasks represents the proportion of their time respondents spent on challenging tasks.

$R^2 = .18$, $F(2, 46) = 4.87$, $p < .05$ for Step 1; $R^2 = .26$, $F(3, 45) = 5.31$, $p < .05$, $\Delta R^2 = .09$, $F_{\text{change}}(1, 45) = 5.28$, $p < .05$ for Step 2.

* $p < .05$ (two-tailed).

The proportion of their time that trainees spent on challenging tasks ($\beta = .31$, $p < .05$; see Table 2, Step 2) explained additional variance in promotability, $\Delta R^2 = .09$, $F_{\text{change}}(1, 45) = 5.28$, $p < .05$, indicating that the more time employees spent on challenging tasks, the higher was the evaluation of their promotability. Therefore, our hypothesis was supported.

To rule out the alternative explanation that supervisors assigned challenging tasks to those employees whom they perceived to be highly promotable, we performed a regression analysis to examine whether decision latitude moderated the relationship between promotability rating and challenging experiences. The alternative explanation would be supported if a high decision latitude reduced the relationship between challenging job experiences and promotability. The centered (Aiken & West, 1991) variables

of job tenure, current job performance, promotability, and decision latitude that were entered in the first step of the regression analysis explained 20% of the variance in job challenge, $R^2 = .20$, $F(4, 44) = 2.73$, $p < .05$. Only promotability rating was related to challenging experiences ($\beta = .32$, $p < .05$). The addition of the interaction-term promotability \times decision latitude ($\beta = .14$, $p > .05$) did not lead to a significant improvement of the model fit, $\Delta R^2 = .02$, $F_{\text{change}}(1, 43) = 1.02$, $p > .05$. We, therefore, found no support for the alternative explanation for our findings.

Conclusion and Discussion Study 1

Our first study lent empirical support for the notion that job challenge is related to supervisors' evaluations regarding employees' promotability over and above employees' current job performance. Moreover, the modest correlation between ratings of job performance and ratings of promotability shows that supervisors distinguished between employees' current performance on the one hand and their promotability on the other.

Results did not support the alternative explanation that supervisors assigned challenging tasks to those employees they perceived as high on promotability. The regression model predicting job challenge with job tenure, job performance, promotability evaluations, decision latitude, and the interaction-term promotability \times decision latitude was not significant. It should be noted that failing to find a significant result cannot rule out this alternative explanation, especially considering the small size of the sample. The statistical power of the test was .73, which is somewhat below the standard level (Cohen, 1988). Yet, although nonsignificant, the relationship between promotability ratings and challenging experiences seems actually stronger for employees with high rather than low decision latitude. These results, however, should be considered with caution as the interaction effect was nonsignificant and the effect size ($f^2 = .02$) of the interaction-term was small (Cohen, 1988).

Study 2

Although the results of Study 1 concurred with our hypothesis, the generalizability of these results is best established via a replication with a different type of sample and organization and with a different operationalization of challenging job experiences. Consequently, Study 2 focused on specific job aspects defined as challenging by the JCP (McCauley et al., 1999). These types of job aspects are challenging in that they stimulate on-the-job-learning and are particularly potent for the development of new skills and perspectives. As in Study 1 and based on its results, we hypothesized that the extent to which employees had challenging experiences in their jobs would be positively related to the evaluation of

their promotability over and above their current job performance and job tenure.

Method Study 2

Participants and Procedure

Respondents were 32 university graduates in earth sciences (19 women, 13 men) working at junior job levels in five different organizations. All respondents held a master's degree, three of the respondents also held a doctoral degree. Participants' mean age was 27.72 ($SD = 1.69$). They had, on average, 19.63 months ($SD = 11.84$) job tenure and 34.06 months of total work experience ($SD = 18.65$). Employees provided self-ratings on challenging job experiences while their supervisors rated their job performance and promotability.

Measures

Challenging job experiences. To reduce survey length and increase the potential for a high response rate, we measured the extent to which respondents have challenging job experiences with 10 items derived from the JCP (McCauley et al., 1999). The JCP distinguishes five clusters that represent different challenging aspects of work: (a) experiencing a job transition (i.e., having unfamiliar responsibilities), (b) creating change (i.e., breaking new grounds, solving problems), (c) managing at high levels of responsibility (i.e., having high stakes, a large scope and scale), (d) managing boundaries (i.e., experiencing external pressure, exerting influence without authority), and (e) dealing with diversity (working across cultures, working with diverse work groups). Respondents indicated the extent to which they experienced these challenging job aspects in their current jobs on a scale ranging from 1 = *not at all* to 5 = *very often*. We evaluated the validity of this measure,⁶ which resulted in a seven-item scale (see Appendix). Internal consistency of this scale was .73.

