Toward a Mediation Model of Employability Enhancement: A Study of Employee–Supervisor Pairs in the Building Sector

Beatrice I. J. M. van der Heijden
Arnold B. Bakker

This study examines whether jobs that enable competence development and a constructive leadership style enhance workers' employability or career potential through their assumed positive relationship with work-related flow (absorption, work enjoyment, and intrinsic work motivation). The authors conducted an explorative study with 303 pairs of employees and their direct supervisors working in a Dutch building company. Results indicate that self-ratings of learning value of the current job and transformational leadership have an indirect relationship with supervisor ratings of employability through work-related flow.

Being an expert and maintaining one's expertise are by no means easy tasks. However, the potential of a working organization to perform optimally in global markets depends on employees' capability to develop, cultivate, and maintain fundamental qualifications. Nowadays, job qualifications are changing continuously. Moreover, the time has passed when careers consisted of upward moves within a framework of long-term employment relations (Arthur, 2008; Sullivan, 1999). Employability (or career potential) management consists of a new mutual psychological contract (Coyle-Shapiro & Neuman, 2004; Rousseau, 2001) and is a joint responsibility of employers and employees. In the present study, we propose an employability enhancement model to examine how learning value of the current job and a transformational leadership style are related to employability. We argue that these predictors have an indirect relationship with employability through work-related flow and build upon the "happy-productive worker thesis" (see Cropanzano & Wright, 2001, for a thorough review) and the "broaden-and-build theory of positive emotions" (Fredrickson, 2001).

Although several studies have reported relationships between career or managerial practices and positive work outcomes, tests of mediating

Beatrice I. J. M. van der Heijden, Institute for Management Research, Radboud University Nijmegen, the Netherlands, Open University of the Netherlands, and University of Twente, the Netherlands; Arnold B. Bakker, Department of Work and Organizational Psychology, Erasmus University Rotterdam, the Netherlands. This study was financed by the Netherlands' Organisation for Scientific Research (ASPASIA Program, Project 015.000.114 granted to van der Heijden). Correspondence concerning this article should be addressed to Beatrice I. J. M. van der Heijden, Radboud University Nijmegen, Department of Strategic Human Resource Management, PO Box 9108, 6500 HK Nijmegen, the Netherlands (e-mail: B.vanderHeijden@fm.ru.nl).

models are rare (for excellent examples, see Bono & Judge, 2003; Dvir, Eden, Avolio, & Shamir, 2002; Piccolo & Colquitt, 2006). In the present study, we propose and test a new mediation model, aimed at clearing up the complexity of employability enhancement. Only since the late 1990s has employability been studied empirically; one important reason for this is the lack of valid operationalizations of the concept (see Van der Heijde & Van der Heijden, 2006, for a review). In our current study, we used a recently developed competence-based approach to employability (Van der Heijde & Van der Heijden, 2006; Van der Heijden, De Lange, Demerouti, & Van der Heijde, 2009).

Employability

During the past decades, the concept of employability has received increased attention. Changes within and around organizations have emphasized the need for flexible firms and a multiskilled workforce. Simultaneously, employees have become responsible for their own careers and work security. However, both theoretical and empirical controversy abounds with regard to the understanding and potential of the concept of employability (Forrier & Sels, 2003; Harvey, 2001; Van der Heijden & Thijssen, 2003). Van der Heijde and Van der Heijden (2006) defined *employability*, or *career potential*, as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (p. 453), within or outside the current organization, for present or new customer(s), and with regard to future prospects (see also Savickas, 1997). Their definition is consistent with that of Forrier and Sels (2003), who characterized the concept as "the chance for employment on the internal or external labor market" (p. 106), and with that of Fugate, Kinicki, and Ashforth (2004), who defined it as "a form of work-specific active adaptability that enables workers to identify and realize career opportunities" (p. 14).

Van der Heijde and Van der Heijden's (2006) conceptualization combined domain-specific expertise with more generic competences. They proposed the following four generic competences as important dimensions of employability, alongside occupational expertise: (a) anticipation and optimization, that is, preparing for and adapting to future changes in a personal and creative manner and striving for the best possible results; (b) personal flexibility, or the capacity to easily adapt to all kinds of changes in the internal and external labor market that do not pertain to one's immediate job domain; (c) corporate sense, the participation and performance in different work groups, including organizations, teams, occupational communities and other networks, which involves sharing responsibilities, knowledge, experiences, feelings, credits, failures, goals, and so on; and (d) balance, that is, compromising between opposing employers' interests as well as one's own opposing work, career, and private interests (employee), and between employers' and employees' interests.

Learning Value of the Job and Employability

Further development of employability can only be attained if employees are provided with important learning experiences and if their job provides frequent opportunities for the practice and extension of their capabilities (Pulakos, Arad, Donovan, & Plamondon, 2000). A challenging job comprises work demands that are optimally broad and complex; it also involves

novelty and autonomy and the possibility to explore alternative strategies and solutions (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Holman & Epitropaki, 2001; Maurer, Weiss, & Barbeite, 2003). A job's value as a nutrient for the employee's further professional development is termed the *learning value of the job* (Boerlijst, Van der Heijden, & Van Assen, 1993, p. 57). The concept refers to the extent to which occupational knowledge and skills can be used and expanded in one's job position.

