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Career Competencies for the Modern Career

M.A.C.T. Kuijpers

Centre for the Innovation of Training

J. Scheerens

University of Twente

Career development gains new meaning in the context of employability demands in a knowledge economy. In this context, increased mobility, a dynamic work environment, and an increased level of career support from employers are seen as characteristics of a modern career. All of these characteristics put emphasis on individual and self-management in career development. This article presents the results of an empirical study that addressed the general question as to which competencies employees need to possess to realize career self-management. In a survey of 1,579 employees (51% response) in 16 Dutch companies, 6 career factors and competencies of career self-management prove to be relevant for career development: career development ability, reflection on capacities, reflection on motives, work exploration, career control, and networking. Among the explanatory variables that are considered, mobility perspective and career support at work and private life appear to be associated most strongly (statistical significance at .01) with career competencies.

Keywords: *career development; career competencies; competency measurement; modern career characteristics*

Background

The modern career is a topic of interest to both employees and employers. Although interest in career development began in the early 20th century, it has only been in the past two decades that career development has become a serious issue of concern within organizations (Burke, 1995). Economic and tech-

Authors' Note: M.A.C.T. Kuijpers, CINOP, Centre for the Innovation of Training, P.O. Box 1585, 5200 BP's-Hertogenbosch; e-mail: mkuijpers@cinop.nl.

nological developments can result in working careers being unpredictable because of changing work opportunities and shifts in labor. A permanent job with one employer, preferably for the entire span of a person's working life, is considered the traditional work pattern (Iellatchitch, Mayrhofer, & Meyer, 2003). However, the traditional job, as a collection of set duties and responsibilities, does not appear flexible enough to make functioning in an unstable job market possible (Meijers & Wardekker, 2003). Today, career opportunities are seen more in the light of employability, in which career development goes beyond the boundaries of organizations: the so-called "boundaryless careers" (Arthur, 1994). The traditional career, chiefly determined by an employee's preliminary training and investments by employers, has shifted toward a modern career largely guided by the employee.

In literature on career development, authors such as Arthur, Inkson, and Pringle (1999) and Hall and Mirvis (1995) described characteristics of the modern career that appeal to self-management in career development. These characteristics include

- increased mobility—careers develop in vertical as well as in horizontal directions, and career development takes place outside the boundaries of one organization;
- increased dynamics in the work environment—work tasks of employees change more often; and
- change of responsibility of the employer from providing career ladders, with fixed career moves determined by the employer, to facilitating employees to develop their own career.

Although recent literature on careers creates the impression that these characteristics are generally accepted, little is known about the impact of labor market changes on the requirements of career self-management. Moreover, there is considerable uncertainty concerning the question of which competencies workers need to possess to realize self-management in their career development.

The fact that (inter)national politics, education, and labor organizations focus on employability makes it essential to study career self-management. Authors in the field of career development plead for research studies with practical relevance that go beyond the traditional focus of career development (Iellatchitch et al., 2003; Savickas, 2003). A reliable and valid categorization and instrument that measures career competencies can serve policymakers, educators, and human resource managers in organizations as well as career counselors. This article describes a study on the operationalization of career competencies and the relation of these competencies with the characteristics of a modern career: increased mobility, a dynamic work environment, and career support at work.

Purpose and Rationale of the Study

Against the societal background described above and the relatively undeveloped state of the art in the operationalization of career competencies relevant for the modern career, two research questions were addressed:

- Which competencies regarding career development can be identified and operationalized in an instrument?
- Which characteristics of the modern career explain the use of career competencies over and above personal characteristics?¹

Although the study was of an exploratory nature, we expected a positive association between the characteristics of the modern career and career development competencies. Because of the ex-post nature of the research design and the correlational nature of the analyses that were carried out, the interpretation of positive associations does not allow going beyond establishing mutual enforcement between career characteristics and career development competencies.

The conceptual background to each of the two central research questions is elaborated in the subsequent subsections.

Measuring Career Competencies

Career competencies in this study are defined as competencies that are relevant for all employees to develop their own career, regardless of the specific job they have. On the basis of a review of the literature on career development and interviews with experts, four career competencies were identified:

- Career reflection: the competency to reflect on personal capacities and motives regarding a career (e.g., Hall & Mirvis, 1995; Murphy, 2001)
- Work exploration: the competency to explore the labor market and specific work environment for suitable work (activities) and mobility prospects (e.g., Ball, 1997)
- Career control: the competency to plan and act on one's own learning and working processes (e.g., Nabi, 2000)
- Self-presentation: the competency to show and discuss one's capacities and values regarding work, thereby increasing one's choices in career development (e.g., Arthur, 1994)

The focus on these career competencies can be corroborated by exploring their relationship with characteristics of the modern career.