⁶We used data from Study 3 to evaluate the validity of this measure. In Study 3 we measured both the extent to which employees had challenging experiences in their jobs and *experienced challenge*. Following Ettington (1998), we assessed experienced challenge ($\alpha = .74$) with the question how often respondents would use the words fascinating, routine, boring, creative, and challenging to describe their work, on a scale ranging from 1 = *always* to 5 = *never*. We correlated the 10 items measuring challenging job experiences with experienced challenge, and found that 7 of the items measuring challenging job experiences correlated with perceived challenge (correlations ranged from .18 to .43, all p values < .05). We removed the three items that did not correlate with experienced challenge from the measure we used for assessing the extent to which employees had challenging job experiences. Results of an exploratory factor analysis (principal axis) with varimax rotation indicated that all seven items loaded on a single component (initial eigenvalue 3.25) that explained 46.36% of the variance. After extraction of the component, eigenvalue was 2.64 and explained variance was 37.68. The factor loadings of the items ranged from .50 to .71.

TABLE 3
Means, Standard Deviations, and Intercorrelations Among Study 2 Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Tenure	19.63	11.84	–				
2. Decision latitude	32.42	18.52	.03	–			
3. Challenging job experiences	2.23	.53	–.02	.65	–		
4. Job performance	3.80	.92	–.14	–.27	.09	–	
5. Promotability	3.38	.87	–.16	.08	.32	.44	–

Note. $N = 32$.

Correlations with an absolute value above .32 are significant at the .05 level (one-tailed).

Decision latitude. The influence employees have on which tasks they perform in their job was measured by asking respondents what percentage of their work activities they initiated themselves as opposed to the percentage of their work activities assigned to them by their supervisors.

Job tenure. Respondents indicated their tenure in months.

Promotability was rated by the earth scientists' supervisors with the same items as in Study 1. Supervisors indicated their agreement with the items on a scale ranging from 1 = *not at all* to 5 = *very much*. Internal consistency of the scale was .83.

Job performance was measured with the same items as in Study 1. Supervisors indicated their agreement with the items on a scale ranging from 1 = *not at all* to 5 = *very much*. The scale's internal consistency was .87. As in Study 1, the evaluation of employees' job performance was related yet a clearly distinct construct from their evaluation of employees' promotability ($r = .44, p < .05$).

Results Study 2

Means, standard deviations, and intercorrelations of the variables in this study are presented in Table 3. As in Study 1, we tested our hypothesis via multiple regression analysis, adding the earth scientists' challenging job experiences in Step 2 into the regression after the inclusion of job tenure and job performance in Step 1.

Although the first step in the regression equation explained 20% of the variance in the evaluation of employees' promotability, $R^2 = .20$, $F(2, 29) = 3.69, p < .05$, the addition of challenging job experiences into the regression equation in Step 2 led to a significant improvement in model fit, $\Delta R^2 = .08$, $F_{\text{change}}(1, 28) = 3.02, p < .05$. Both employees' job performance ($\beta = .40, p < .05$) and challenging job experiences ($\beta = .28, p < .05$) were related to employees' promotability evaluations, which supports our hypothesis. Unstandardized regression coefficients, standard errors, and standardized coefficients are presented in Table 4.

TABLE 4
Regression of Junior Employees' Promotability on Job Tenure, Job Performance, and Challenging Job Experiences

Variable	<i>B</i>	SE <i>B</i>	β
Step 1:			
Tenure	-.01	.01	-.10
Job performance	.40	.16	.43*
Step 2:			
Tenure	-.01	.01	-.10
Job performance	.38	.15	.40*
Challenging job experiences	.46	.27	.28*

Note. $N = 32$.

$R^2 = .20$, $F(2, 29) = 3.69$, $p < .05$ for Step 1; $R^2 = .28$, $F(3, 28) = 3.64$, $p < .05$, $\Delta R^2 = .08$, $F_{\text{change}}(1, 28) = 3.02$, $p < .05$ for Step 2.

* $p < .05$ (one-tailed).

Again, we explored the possibility that impressions of employees' promotability influenced supervisors' task allocation decisions as an alternative explanation for the relationship between challenging job experiences and promotability evaluations. We performed a regression analysis to examine whether decision latitude moderated the relationship between potential rating and challenging job experiences. In the first step the centered variables job tenure, performance, promotability, and decision latitude were entered in the regression equation. These variables explained 53% of the variance in job challenge ($R^2 = .53$, $F(4, 26) = 7.18$, $p < .05$) due to the significant contribution of decision latitude ($\beta = .68$, $p < .05$). The addition of the interaction-term promotability \times decision latitude ($\beta = .04$, $p > .05$) in the second step of the regression analysis did not lead to incremental model fit ($\Delta R^2 = .00$, $F_{\text{change}}(1, 25) = .09$, $p > .05$). Thereby, we found no support for the alternative explanation.

Conclusions and Discussion Study 2

Using a different type of sample and measure of challenging job experiences, Study 2 replicated the findings of Study 1. The extent to which junior earth scientists had challenging job experiences was positively related to their promotability evaluations over and above job performance. The results of both Studies 1 and 2 suggest that, independent from employees' job performance, the extent to which employees have challenging experiences in their jobs is important for being considered suitable for career advancement.

Again our results did not support the alternative explanation that supervisors assigned challenging tasks to those employees they perceived as

high on promotability. The interaction was nonsignificant and the effect size (f^2) of the interaction term was only .0002. Moreover, a low and nonsignificant correlation ($r = .09, p > .05$) was found between supervisory performance ratings and employees' challenging job experiences, and a significant and strong relationship was found between employees' decision latitude and challenging job experiences ($r = .65, p < .05$), which both contradict the alternative explanation. Nevertheless, these results should be considered with caution because our sample size was small.