Longitudinal analyses have revealed that employee flexibility is positively influenced by the complexity of the job (Kohn & Schooler, 1982). Job content has also been found to influence the employee's active orientation (Brousseau, 1978) and self-esteem (Kohn & Schooler, 1982), both of which are relevant indicators of employability. Moreover, individuals employed in jobs with high learning value, as expressed by the demands and challenges of such jobs, exhibit high levels of initiative taking and proactivity (Fay & Frese, 2001; Fay & Kamps, 2006). Proactive behavior contributes to individual and organizational performance (Fay & Frese, 2001) and to career success (Seibert, Kraimer, & Crant, 2001); it is also seen as an important ingredient of individuals' employability.

Transformational Leadership and Employability

Transformational leadership is the leadership concept that is studied most often (Judge & Piccolo, 2004); it is characterized by leaders behaving in ways that result in individuals admiring, respecting, and trusting them, such that their followers wish to emulate them (idealized influence). Transformational leaders provide meaning, optimism, and enthusiasm for a vision of a future state (inspirational motivation), encourage followers to be creative and innovative (intellectual stimulation), and actively develop the potential of their followers (individualized consideration; Alimo-Metcalfe & Alban-Metcalfe, 2001; Avolio, Bass, & Jung, 1999).

Transformational leadership has a positive relationship with a range of positive outcome variables, including organizational productivity, effectiveness, employee job satisfaction, and commitment (Lowe, Kroeck, & Sivasubramaniam, 1996; Nemanich & Keller, 2007). Day (2000) argued that the enhancement of followers' capacity and potential is the main goal of leadership. Therefore, transformational leaders exert a positive influence on employees' self-esteem (Bass, Avolio, Jung, & Bernson, 2003; Eden, 1992) by reinforcing their self-perceptions of competence (Conger & Kanungo, 1998; Shamir, House, & Arthur, 1993) and efficacy (Bono & Judge, 2003; Pierce & Gardner, 2004); these leaders presumably contribute to individuals' employability as well.

Subordinates who receive sufficient information and support from their supervisor are expected to have more positive work attitudes and engage in more positive work behaviors, compared with subordinates who receive less support (Bakker & Demerouti, 2007; Basu & Green, 1997; Liden, Sparrowe, & Wayne, 1997). Transformational leaders build a constructive work climate and suggest new ways to look at work processes (Elkins & Keller, 2003; Vera & Crossan, 2004), and their leadership style has been found to be positively related to follower creativity (Shin & Zhou, 2003), another important aspect of employability.

Notwithstanding the impressive support regarding the validity of transformational leadership in predicting outcomes such as satisfaction and performance,

more research is needed to better understand the processes by which transformational leaders influence employees (see House & Aditya, 1997; Piccolo & Colquitt, 2006). In line with the theorizing of Bono and Judge (2003) and Shamir et al. (1993), we hypothesize that employees of transformational leaders find their jobs more meaningful and, thus, become immersed in their jobs, that is, they achieve a state of flow (Johns, Xie, & Fang, 1992).

Flow at Work: Toward a Model of Employability Enhancement

Work-related flow is defined as a short-term peak experience at work (Bakker, 2005, 2008) and is characterized by a high amount of enjoyment, total concentration, and a continuous interest in one's work. In line with recent attention on positive organizational behavior research (Bakker & Schaufeli, 2008), we attempted to test a mediation model wherein both positive individual work experiences, such as work-related flow, and positive career outcomes (i.e., employability enhancement) were included. Obviously, both individual workers and working organizations may benefit from empirical research in this field.

On the basis of previous research in related areas, we predicted that learning value of the current job and transformational leadership would have a positive relationship with employability through work-related flow. Bakker (2005) found that music teachers' job resources were positively related to work-related flow and indirectly contributed to students' levels of flow while playing music. Similarly, Salanova, Bakker, and Llorens (2006) showed that teachers' organizational resources (including innovation and goal orientation) had a causal effect on work-related flow. In addition, in their laboratory study, Sosik, Kahai, and Avolio (1999) found that flow mediated the effects of transformational leadership on creativity.

Findings from previous research support a central proposition of the Job Demands/Resources Model (Bakker & Demerouti, 2007). According to the model, job resources have motivating potential, fuel work engagement, and indirectly contribute to performance (Bakker, Demerouti, & Verbeke, 2004). Because they are important job resources, learning value and transformational leadership play a key role in individuals' ability to achieve work-related goals, reduce job demands and the associated physiological and psychological costs, and stimulate personal growth and development (Bakker & Demerouti, 2007; Bakker, Demerouti, & Euwema, 2005).

Job resources act as *extrinsic* motivators by fostering employees' willingness to exert effort to complete the work task (Gagné & Deci, 2005). In cases of such motivation, the task is very likely to be completed successfully, thereby achieving the goal (Klein, 1989; Meijman & Mulder, 1998). Several recent studies have shown that employees may, in turn, become more committed to and engaged in their job because they derive fulfillment from it (Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004); consequently, they perform better (Bakker, Demerouti, & Verbeke, 2004; Harter, Schmidt, & Hayes, 2002; Salanova, Agut, & Peiró, 2005).