The Impact of Characteristics of the Modern Career on Career Competencies

To understand the construct of competencies, it is important to explore relationships with relevant explanatory variables. The extent to which people develop career competencies could be seen as depending on personal variables, such as character, gender, age, position, and ambition. However, for human resource development purposes, it is even more relevant to understand the relationship of career competencies with work-related variables because these variables can be controlled and influenced. In the literature on career management, it is assumed that environmental factors of the modern career, such as increased mobility, increased dynamics in the work situation, and changes in support in the work situation, urge employees to take responsibility for their own career development. Because of the increased interest on the influence of the employees' private life on their career development (Ball, 1997; Defillippi & Arthur, 1994), the career support from the private situation was included in the study as well. In the design of the study, the impact of controllable characteristics of the modern career on career competencies has to be separated from the impact of relevant personal variables. Personal factors investigated are gender, age, job position, and career ambition. Work-related characteristics of the modern career studied are mobility perspective, dynamic work environment, and level of career support by employers in the work environment. Each of these three phenomena will be described in more detail below.

Mobility perspective. Mobility perspective includes mobility opportunity on the labor market and mobility intentions for the coming year. Various authors point to the increase of mobility within career paths (Arthur, 1994; Hall & Mirvis, 1995) and describe its relevance for employability (Allegro, 1998) and career development (Boudreaux, 2001). From these references, we inferred that quantity of work opportunities, related to educational level and work experiences, as well as possibilities on the labor market to realize mobility wishes, were relevant categories to include in our study. Mobility intentions were operationalized as intentions of the employees within or outside their organization in the coming year.

A dynamic work environment. A dynamic work environment refers to the frequency of work changes that the employee experiences. A distinction was made between change in work tasks at the current workplace and change in the

work history. The work history refers to the change of work within and outside organizational boundaries during the past 5 years. With increased mobility, an increase in the dynamics of the work environments is expected in a modern career (Allegro, 1998). A more dynamic work environment is expected to appeal to the career development of the employees to enhance their employability (van der Heijden, 1998). According to Harrison (2000), career development will not be as attractive and necessary in organizations where changes of work tasks are not relevant.

Career support in the work environment. Career support in the work environment refers to the facilities an organization offers to obtain new work experiences, to undertake learning activities, and to develop a network for career development purposes. Within the ideas of the modern career, the employer is expected to promote the future perspectives and employability of the employee (Kakabadse & Kakabadse, 2000). To be attractive for employees, the organization should offer opportunities to obtain learning experiences, work experiences, and network contacts (van der Heijden, 1998). Moreover, employees who experience more career support prove to be more motivated to undertake activities in these matters (Nabi, 2000).

Career support in the private situation. As an additional variable, we considered career support in the private situation. A distinction was made between experienced moral support and support to invest time and money for career development purposes. Little research has been conducted on the influence of career support from the private situation on career development. Studies in this area focused merely on the influence of relatives on students' career choices (Arbona, 2000). In the literature of modern careers, the importance of balancing work and private life is emphasized (Defillippi & Arthur, 1994).

Method

By means of literature review and interview studies, career competencies were defined. A measurement instrument was developed, tested, and validated. Subsequently, a large-scale survey was carried out to empirically investigate the construct career competencies and the relation between career competencies and characteristics of the modern career. The instrument, a self-assessment questionnaire, was distributed among 3,086 employees in 16 Dutch companies. Employees were randomly chosen from the organizations' target groups.

Table 1
Matrix of Participating Organizations

C+ D+ M+	C+ D+ M-	C+ D- M+	C+ D- M-
Organization advice center	School for higher vocational education	Ministry of Agriculture	Province house Friesland
Information technology company Siemens	Pharmaceutical company	Dutch dredge company Holland Construction Group	Province house Groningen
C- D+ M+	C- D+ M-	C- D- M+	C- D- M-
Temporary employment agency Randstad	Academic hospital	Engineer office	University of Twente
Food service company Sara Lee	Regional educational center (D+/-)	National Pension Fund	City Hall Enschede

Note: C = career support in the work environment; D = dynamic work environment; M = mobility opportunities of the employees.

Selection of Organizations

Organizations participating in this study were selected based on the extent of the presence of the work-related variables: mobility opportunities, dynamic work environment, and career support from the work environment. To promote variability within the response group, organizations were included in which these variables were present as well as organizations in which these variables were largely absent. Organizations were classified based on criteria to determine the extent of attendance of these variables (Table 1). The matrix consists of eight cells in which the three work-related variables in all possible combinations of presence and absence were represented (Table 1).