Study 3

In Study 1 and Study 2, we used samples that only concerned employees in an early career stage, and employees' promotability was rated via an ad hoc supervisory rating that did not have any immediate consequences for employees' actual careers. To strengthen the external and internal validity of our findings, Study 3 focused on middle-instead of entry-level jobs and employed formal instead of informal evaluations of promotability as the dependent variable. Based on the results of Studies 1 and 2, we again hypothesized that the extent to which employees have challenging job experiences will be positively related to formal, organizational evaluations of promotability over and above current job performance and job tenure.

Method Study 3

Participants and Procedure

Our sample consisted of 158 employees (70% male) of a pharmaceutical company who volunteered to participate in this study. Respondents had an average age of 43.44 ($SD = 7.88$). Five respondents held an associate's degree, 82 respondents held a bachelor's degree, and 55 respondents held a master's degree. Of 16 respondents we had no information regarding their education level. Respondents held a wide variety of jobs at middle job levels. Mean job tenure was 5.45 years ($SD = 5.80$) and on average they had 19.44 years of work experience ($SD = 19.76$). Participants provided self-ratings on challenging job experiences. The HR department provided us with information regarding employees' formal performance evaluations by their supervisors and the organization's management development task force (i.e., a team of higher-level managers responsible for the management succession program) provided us with information regarding which employees in their organization were seen as promotable. As many large organizations currently do (Garman & Glawe, 2004), the pharmaceutical company practices succession planning to plan for key transitions in their organization and to plan career opportunities for

TABLE 5
Means, Standard Deviations, and Intercorrelations Among Study 3 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Tenure	5.44	5.80	–				
2. Decision latitude	49.51	19.95	–.13	–			
3. Challenging job experiences	3.37	.81	–.15	.23	–		
4. Job performance	3.26	.61	–.05	.27	.12	–	
5. Promotability ^a	.14	.35	–.13	.31	.19	.28	–

Note. *N* = 158.

^aFor promotability, 1 = *potential for promotion*, 0 = *no potential for promotion*.

Correlations with an absolute value above .19 are significant at the .05 level (two-tailed).

talented employees who are eager to progress in their careers and might otherwise leave the organization.

Measures

Challenging job experiences. The extent to which respondents had challenging job experiences was measured with the same seven-item scale we used in Study 2. The internal consistency was .80.

Decision latitude. The influence employees have on which tasks they perform in their job was measured by asking respondents what percentage of their work activities they initiated themselves as opposed to the percentage of their work activities that was assigned to them by their supervisors.

Performance on the job was operationalized as the overall performance rating employees received in their annual performance evaluation. Ratings ranged from 1 = *very unsatisfactory performance* to 5 = *excellent performance*.

Promotability. Based on information provided by employees' supervisors, the HR department, and their own observations, the management development task force indicated for each employee whether or not he or she could be considered a high-potential employee who would, in the future, be motivated and eligible for high-level positions in the organization, coded as 1 = *potential* or 0 = *not a potential*. The organization uses this information for identifying those employees in the organization who are suitable for promotion in cases of vacancies in higher-level positions and to plan future career steps for talented employees. Neither the direct supervisors nor the employees knew of the existence of this evaluation.

Results Study 3

Table 5 reports means, standard deviations, and intercorrelations of the variables in this study. We again tested the proposition that employees'

TABLE 6
Logistic Regression of Employees' Promotability on Job Tenure, Job Performance, and Challenging Job Experiences

Variable	<i>B</i>	<i>SE</i>	Odds ratio	Wald statistic
Step 1:				
Tenure	-.11	.08	.89	1.86
Job performance	1.18	.39	3.26	9.19*
Step 2:				
Tenure	-.12	.09	.89	1.78
Job performance	1.21	.41	3.36	8.61*
Challenging job experiences	.99	.42	2.70	5.70*

Note. Predictors were entered in the regression equation in blocks.

For Step 1, $\Delta\chi^2(2, N = 158) = 13.85, p < .05$. For Step 2, $\Delta\chi^2(1, N = 158) = 6.85, p < .05$. For the final model, $\chi^2(3, N = 158) = 20.70, p < .05$ (two-tailed).

* $p < .05$ (two-tailed).

challenging job experiences would be related to their promotability evaluations over and above their current job performance. Because the dependent variable was dichotomous, we used logistic regression analysis for parameter estimation. Job tenure and job performance were entered in the first step. Job challenge was entered in the second step. Table 6 presents the results of the hierarchical logistic regression analysis for promotability. As logistic regression analysis is a nonlinear regression model, it does not provide an R^2 and F -statistic to test overall model fit. Instead, overall and improvement chi-square tests can be computed from the log-likelihood statistics (Hosmer & Lemeshow, 2000). Logistic coefficients (B) represent the degree to which the log odds of the event occurring are changed for each unit increase in the associated independent variable. The odds ratio for a variable indicates the change in odds for a case when the value of that variable increases by 1. The Wald statistic tells us whether the B statistic for the corresponding independent variable is significantly different from zero.