According to the "happy-productive worker thesis" (Cropanzano & Wright, 2001), engaged employees often experience positive emotions, which may be the reason they are more productive, successful, and sensitive to current and future opportunities at work. Another attempt to address the conceptual link between positive emotions and positive work outcomes can be found in

the “broaden-and-build theory of positive emotions” (Fredrickson, 2001). This theory states that certain positive emotions, including joy and interest (important indicators for work-related flow), share the capacity to broaden people’s momentary thought–action repertoires and build their personal competencies through widening the array of thoughts and actions that come to mind (Bakker, 2009). It is important to empirically investigate whether the positive emotion of work-related flow contributes to enhanced career potential. On the basis of our literature review and in line with the frameworks of the happy-productive worker thesis (Cropanzano & Wright, 2001) and the broaden-and-build theory of positive emotions (Fredrickson, 2001), we formulated the following hypotheses (also see Figure 1, which illustrates the relationships between the model variables).

Hypothesis 1: Learning value of the job has a positive relationship with work-related flow.

Hypothesis 2: Transformational leadership has a positive relationship with work-related flow.

Hypothesis 3: Employees’ experience of flow, in turn, is positively related to supervisor ratings of employability.

Method

Procedure

The study was carried out among pairs of employees and supervisors working at a large Dutch company that produces building materials. The company’s turnover rate was 13% (total percentage for external turnover), and its performance (expressed in sales) comprised 400 million euro. Employees working in numerous types of jobs at middle and higher level positions were invited to participate in the study. They were informed about the background of the study and were asked to complete an electronic questionnaire using the company’s Intranet. To ensure respondents’ anonymity and to prevent social desirability in answering, the website was fully administered by an independent expert agency that was under our supervision.

FIGURE 1

The Employability Enhancement Model

All employees received an anonymous feedback report indicating their scores on the model variables and guidelines for interpreting the scores, as well as a clear outline of ways to improve their future employability. In general, the participating company can be characterized as one that gives serious attention to employability enhancement, which might have positively influenced employees' willingness to participate in the study (the relatively high response rate is discussed later in this article).

To determine worker employability, we assessed supervisors' perceptions of their subordinates' employability, and submitted the corresponding items to the supervisors involved. To prevent the collection of unreliable data as an effect of training or fatigue and to protect the independence of the data points, one supervisor completed employability ratings for a maximum of three employees, striving for a valid reflection of the distribution of respondents across departments, age groups, gender, and educational level.

Participants

Our final sample consisted of 303 employee/supervisor pairs (response rate, 91.8%). The sample included 253 male (83.5%) and 50 female employees (16.5%). The mean age of the employees was 41 years ($SD = 9.15$). Respondents' highest educational levels were (a) high school or equivalent (46.4%), (b) college/(some) university (34.2%), (c) bachelor's degree or recognized equivalent (17.0%), and (d) master's degree or recognized equivalent (2.4%). The average organizational tenure was 10.74 years ($SD = 9.61$). In total, 288 of the supervisors were men (95.0%), and 15 were women (5.0%). The mean age of the supervisors was 43 years ($SD = 7.96$).

Measures

Learning value was assessed using the recently developed and validated six-item Learning Value of the Job scale. An example of items appearing on the scale is "The experience I gain in my job encourages me to develop new capabilities" (i.e., acts as a nutrient for further learning). Employees could respond to each of the statements using a 6-point rating scale ranging from *strongly disagree* (1) to *strongly agree* (6). Its factor structure and related psychometric qualities are good. Cross-cultural research in seven European countries showed that Cronbach's alpha ranged from .74 to .90, depending upon country (Van der Heijden, Boon, Van der Klink, & Meijs, 2008; Van der Heijden et al., 2005).

Transformational leadership, as perceived by the employees, was assessed with the thoroughly validated Transformational Leadership Questionnaire (Alimo-Metcalfe & Alban-Metcalfe, 2001). Five of the nine original subscales were used in our study, given their assumed predictive validity (on the basis of data presented in our previously discussed extensive literature review) in the light of employability enhancement: (a) the Concern subscale (13 items) is focused on "genuine interest in staff as individuals; values their contributions; develops their strengths; coaches, mentors; has positive expectations of what their staff can achieve"; (b) the Empowerment subscale (6 items) is focused on the employer's ability to [trust] staff to make decisions/take initiative on important matters; [delegate] effectively; [develop]s staffs' potential"; (c) the Openness subscale (9 items) is described as "open to criticism and disagreement;

consults and involves others in decision making; regards values as integral to the organization"; (d) the Encouragement subscale (8 items) "encourages questioning traditional approaches to the job, encourages new approaches/solutions to problems, encourages strategic thinking"; and (e) the Support subscale (9 items) is described as "supportive when mistakes are made, and encourages critical feedback of him- or herself and the service provided." The anchors for each item for all five subscales ranged from *strongly disagree* (1) to *strongly agree* (6). Evidence indicates that the factor structure, reliability, and convergent and discriminant ability of the Transformational Leadership Questionnaire are good (Alimo-Metcalfe & Alban-Metcalfe, 2001).

Work-related flow was assessed with a recently developed and psychometrically sound instrument named the Work-reLated Flow Scale (WOLF; Bakker, 2008). The WOLF includes 13 items that measure absorption (4 items), work enjoyment (4 items), and intrinsic work motivation (5 items). Examples of scale items that were submitted to the employees are "When I am working, I forget everything else around me" (absorption); "I do my work with a lot of enjoyment" (work enjoyment); and "When I am working on something at my job, I do that out of myself and not because I have to" (intrinsic work motivation). The scale anchors ranged from *never* (1) to *always* (7). Recent cross-cultural research in seven European countries showed that, depending upon country, Cronbach's alphas ranged from .76 to .87, for the Absorption measure, from .83 to .88 for Work Enjoyment, and from .59 to .83 for Intrinsic Work Motivation (Van der Heijden et al., 2008; Van der Heijden et al., 2005). Bakker (2008), in his validation study using seven samples, found that a three-factor solution fit the data well and reported coefficients ranging from .75 to .86 for Absorption, from .88 to .96 for Work Enjoyment, and from .63 to .82 for Intrinsic Work Motivation. In addition, he gave evidence for the convergent validity of the WOLF vis-à-vis other constructs.

Employability was assessed with Van der Heijde and Van der Heijden's (2006) Employability (or Career Potential) Instrument, which has proven to have sound psychometric qualities (see also Van der Heijden et al., 2009). The instrument comprises five subscales: Occupational Expertise (15 items), Anticipation and Optimization (8 items), Personal Flexibility (8 items), Corporate Sense (7 items), and Balance (9 items). Supervisors were asked to indicate the employability of their subordinates. Examples of scale items are "By virtue of my experience with him/her, I consider him/her . . . competent to be of practical assistance to colleagues with questions about the approach to work" (ranging from *not at all* to *extremely*; occupational expertise), "(S) he is . . . focused on continuously developing him/herself" (*not at all* to *a considerable degree*; anticipation and optimization), "(S)he adapts to developments within the organization . . ." (*very badly* to *very well*; personal flexibility), "(S)he manages to exercise . . . influence within the organization" (*very little* to *a very great deal*; corporate sense), and "The time (s)he spends on his/her work and career development on the one hand and his/her personal development and relaxation on the other are . . . evenly balanced" (*not at all* to *a considerable degree*; balance). All employability items were scored on a 6-point rating scale.

Elaborate tests of reliability and validity aspects of the Employability (or Career Potential) Instrument, with emphasis on convergent, discriminant, and predictive validity (for career success), have yielded very promising

results. Recent cross-cultural research in seven European countries showed that, depending upon country, Cronbach's alphas ranged from .82 to .96, for Occupational Expertise, from .67 to .91 for Anticipation and Optimization, from .68 to .89 for Personal Flexibility, from .83 to .92 for Corporate Sense, and from .82 to .96 for Balance (Van der Heijden et al., 2008; Van der Heijden et al., 2005).

Data Analysis

Structural equation modeling (SEM) analyses were carried out using the AMOS software package (Arbuckle, 2006). To test the fit between the model and the data, the traditional chi-square value, the goodness-of-fit index (GFI), and the root mean square error of approximation (RMSEA) were calculated. As a rule of thumb, a $GFI \geq .90$ and a $RMSEA \leq .08$ indicate a reasonable fit between the model and the data (Browne & Cudeck, 1993). Because these indices are dependent on sample size, as recommended by Marsh, Balla, and Hau (1996), the nonnormed fit index (NNFI), the incremental fit index (IFI), and the comparative fit index (CFI) were also examined. These indices should have values of .90 or higher (Hoyle, 1995).

The research model, as presented in Figure 1, consists of hypothetical constructs or latent variables that are all estimated by manifest variables that are directly observed (i.e., using data from the previously described scales). The only exception is the latent variable learning value, for which we created two parcels of items as recommended by Hall, Snell, and Foust (1999). Bagozzi and Edwards (1998) referred to this as a Partial Disaggregation Model. Thus, learning value was included as a latent factor with two indicators being the two halves of the scale. The proposed model included the correlation among the latent factors Learning Value and Transformational Leadership. Using the chi-square difference test, the hypothetical model was compared with several nested models that specified various alternative relationships.

Results

Descriptive Statistics

Table 1 shows the means, standard deviations, reliability coefficients, and correlations between all study variables. All constructs that were assessed demonstrated good internal consistencies, except the Absorption scale (Cronbach's $\alpha = .55$). The subscales for transformational leadership were relatively highly correlated, ranging from .75 to .87, which might indicate some form of multicollinearity. Because multicollinearity is difficult to manage after the fact, possible measurement errors have been carefully accounted for in our modeling approach (Grewal, Cote, & Baumgartner, 2004). In addition, Table 1 shows that learning value correlated significantly with all scales that assess transformational leadership and with three of the five employability scales. Finally, the WOLF subscales correlate with several of the Employability (or Career Potential) Instrument subscales, and with all indicators of the predictor variables.