The first set of variables was significantly related to being designated as high on promotability, $\Delta\chi^2(2, N = 158) = 13.85, p < .05$. Only job performance significantly predicted promotability. Challenging job experiences, entered on Step 2, accounted for a significant increment in model fit, $\Delta\chi^2(1, N = 158) = 6.85, p < .05$, indicating that having challenging job experiences explained variance in promotability over and above job performance and job tenure. These results support our hypothesis. The full model correctly predicted the promotability rating of 85% of the employees.

Again, we performed a regression analysis to examine whether impressions of employees' promotability influenced supervisors' task allocation

decisions as an alternative explanation for the relationship between job challenge and promotability. Together, the centered variables job tenure, current job performance, promotability rating, and decision latitude explained 10% of job challenge, $R^2 = .10$, $F(4, 130) = 3.66$, $p < .05$, mainly due to the significant contribution of decision latitude ($\beta = .18$, $p < .05$). Employees who had high decision latitude reported to have more challenging job experiences than those who had low decision latitude. The addition of the interaction-term promotability \times decision latitude ($\beta = .03$, $p > .05$) in the second step of the regression analysis did not lead to incremental model fit ($\Delta R^2 = .00$, $F_{\text{change}}(1, 129) = .10$, $p > .05$). Thereby, we found no support for the alternative explanation.

Conclusions and Discussion Study 3

The aim of Study 3 was to replicate and extend the findings of Study 1 and Study 2. We found that the extent to which middle-level employees had challenging experiences in their jobs was positively related to their formal promotability evaluation over and above job performance and job tenure. Again, we found no support for the suggestion that impressions of employees' promotability influenced supervisors' task allocation decisions. Although the effect of the interaction promotability \times decision latitude was nonsignificant and small in effect size ($f^2 = .001$), our results actually suggest that the relationship between job challenge and promotability evaluations is somewhat stronger for those employees who have high decision latitude. Moreover, the low and nonsignificant correlation ($r = .12$, $p > .05$) between supervisory performance ratings and employees' challenging job experiences counteracts the alternative explanation.

General Discussion

This study was motivated by the importance of promotability evaluations for both individuals' career opportunities and organizations' human resource management practices as well as by the lack of theoretical considerations in research on promotability evaluations. Based on theoretical arguments and practical concerns, we argued that promotability research should move beyond examining demographic variables and job performance as indicators of promotability and focus on behavioral factors that may influence employees' promotability more directly and that are largely under the control of employees themselves. We therefore conducted three studies to examine the extent to which supervisory promotability evaluations are influenced by the quality, or content, of employees' work.

The results of our studies indicate that having challenging experiences in one's job is important for receiving favorable supervisory (Study 1 and Study 2) and formal organizational (Study 3) promotability evaluations. Thereby, we provide empirical support for the widely accepted (e.g., Mainiero, 1994; McCall et al., 1988) but hardly examined (Cianni & Romberger, 1995; Lyness & Thompson, 2000) proposition that job challenge is an important prerequisite for career advancement. The current results extend previous work by showing that *what* one performs explains variance in promotability evaluations beyond the variance accounted for by *how* one performs in one's current job. At the same time, our results underscore the importance of the quality, or content, of work experience for career-related outcomes (Quinones et al., 1995; Tesluk & Jacobs, 1998).

Establishing a positive relationship between employees' challenging job experiences and evaluations of their promotability is far from trivial. Often, taking up challenging tasks will require one to develop and apply new skills and procedures instead of relying on known routines (Davies & Easterby-Smith, 1984). Consequently, individuals run more risk of failure, decreased performance, and productivity loss (Earley, Connolly, & Ekegren, 1989), which may, in turn, result in unfavorable performance evaluations and, one might assume, unfavorable promotability evaluations. Our results, however, suggest that supervisors not only value individuals' task performance but additionally value individuals' engagement in challenging job experiences when evaluating employees' promotability. Supervisors seem to appreciate employees' engagement in challenging tasks regardless of whether an individual's performance on these tasks will immediately pay off in terms of organizational benefit.

Extant research has mainly focused on job performance (e.g., Greenhaus et al., 1990; Van Scotter et al., 2000; Wayne et al., 1999) and demographic variables related to promotability evaluations (e.g., Greenhaus et al., 1990; Hartman et al., 1991). Nevertheless, impressive accomplishments in one job do not guarantee success in another, higher-level job (Peter & Hull, 1969; Sessa, 2001), and past job performance may be irrelevant for future challenges (Sorcher, 1985). Moreover, although it is important to examine evaluation fairness in career-related decision making, it does not provide individual employees with information on how to improve their own career opportunities.