Test of the Employability Enhancement Model

After determining whether the observed variables had a multivariate normal distribution, SEM analyses were carried out with the AMOS software package (Arbuckle, 2006). We followed the two-step approach

TABLE 1
Means, Standard Deviations, Reliability Coefficients, and Correlations Between the Model Variables (N = 303)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Learning Value	4.37	0.78	.81	—												
Transformational Leadership																
2. Concern	4.13	0.85	.31**	.95												
3. Empowerment	4.32	0.83	.29**	.84**	.83											
4. Openness	4.35	0.70	.24**	.82**	.75**	.85										
5. Encouragement	4.06	0.93	.32**	.87**	.79**	.77**	.91									
6. Support	4.10	0.67	.25**	.83**	.75**	.80**	.76**	.82								
Work-Related Flow																
7. Absorption	4.35	0.89	.30**	.24**	.25**	.20**	.26**	.22**	.55	—						
8. Work Enjoyment	5.20	0.87	.29**	.25**	.28**	.19**	.24**	.20**	.61**	.73	—					
9. Intrinsic Work Motivation	4.32	0.95	.24**	.21**	.25**	.20**	.23**	.18**	.71**	.66**	.62	—				
Employability																
10. Occupational Expertise	4.36	0.67	.07	.15**	.20**	.20**	.09	.14*	.12	.15**	.08	.95	—			
11. Anticipation and Optim.	3.49	0.71	.17**	.13*	.19**	.19**	.10	.11	.14*	.20**	.13*	.69**	.89	—		
12. Personal Flexibility	3.92	0.67	.19**	.19**	.21**	.24**	.17**	.15*	.16**	.20**	.15*	.70**	.75**	.88	—	
13. Corporate Sense	3.90	0.72	.18**	.11	.18**	.14*	.12*	.10	.18**	.19**	.12*	.77**	.69**	.71**	.85	—
14. Balance	4.17	0.54	.08	.16**	.19**	.23**	.12*	.12*	.13*	.17**	.10	.60**	.54**	.56**	.49**	.83

Note. Cronbach's alphas are on the diagonal and are italicized. Anticipation and Optim = Anticipation and Optimization.

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

recommended by Anderson and Gerbing (1988). In the first stage, the measurement model was analyzed to ensure sufficient reliability and validity of the constructs. In the second stage, the best fitting model was identified, and the hypotheses concerning the relationships between the constructs were tested. The first row in Table 2 shows that the measurement model fit the data well. All fit indices were equal to or higher than the criterion value of .90 and, together with a RMSEA of .05, this indicates an acceptable fit between the model and the data. In addition, all indicators had significant and substantial loadings on the intended factors (ranging from .63 to .95).

In the second stage, we tested our hypotheses simultaneously. The second row in Table 2 shows that the hypothesized model fits the data well, $\chi^2(86) = 167.53$, GFI = .94, NNFI = .97, RMSEA = .05 (see Table 2 for more details). For the two indicators of Learning Value, the factor loadings were .62 and .96. For Transformational Leadership, the factor loadings ranged from .87 to .95. The factor loadings for the Work-Related Flow dimensions Absorption, Work Enjoyment and Intrinsic Work Motivation were .79, .80, and .91, respectively. Finally, the factor loadings for the Employability dimensions ranged from .66 to .85. (See Figure 2.)

To test the alternative hypothesis that learning value and transformational leadership also have a direct relationship with employability, both paths were included in the model. The results (see third row in Table 2) showed that this alternative model (M2) fit the data slightly better than did the proposed hypothetical model (M1), delta $\chi^2(2) = 6.62$, $p < .05$. However, both path coefficients had nonsignificant values: learning value-employability, $\beta = .07$, $t = .97$, $p = .33$, and transformational leadership-employability, $\beta = .13$, $t = 1.92$, $p = .06$. In a third model (M3), the Direct Effects Model, we excluded the path from flow to employability from Model 2. Although this led to a significant worsening in fit of the model to the data, delta $\chi^2(1) = 44.34$, $p < .01$, when compared with Model 2, the coefficient of the path from transformational leadership to employability was now significant, $\beta = .14$, $t = 2.21$, $p < .05$.

These latter findings suggest that there is a unique mediation effect of transformational leadership to employability through flow. Because of the shared variance with transformational leadership, learning value does not make a unique prediction to employability, but it does have an indirect effect. To examine whether the effects of learning value and transformational leadership were really carried by work-related flow,

TABLE 2

Results of SEM Analyses: Fit Indices of the Employability Enhancement Model and the Alternative Models (Standardized Maximum Likelihood Estimates)

Model	χ^2	df	GFI	RMSEA	NNFI	CFI	IFI
Measurement Model	160.91	84	.94	.05	.97	.98	.98
M1 Employability Model	167.53	86	.94	.05	.97	.98	.98
M2 Employability Model including direct effects	160.91	84	.94	.05	.97	.98	.98
M3 Direct Effects Model	205.25	85	.92	.07	.96	.97	.97
M0 Null Model	3,589.04	105	.33	.32			

Note. $N = 303$. SEM = structural equation modeling; GFI = goodness-of-fit index; RMSEA = root mean square error of approximation; NNFI = nonnormed fit index; CFI = comparative fit index; IFI = incremental fit index.

FIGURE 2

**The Employability Enhancement Model: Standardized Solution
(Maximum Likelihood Estimates)**

Note. $N = 303$. All model parameters are significant at the $p < .01$ level.

we conducted two Sobel tests. Results of the Sobel tests confirmed that learning value of the current job had an indirect effect on employability through flow ($z = 2.28$, $p < .05$). In addition, flow mediated the relationship between transformational leadership and employability ($z = 2.05$, $p < .05$).