Research on employees' actual behaviors that impact their career prospects is scarce and has mainly addressed behaviors related to impression management (e.g., Judge & Bretz, 1994; Thacker & Wayne, 1995; Wayne et al., 1997). Although it might be tempting for employees to engage in impression management strategies such as self-promotion and bargaining in order to make themselves appear more promotable,

research indicates that these behaviors are negatively related to perceptions of promotability (Judge & Bretz, 1994; Wayne et al., 1997). Our results suggest that actual task behaviors, that is, engaging in challenging job experiences, may be an important antecedent of individuals' career opportunities. This finding is especially relevant for individual employees, as it is important to know what they can actually do to positively influence supervisors' perceptions of their promotability. The results of our studies suggest that in order to develop their careers, employees should not only perform well but also pay close attention to the activity choices they make in their jobs and careers. To foster their own career development, employees should signal both their ambition and capabilities by engaging in challenging activities that are demanding and that place them in dynamic settings with problems to solve and choices to make under conditions of risk and uncertainty (McCauley et al., 1994). Currently, responsibility for obtaining beneficial job experiences is shifting to individual employees (Hall & Mirvis, 1995), which implies that employees need to possess the decision latitude, information, and support that allow them to initiate and to get involved in tasks that contain challenging job aspects (Tesluk & Jacobs, 1998).

The relationship between challenging job experiences and promotability evaluations is not only important for individuals' careers development but may also explain why some groups experience more difficulty in progression with their careers than other groups. For instance, it has been suggested that one reason why so few women are promoted to senior-level positions is that they may be less motivated than men to engage in challenging tasks (De Pater et al., 2009; Dickerson & Taylor, 2000) or to seek challenging organizational roles (Lyness & Schrader, 2006). Organizations that seek ways to reduce a demographic imbalance in senior-level positions may encourage groups that are underrepresented at higher organizational levels to engage in challenging tasks and assignments.

Also of practical relevance is the finding that challenging job experiences are related to promotability evaluations but not to evaluations of employees' job performance. In practice, employees who encounter only a few challenging experiences may receive positive performance evaluations but may not make much progress in their careers because they have performed fewer challenging tasks than their colleagues. Related to the above, this finding may also obscure potential problems for career advancement for these employees, as they receive signals that they are performing well and thus may not see the need to change their task behaviors. It might, therefore, be important that supervisors, in the evaluations of their subordinates, discuss both current performance and promotability so that employees who are able and willing to effectively perform at higher job levels receive information and support regarding how to

influence their own career opportunities. Distinguishing between current performance and promotability evaluations may not only help individual employees but may also help organizations to uncover talented employees who otherwise would have remained unnoticed.

The results of this study further imply that research on succession planning may benefit from taking a broader perspective and should also examine how and on what grounds talented employees are identified as being promotable. Focusing on the identification of promotable employees may be especially relevant as many organizations practice succession planning not only for planning transitions for key positions in the organization but also as a tool for creating and retaining a large pool of talented employees for transitions and personnel needs that may occur in the future (Garman & Glawe, 2004).

When considering the generalizability of our findings, several potential limitations should be noted. First, based on literature regarding contextual performance (Borman & Motowidlo, 1993; Van Scotter & Motowidlo, 1996; Van Scotter et al., 2000) and the beneficial effects of job challenge on career development (e.g., Berlew & Hall, 1966; Davies & Easterby-Smith, 1984), we assumed that challenging job experiences affect promotability ratings, rather than the reverse. It is nonetheless conceivable that supervisors assign challenging tasks on the basis of early evaluations of their employees' promotability. As our study design was cross sectional, we could not directly test the causality of the relationship between job challenge and promotability, but, for several reasons, we consider the alternative explanation less likely. First, if supervisors had assigned challenging tasks to those employees they considered highly promotable, then the interaction between promotability and decision latitude would have been negatively related to the extent to which respondents indicated to have challenging experiences in their job. That is, the relationship between promotability and job challenge would have been stronger when employees' decision latitude was low, which was the case in none of our studies. Although failing to find a significant result cannot rule out this alternative explanation, the overall pattern of the results suggests that the alternative explanation might not be valid. Second, if the alternative explanation was true, we would expect significant positive correlations between performance ratings and job challenge. None of our studies, however, showed significant correlations between job performance and challenging job experiences.

Although employing a longitudinal design might have allowed us to more directly examine the causality of the relationship between challenging job experiences and promotability evaluations, employing a longitudinal rather than a cross-sectional design would have introduced other problems. In a predictive study, employees' work experience may change

during the time between the measurement of the predictor variables and the criterion variables because employees' work experience is a dynamic variable. Therefore, with work experience as central variable, it seems more appropriate to collect both the dependent and independent variables at the same time (McDaniel, Schmidt, & Hunter, 1988).

A second limitation relates to the small sample sizes in Study 1 and Study 2, which excluded the possibility of conducting multilevel analyses in cases where supervisors evaluated more than one employee. Nevertheless, given the different departments and locations where individuals were employed, we believe that there is little chance that supervisor effects will have influenced our findings. Nevertheless, it would have been desirable to control for nesting within supervisor, department, or organization because of the possibility that challenging jobs are valued differently in different departments or organizations. Our small sample sizes also kept us from controlling for other variables that might relate to promotability evaluations, such as education level, type of job, cognitive ability, ability to handle stress, and perceived trainability. Yet, the overall pattern of results, although different research measures and samples were employed, is encouraging as it suggests robustness of our findings (Van Scotter et al., 2000).