Taken together, these findings confirmed all three hypotheses. Learning value of the current job and transformational leadership have indirect relationships with employability through work-related flow. The results of the final Employability Enhancement Model, which is identical to the proposed model, are summarized in Figure 2. The model explains 15% of the variance in flow at work and 3% of the variance in employability ratings.

Discussion

Reflection on the Outcomes and Practical Implications

The goal of our study was to validate a mediation model of employability enhancement. It is important to understand which organizational practices influence employability so that a foundation can be established for theory development and further research can be conducted on the topic from a human resources management perspective.

The results of our structural equation modeling analyses confirmed the hypothesized model. Although flow explained only 3% of the variance in employability, the results of this study are interesting; the variance indicates that many of the factors that were not taken into account also

affect employability. Given that employability is a highly complicated personal attribute that is expected to be influenced by many individual and organizational factors, it is promising to have found confirmation for a model that includes, to some extent, manipulable factors.

Specifically, perceptions of employees indicating that (a) their supervisors displayed behaviors that were to a large extent characterized by concern, empowerment, openness, encouragement, and support (transformational leadership) and (b) their jobs were characterized as challenging constellations of tasks and responsibilities wherein the individual had ample opportunities to learn, contributed positively to the experienced amount of work-related flow (absorption, work enjoyment, and intrinsic motivation). The latter variables themselves are related to positive outcomes, in this case employability, as rated by the supervisor.

Because past research has focused mainly on either learning value or leadership style, we decided to test a model that simultaneously took both factors into account. Our findings are consistent with previous research on flow (Bakker, 2005, 2008; Salanova et al., 2006; Sosik et al., 1999) and are in line with a central proposition of the Job Demands-Resources Model (Bakker & Demerouti, 2007) and with the theoretical approaches formulated in the happy-productive worker thesis (Cropanzano & Wright, 2001) and the broaden-and-build theory of positive emotions (Fredrickson, 2001). Accordingly, job resources, being extrinsic motivators, have motivating potential and contribute to performance through work-related flow (Bakker et al., 2004).

It is important to pay careful attention to employability enhancement throughout careers. Currently, changes mark a move away from a paternalistic culture toward a performance culture, from providing lifetime employment in one institution to a ubiquitous need for improving an individual's employability across professional domains and across organizations (DeFillippi & Arthur, 1996). This performance culture implies that employees are regularly exposed to job demands such as work constraints, role uncertainty, and new job requirements, making the need for encouragement and empowerment very strong. The outcomes of our study indicate that employees experience a satisfying social work environment when they have a challenging job and a stimulating and motivating supervisor who is willing and ready to coach and monitor the employees' growth and employability, that is to say, aimed at increasing employee engagement and empowerment. Only if both an enriching job and a constructive managerial style exist can employees flourish and their employability be addressed (Bakker & Schaufeli, 2008).

Obviously, the amount of influence employees can exert on their supervisor's leadership style is limited, although we do see opportunities regarding the shaping of the employee-supervisor exchange relationship (i.e., the psychological contract between the two parties). The *psychological contract* refers to "the idiosyncratic set of reciprocal expectations held by employees concerning their obligations (what they will do for the employer) and their entitlements (what they expect to receive in return)" (McLean Parks, Kidder, & Gallagher, 1998, p. 698). A relatively blunt but practical implication is that in case the employee is willing to invest in a high-quality relationship, for instance, by showing commitment and by putting forth extra effort (see LePine, Erez, & Johnson, 2002, for a discussion of Organizational Citizenship Behavior), it is likely that the supervisor will reply positively and that his or her management style will be more constructive.

Regarding possibilities for job enrichment, it might be helpful to consult a career counselor to ensure that different opportunities to increase the amount of learning value in one's job as well as other career development enhancing practices are carefully explored and implemented in the employee's current assignment.

Limitations and Recommendations for Further Research

The present study has some limitations. First, all data were collected using questionnaires, opening up the possibility of response set consistencies. Second, all data were collected at one point in time, that is, the study was cross-sectional. This implies that further research is needed to address the issue of causality. Research using multiwave designs can provide more specific information about the stability and change of the variables and about cross-lagged (i.e., over time) relationships than did our cross-sectional approach (De Lange, 2005; Taris & Kompier, 2003). Third, further research is needed to investigate the robustness of our findings and to determine the extent to which our findings generalize to other occupational settings or to other countries (Fouad & Arbona, 1994). Moreover, given that our sample was predominantly male, it would be useful for future research to examine possible gender effects.

Nevertheless, we believe that our results are noteworthy and provide good challenges for future research and cross-validation. One of the strengths of our study is that we gathered data from two different sources (employees and their supervisors) to prevent the so-called common-method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Because the disagreement between supervisors and employees regarding facets of employability is indicative of the difficulty of evaluating employability (Van der Heijde & Van der Heijden, 2006; Van der Heijden, 2000), we recommend that employees' self-assessments and supervisor assessments be compared in future research. Moreover, research that considers the impact of internal and external labor market opportunities may enhance the understanding of employability. More specifically, when there is a lack of employment opportunities, work organizations may already face detrimental effects, even in a situation of reasonable motivation and engagement of their employees, because their staff may show high organizational tenure, yet not be strongly committed. A perceived lack of employment opportunities has already been shown to be significantly related to health and well-being (Catalona, 1991; Mauno, Kinnunen, Mäkikangas, & Nätti, 2005; Sverke, Hellgren, & Näswall, 2002), both of which are strong predictors of employability (see also Van der Heijden et al., 2005).