In two of our three studies we relied on self-report data to assess employees' job challenge. There is, however, considerable evidence that perceptual measures do reflect reality (Spector, 1992). Moreover, we found comparable results across all samples. Therefore, the use of self-report in this study may not have limited the internal validity as much as sometimes is assumed. We obtained evaluations of employees' promotability from employees' supervisors and organizational records, thereby preventing common method bias to inflate our main results.

Another possible limitation is, however, related to the measurement of promotability. In the first two studies, promotability was operationalized as supervisors' perceptions of employees' capacities and willingness to effectively perform at higher job levels. In the third study we used the organization's formal performance and promotability evaluations, both being single-item ratings. Although single-item measures are frequently used in human resource management and in organizational behavior research, a psychometric shortcoming of these measures is that they cannot yield estimates of internal consistency reliability (Wanous, Reichers, & Hudy, 1997). Yet, studies that compared single-item to multiple-item measures for, among others, job satisfaction, self-esteem, teaching effectiveness, attitudes, beliefs, and perceptions (Gardner, Cummings, Dunham, & Pierce, 1998; Scarpello & Campbell, 1983; Wanous & Hudy, 2001) reported satisfactory correlations between the different measures.

One last potential limitation of our third study lies in the fact that we are unaware of the exact criteria used by the members of the management development task force for evaluating employees' promotability. When discussing this issue with the HR director of the pharmaceutical company, she only stated that employees who were identified as promotable were seen as highly capable individuals who were eager to progress in their careers and willing to invest in their future with their company. Future research should directly examine the criteria that supervisors use for evaluating the promotability of their employees. In addition, the relationship between job challenge and actual promotion decisions could be investigated. Examining actual promotion decisions may, however, yield other concerns and limitations, as there are many factors beyond individual employees' control that may influence whether or not they are promoted. One such factor is the availability of higher-level positions, which will, among others, depend on organizational growth, employee turnover, and the labor market. These factors may conceal individual factors related to promotions that can be revealed by examining promotability evaluations. The promotability ratings we applied in the third study represented organization's formal promotability evaluations as a direct antecedent for actual promotions not being influenced by situational constraints.

Based on the results of our studies, we can identify a number of issues that future research could address. First, having challenging job experiences may not only result in learning (McCauley et al., 1994) and favorable promotability evaluations, but may also lead to other beneficial outcomes. For instance, it has been suggested that having challenging job experiences may result in higher inner work standards (Berlew & Hall, 1966), ambition for higher-level positions (Van Vianen, 1999), and increased job satisfaction (Judge, Bono, & Locke, 2000). Future research may address these issues to further explore the impact of challenging job experiences on individuals' careers.

Future research could also study antecedents of having challenging experiences in one's job. Organizational theorists acknowledged that both job incumbents themselves and their supervisors influence employees' job content (Miner, 1987; Wrzesniewski & Dutton, 2001). Indeed, the respondents in our studies differed regarding their decision latitude. In situations of high decision latitude, employees have better opportunities to initiate the performance of challenging tasks, which may, among others, depend on their self-efficacy beliefs (Bandura, 1986; Dickerson & Taylor, 2000; Lyness & Schrader, 2006) and achievement motives (De Pater et al., 2009; Hirschfeld, Thomas, & Lankau, 2006). In situations of low decision latitude, employees will perform challenging tasks only if these tasks are assigned to them. The question then is what factors may

influence supervisors' decisions to assign challenging tasks to a particular subordinate.

Another question that future research may address is whether the consequences of having challenging tasks depend on who initiated an employee's engagement in the challenging tasks: the employee or his or her supervisor. For instance, one might expect that employees learn from challenging job experiences regardless of whether they choose to perform them or have these experiences assigned to them. It is conceivable though, that employees who take the initiative to perform challenging tasks are more favorably evaluated on their promotability than employees who perform challenging tasks only when these are assigned to them, as taking the initiative to perform challenging tasks signals employees' perseverance, effort, and motivation (e.g., Van Scotter & Motowidlo, 1996; Van Scotter et al., 2000) as well as their willingness to perform tasks related to higher-level jobs (Davies & Easterby-Smith, 1984). In a similar vein, it would be interesting to investigate whether the relationship between challenging work and employees' affective outcomes depends on the extent to which challenging activities are initiated rather than assigned.

In conclusion, the results of our studies provide support for the notion that job challenge significantly contributes to evaluations of promotability independent from current job performance and job tenure. This finding has important implications for theory and practice regarding individual career development and human resource management practices, and may give rise to additional research on the determinants, correlates, and consequences of job challenge.

REFERENCES

- Aiken LS, West SG. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Anderson JR. (1995). *Cognitive psychology and its implications* (4th ed.). New York: W. H. Freeman and Company.
- Arthur MB, Khapova SN, Wilderom CPM. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior*, 26, 177–202.
- Bandura A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice-Hall.
- Becker GS. (1975). *Human capital*. Chicago: University of Chicago Press.
- Beehr TA, Taber TD, Walsh JT. (1980). Perceived mobility channels: Criteria for intra-organizational job mobility. *Organizational Behavior and Human Performance*, 26, 250–264.
- Berlew DE, Hall DT. (1966). The socialization of managers: Effects of expectations on performance. *Administrative Science Quarterly*, 11, 207–223.
- Bliege Bird R, Smith EA. (2005). Signaling theory, strategic interaction, and symbolic capital. *Current Anthropology*, 46, 221–238.
- Borman WC, Motowidlo SJ. (1993). Expanding the criterion domain to include elements of contextual performance. In Schmitt N, Borman WC (Eds.), *Personnel selection in organizations* (pp. 71–98). New York: Jossey Bass.

- Campbell JP. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In Dunnette MD, Hough LM (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 687–732). Palo Alto, CA: Consulting Psychologists Press.
- Cianni M, Romberger B. (1995). Perceived racial, ethnic, and gender differences in access to developmental experiences. *Group and Organization Management*, 20, 440–459.
- Cohen J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Conger JA, Fulmer RM. (2003). Developing your leadership pipeline. *Harvard Business Review*, 81, 76–84.
- Cox T, Nkomo SM. (1992). Candidate age as a factor in promotability ratings. *Public Personnel Management*, 21, 197–210.
- Davies J, Easterby-Smith M. (1984). Learning and developing from managerial work experiences. *Journal of Management Studies*, 21, 169–183.
- De Pater IE, Van Vianen AEM, Fischer AH, Van Ginkel WP. (2009). Challenging experiences: Gender differences in task choice. *Journal of Managerial Psychology*, 24, 4–28.
- Dickerson A, Taylor MA. (2000). Self-limiting behavior in women. *Group and Organization Management*, 25, 191–210.
- Earley PC, Connolly T, Ekegren G. (1989). Goal, strategy development and task performance. *Journal of Applied Psychology*, 74, 24–33.
- Ettington DR. (1998). Successful career plateauing. *Journal of Vocational Behavior*, 52, 72–88.
- Ford JK, Quinones MA, Sego DJ, Sorra JS. (1992). Factors affecting the opportunity to perform trained tasks on the job. *PERSONNEL PSYCHOLOGY*, 45, 511–527.
- Gardner DG, Cummings LL, Dunham RB, Pierce JL. (1998). Single-item versus multiple-item measurement scales: An empirical comparison. *Educational and Psychological Measurement*, 58, 898–915.
- Garman AN, Glawe J. (2004). Succession planning. *Consulting Psychology Journal: Practice and Research*, 56, 119–128.
- Greenhaus JH, Parasuraman S, Wormley WM. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33, 64–86.
- Hall DT, Mirvis PH. (1995). Careers as lifelong learning. In Howard A (Ed.), *The changing nature of work* (pp. 323–361). San Francisco: Jossey Bass.
- Harris KJ, Kacmar KM, Carlson DS. (2006). An examination of temporal variables and relationship quality on promotability ratings. *Group and Organization Management*, 31, 677–699.
- Hartman SJ, Griffith RW, Crino MD, Harris OJ. (1991). Gender-based influences: The promotion recommendation. *Sex Roles*, 25, 285–300.
- Hirschfeld RR, Thomas CH, Lankau MJ. (2006). Achievement and avoidance motivational orientations in the domain of mentoring. *Journal of Vocational Behavior*, 68, 524–537.
- Hosmer DW, Lemeshow S. (2000). *Applied logistic regression* (2nd ed.). New York: Wiley.
- Humphrey RH. (1985). How work roles influence perception: Structural-cognitive processes and organizational behavior. *American Sociological Review*, 50, 242–252.
- Jones EE, Nisbett R. (1987). The actor and the observer: Divergent perceptions of the causes of behavior. In Nisbett RE, Valins S, Jones EE, Kanouse DE, Kelley HH, Weiner B (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 79–94). Hillsdale, NJ: Erlbaum.
- Judge TA, Bono JE, Locke EA. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology*, 85, 237–249.