To conclude, as indicated earlier, work organizations change rapidly and individual employees are being urged more and more to find out what new knowledge and skills are required of them to adapt to and to stay in a desired job. However, previous research has indicated that, even in a period of a huge shortage of highly skilled professionals, these individuals' lifelong employability is badly guided (Van der Heijden et al., 2005). It is hard to understand why, in an era of ever-increasing needs for occupational expertise, supervisors do not seem to be much interested in the lifelong career development and growth of their employees' abilities, and thus immediately endanger these individuals' future employability. It seems important that supervisors provide the necessary

resources for achieving employability, through constructive leadership style and by providing jobs with high learning value. In light of this, it may be interesting to use the Job Demands-Resources Model (Bakker & Demerouti, 2007) that has proven to be applicable to many occupational and organizational settings as a guiding framework in future research on employability.

References

- Alimo-Metcalfe, B., & Alban-Metcalfe, R. J. (2001). The development of a new Transformational Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 74, 1-27.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39, 1154-1184.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Arbuckle, J. L. (2006). *AMOS 7.0 user's guide*. Chicago, IL: SPSS.
- Arthur, M. B. (2008). Examining contemporary careers: A call for interdisciplinary inquiry. *Human Relations*, 61, 163-186.
- Avolio, B. J., Bass, B. M., & Jung, D. (1999). Reexamining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 7, 441-462.
- Bagozzi, R. P., & Edwards, J. R. (1998). A general framework for representing constructs in organizational research. *Organizational Research Methods*, 1, 45-87.
- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, 66, 26-44.
- Bakker, A. B. (2008). The Work-Related Flow Inventory: Construction and initial validation of the WOLF. *Journal of Vocational Behavior*, 72, 400-414.
- Bakker, A. B. (2009). Building engagement in the workplace. In C. L. Cooper & R. J. Burke (Eds.), *The peak performing organization* (pp. 50-72). London, England: Routledge.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22, 309-328.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10, 170-180.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. *Human Resource Management*, 43, 83-104.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29, 147-154.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Bernson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88, 207-218.
- Basu, R., & Green, S. G. (1997). Leader-member exchange and transformational leadership: An empirical examination of innovative behaviors in leader-member dyads. *Journal of Applied Social Psychology*, 27, 477-499.
- Boerlijst, J. G., Van der Heijden, B. I. J. M., & Van Assen, A. (1993). *Veertigplussers in de onderneming* [Over-forties in the organization]. Assen, The Netherlands: Van Gorcum/Stichting Management Studies.
- Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational aspects of transformational leaders. *Academy of Management Journal*, 46, 554-572.
- Brousseau, K. R. (1978). Personality and job experience. *Organizational Behavior and Human Decision Processes*, 22, 235-252.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 445-455). Newbury Park, CA: Sage.

- Catalona, R. (1991). The health effects of economic insecurity. *American Journal of Public Health*, 81, 1148-1152.
- Conger, J. A., & Kanungo, R. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Coyle-Shapiro, J. A. M., & Neuman, J. H. (2004). The psychological contract and individual differences: The role of exchange and creditor ideologies. *Journal of Vocational Behavior*, 64, 150-164.
- Cropanzano, R., & Wright, T. A. (2001). When a "happy" worker is really a "productive" worker: A review and further refinements of the happy-productive worker thesis. *Consulting Psychology Journal*, 53, 182-199.
- Day, D. (2000). Assessment of leadership. In R. J. Klimoski & S. J. Zaccaro (Eds.), *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (pp. 384-410). San Francisco, CA: Jossey-Bass.
- DeFillippi, R. J., & Arthur, M. B. (1996). Boundaryless contexts and careers: A competency-based perspective. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career: A new employment principle for a new organizational era* (pp. 116-131). New York, NY: Oxford University Press.
- De Lange, A. H. (2005). *What about causality? Examining longitudinal relations between work characteristics and mental health* (Unpublished doctoral dissertation). Radboud University, Nijmegen, The Netherlands.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735-744.
- Eden, D. (1992). Leadership and expectations: Pygmalion effects and other self-fulfilling prophecies in organizations. *The Leadership Quarterly*, 3, 271-305.
- Elkins, T., & Keller, R. T. (2003). Leadership in research and development organizations: A literature review and conceptual framework. *The Leadership Quarterly*, 14, 587-606.
- Fay, D., & Frese, M. (2001). The concept of personal initiative: An overview of validity studies. *Human Performance*, 14, 97-124.
- Fay, D., & Kamps, A. (2006). Work characteristics and the emergence of a sustainable workforce: Do job design principles matter? *Gedrag & Organisatie*, 19, 184-203.
- Forrier, A., & Sels, L. (2003). The concept employability: A complex mosaic. *International Journal of Human Resources Development and Management*, 3, 102-124.
- Fouad, N. A., & Arbona, C. (1994). Careers in a cultural context. *The Career Development Quarterly*, 43, 96-104.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65, 14-38.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-326.
- Grewal, R., Cote, J. A., & Baumgartner, H. (2004). Multicollinearity and measurement error in structural equation models: Implications for theory testing. *Marketing Science*, 23, 519-529.
- Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *The Journal of School Psychology*, 43, 495-513.
- Hall, R. J., Snell, A. F., & Foust, M. S. (1999). Item parceling strategies in SEM: Investigating the subtle effects of unmodeled secondary constructs. *Organizational Research Methods*, 2, 233-256.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7, 79-109.
- Holman, D., & Epitropaki, O. (2001). Understanding learning experiences in the workplace: A factor analytic investigation. *Journal of Occupational and Organizational Psychology*, 74, 675-681.