- Judge TA, Bretz RD. (1994). Political influence behavior and career success. *Journal of Management*, 20, 43–65.
- Karaevli A, Hall DT. (2003). Growing leaders for turbulent times: Is succession planning up to the challenge? *Organizational Dynamics*, 32, 62–79.
- Locke EA, Mento AJ, Katcher BL. (1978). The interaction of ability and motivation in performance: An exploration of the meaning of moderators. *PERSONNEL PSYCHOLOGY*, 31, 269–280.
- London M. (2002). Organizational assistance in career development. In Feldman DC (Ed.), *Work careers: A developmental perspective* (pp. 323–345). San Francisco: Jossey-Bass.
- London M, Stumpf SA. (1983). Effects of candidate characteristics on management promotion decisions: An experimental study. *PERSONNEL PSYCHOLOGY*, 36, 241–259.
- Lyness KS, Schrader CA. (2006). Moving ahead or just moving? An examination of gender differences in senior corporate management appointments. *Group & Organization Management*, 31, 651–676.
- Lyness KS, Thompson DE. (2000). Climbing the corporate ladder: Do female and male executives follow the same route? *Journal of Applied Psychology*, 85, 86–101.
- Mainiero LA. (1994). Getting anointed for advancement: The case of executive women. *Academy of Management Executive*, 8, 53–67.
- McCall MW, Lombardo MM, Morrison AM. (1988). *The lessons of experience: How successful executives develop on the job*. Lexington, MA: Lexington Books.
- McCauley CD, Ohlott PJ, Ruderman MN. (1999). *Job challenge profile*. New York: Jossey-Bass/Pfeiffer.
- McCauley CD, Ruderman MN, Ohlott PJ, Morrow JE. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology*, 79, 544–560.
- McDaniel MA, Hartman NS, Whetzel DL, Grubb WL III. (2007). Situational judgment tests, response instructions, and validity: A meta-analysis. *PERSONNEL PSYCHOLOGY*, 60, 63–91.
- McDaniel MA, Schmidt FL, Hunter JE. (1988). Job experience correlates of job performance. *Journal of Applied Psychology*, 73, 327–330.
- Miner AS. (1987). Idiosyncratic jobs in formalized organizations. *Administrative Science Quarterly*, 32, 327–351.
- Ng TWH, Eby LT, Sorensen KL, Feldman DC. (2005). Predictors of objective and subjective career success. A meta-analysis. *PERSONNEL PSYCHOLOGY*, 58, 367–408.
- Peter LJ, Hull R. (1969). *The Peter principle: Why things always go wrong*. New York: William Morrow & Company.
- Quinones MA, Ford JK, Teachout MS. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *PERSONNEL PSYCHOLOGY*, 48, 887–910.
- Saville P, Holdsworth R. (1993). *Work profiling system, course notes*. Thames Ditton, Surrey, UK: Saville & Holdsworth.
- Scarpello V, Campbell JP. (1983). Job satisfaction: Are all the parts there? *PERSONNEL PSYCHOLOGY*, 36, 577–600.
- Sessa VI. (2001). Executive promotion and selection. In London M (Ed.), *How people evaluate others in organizations*. Mahwah, NJ: Erlbaum.
- Sorcher M. (1985). *Predicting executive success*. New York: Wiley.
- Spector PE. (1992). A consideration of the validity and meaning of self-report measures for job-conditions. In Cooper CL, Robertson IT (Eds.), *International review of industrial and organizational psychology* (Vol. 7). Chichester, UK: Wiley.
- Spence M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87, 355–374.

- Srull TK, Wyer RS. (1989). Person memory and judgment. *Psychological Review*, 96, 58–83.
- Tesluk PE, Jacobs RR. (1998). Toward an integrated model of work experience. *PERSONNEL PSYCHOLOGY*, 51, 321–355.
- Thacker RA, Wayne SJ. (1995). An examination of the relationship between upward influence tactics and assessments of promotability. *Journal of Management*, 21, 739–757.
- Turnage JJ, Muchinsky PM. (1984). A comparison of the predictive validity of assessment center evaluations versus traditional measures in forecasting supervisory job performance: Interpretive implications of criterion distortion for the assessment paradigm. *Journal of Applied Psychology*, 69, 595–602.
- Van Scotter JR, Motowidlo SJ. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance. *Journal of Applied Psychology*, 81, 525–531.
- Van Scotter JR, Motowidlo SJ, Cross TC. (2000). Effects of task performance and contextual performance on systematic rewards. *Journal of Applied Psychology*, 85, 526–535.
- Van Velsor E, Hughes MW. (1990). *Gender differences in the development of managers: How women managers learn from experience* (Technical Report No. 145). Greensboro, NC: Center for Creative Leadership.
- Van Vianen AEM. (1999). Managerial self-efficacy, outcome expectancies, and work-role salience as determinants of ambition for a managerial position. *Journal of Applied Social Psychology*, 29, 639–665.
- Wanous JP, Hudy MJ. (2001). Single-item reliability: A replication and extension. *Organizational Research Methods*, 4, 361–375.
- Wanous JP, Reichers AE, Hudy MJ. (1997). Estimating the reliability of a single-item measure. *Psychological Reports*, 78, 631–634.
- Wayne SJ, Liden RC, Graf IK, Ferris GR. (1997). The role of upward influence tactics in human resource decisions. *PERSONNEL PSYCHOLOGY*, 50, 979–1006.
- Wayne SJ, Liden RC, Kraimer ML, Graf IK. (1999). The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behavior*, 20, 577–595.
- Williams RS, Walker J. (1985). Sex differences in performance rating: A research note. *Journal of Occupational Psychology*, 58, 331–337.
- Wrzesniewski A, Dutton D. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26, 179–201.

APPENDIX

Items for Measuring Challenging Job Experiences in Study 2 and Study 3

- (a) It is your responsibility to start up or try out something new, or to initiate strategic changes in your division.
- (b) It is your responsibility to perform activities that are highly visible for others in your organization, for instance, for (top) management. As a consequence, your successes and failures are easily observable for others.
- (c) You are responsible for a diverse range of job responsibilities. For instance, you are responsible for several projects, services, workgroups, technologies, and so on.

- (d) To function effectively, you have to use your influence with others who formally are not subjected to your authority, such as management and important individuals working for other divisions.
- (e) It is a part of your job to regularly make your appearance in public, for instance, for presenting your work at conferences or representing your organization.
- (f) It is your responsibility to carry out tasks that your colleagues consider risky.
- (g) For others, such as management, you personify a specific project within your organization.