- House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, 23, 409-473.
- Hoyle, R. H. (1995). *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.
- Johns, G., Xie, J. L., & Fang, Y. (1992). Mediating and moderating effects of job design. *Journal of Management*, 18, 657-676.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.
- Klein, H. J. (1989). An integrated control theory model of work motivation. *Academy of Management Review*, 14, 150-172.
- Kohn, M. L., & Schooler, C. (1982). Job conditions and personality: A longitudinal assessment of their reciprocal effects. *American Journal of Sociology*, 87, 1257-1283.
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87, 52-65.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, 15, 47-119.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytical review of the MLQ literature. *The Leadership Quarterly*, 7, 385-425.
- Marsh, H. W., Balla, J. R., & Hau, K. T. (1996). An evaluation of incremental fit indices: A clarification of mathematical and empirical properties. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 315-353). Mahwah, NJ: Erlbaum.
- Mauno, S., Kinnunen, U., Mälikangas, A., & Nätti, J. (2005). Psychological consequences of fixed-term employment and perceived job insecurity among health care staff. *European Journal of Work and Organizational Psychology*, 14, 209-237.
- Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology*, 88, 707-724.
- McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *Journal of Organizational Behavior*, 19, 697-730.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry, & C. J. de Wolff (Eds.), *Handbook of work and organizational psychology* (2nd ed., pp. 5-33). Hove, UK: Erlbaum.
- Nemanich, L. A., & Keller, R. T. (2007). Transformational leadership in an acquisition: A field study of employees. *The Leadership Quarterly*, 18, 49-68.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49, 327-340.
- Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30, 591-622.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85, 612-624.
- Rousseau, D. M. (2001). Schema, promise and mutuality: The building blocks of the psychological contract. *Journal of Occupational and Organizational Psychology*, 74, 511-541.

- Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology, 90*, 1217-1227.
- Salanova, M., Bakker, A. B., & Llorens, S. (2006). Flow at work: Evidence for an upward spiral of personal and organizational resources. *Journal of Happiness Studies, 7*, 1-22.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly, 45*, 247-259.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*, 1-23.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology, 54*, 845-874.
- Shamir, B., House, R. J., & Arthur, M. J. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science, 4*, 577-594.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal, 46*, 703-714.
- Sosik, J. J., Kahai, S. S., & Avolio, B. J. (1999). Leadership style, anonymity, and creativity in group decision support systems: The mediating role of optimal flow. *Journal of Creative Behavior, 33*, 227-256.
- Sullivan, S. E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management, 25*, 457-484.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology, 7*, 242-264.
- Taris, T. W., & Kompier, M. (2003). Challenges of longitudinal designs in occupational health psychology. *Scandinavian Journal of Work, Environment and Health, 29*, 1-4.
- Van der Heijde, C. M., & Van der Heijden, B. I. J. M. (2006). A competence-based and multi-dimensional operationalization and measurement of employability. *Human Resource Management, 45*, 449-476.
- Van der Heijden, B. I. J. M. (2000). The development and psychometric evaluation of a multidimensional measurement instrument of professional expertise. *High Ability Studies, 11*, 9-39.
- Van der Heijden, B. I. J. M., Boon, J., Van der Klink, M., & Meijs, E. (2008, February). *Does (in)formal learning enhance employability?* Paper presented at the Academy of Human Resource Development International Research Conference, Panama City, FL.
- Van der Heijden, B. I. J. M., De Lange, A. H., Demerouti, E., & Van der Heijde, C. M. (2009). Age effects on the employability-career success relationship. *Journal of Vocational Behavior, 74*, 156-164.
- Van der Heijden, B. I. J. M., Scholarios, D., Bozionelos, N., Van der Heijde, C. M., Epitropaki, O., & the Indic@tor consortium. (2005). *Report on final results. Indic@tor Report: A cross-cultural study on the measurement and enhancement of employability in small and medium-sized ICT-companies*. Brussels, Belgium: European Commission.
- Van der Heijden, B. I. J. M., & Thijssen, J. G. L. (2003). Editorial: HRD and employability. *International Journal of Human Resources Development and Management, 3*, 99-101.
- Vera, D., & Crossan, M. (2004). Strategic leadership and organization learning. *Academy of Management Review, 29*, 222-240.

Copyright of Career Development Quarterly is the property of National Career Development Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.