In one case, it was not possible to allocate the organization to one of the extremes in presence of a dynamic work environment; according to the outcome of the criteria list, this organization had a moderate dynamic work environment. Because no other organization was available, it was decided to include this organization. The acquisition of the participating organization was performed randomly and was terminated when the eight cells matrix was completed.

Respondent Group

The target population was defined as employees in Dutch companies with a minimum educational level of higher vocational education, having at least 1 year's work experience and a minimum of 20 working hours a week. Of the 3,086 questionnaires, 1,591 (51%) were returned completed. This realized sample of 1,591 respondents consisted of 68% males and 32% females. In the Netherlands, the ratio of men to women having successfully completed higher education is 60 to 40 (see the Web site of the Central Statistics Agency, <http://www.cbs.nl>). The realized sample roughly corresponds to this ratio. The average age of the respondents was 40, with a standard deviation of 9.9. Of the total respondent group, 23% were 30 years old or younger, 44% were between 30 and 45, and 33% were older than 45. Half the respondent group consisted of operational staff, and the other half held an executive position. Among 125 employees who failed to return the questionnaire, nonresponse interviews were held to verify the correspondence between the nonresponse and the response group on the variables of gender, age, position, mobility perspective, and career support from the work situation. The employees from the nonresponse group were selected at random. The results revealed no significant differences between the nonresponding and the responding subjects. From this, we may conclude that the nonresponse was not selective and that this threat to the generalizability of the results could be ruled out.

The Instrument to Measure Career Competencies

The instrument used for collecting data on career competencies was a written self-assessment questionnaire. The development of the questionnaire took place in various phases:

1. Literature study on career research to see if any questionnaire was available from previous studies. No appropriate questionnaire was found for the current study.
2. Interviews with nine specialists in the field of career development in the Netherlands were held to identify indicators of career competencies.
3. Construction of a self-assessment questionnaire based on the aspects of career competencies that were generated in the interviews with specialists. Next, the initial version of the questionnaire was adjusted on the basis of interviews with employees from the target group, researchers, language experts, and

methodologists. In this way, it was verified that the items were clearly formulated, sufficiently covered the earlier identified indicators (see Step 2 above), and were sufficiently distinct from one another.

4. Assessment of the face validity of the content of the questionnaire was performed by nine specialists; four of them had also been involved in Step 2, described above, and five of them became involved for the first time. The overall result of this round of expert consultation was that the questionnaire was seen as a valid measure of career competencies.
5. Next, the instrument was tested by means of a pilot study among 197 respondents (42% response). The pilot results were used to construct scales of items that represented career competencies. Reliability of the scales (Cronbach's alphas of .74 to .80 in the pilot study and Cronbach's alphas of .74 to .88 in the main survey) and discrimination between the competencies proved to meet conventional standards.
6. Fourteen interviews with respondents of the pilot study were held to explore whether questionnaire responses and statements in interviews from the same respondents matched. This approach could be seen as an exploration of the convergent validity of the measurement instrument. The results on career competencies measured by the questionnaire corresponded with the result measured by means of an interview, with the exception of one case.
7. Correlational study was performed using the existing construct of locus of control (a personality characteristic) to determine the discriminant validity. Although a relation between internal locus of control and career development is expected to some extent—a person who attributes his or her success and failure to his or her own activities is more likely to act on his or her career development—it is not desirable that the career development questionnaire in essence measures the internal locus of control of a person. Therefore, the correlation between the results of the questionnaire on career competencies and the results of a questionnaire on locus of control should be present but limited in size. The results did confirm to this requirement; the correlation was significant but low (.18 to .22). This finding supports the discriminant validity of the career competencies questionnaire.

In the questionnaire, the construct of career competencies was expounded in two different structures (Table 2). Based on theory and qualitative studies, each career competency was expected to consist of several content parts that are likely to function as a unit. For example, career reflection comprises reflection on capacities and reflection of motives. Based on theoretically allocated characteristics of competencies, defined as a unity of dispositions for performance and actual behavior (Nordhaug, 1993; Parry, 1998; Spencer & Spencer, 1993) and including motivation as an element of competencies (Bunk, 1994), career competencies were also included in a second structure that represented modalities. A distinction was made between questions that measured ability, behavior, and motivation.

Table 2
Structure of Career Competencies in Content Aspects and Modalities

Competencies	Modalities	Content Aspects
C1. Career reflection	v. Ability	1. Reflection on capacities
	g. Behavior	2. Reflection on motives
	m. Motivation	
C2. Work exploration	v. Ability	3. Orientation on work
	g. Behavior	4. Orientation on mobility
	m. Motivation	
C3. Career control	v. Ability	5. Career planning
	g. Behavior	6. Control of learning process
	m. Motivation	7a. Control of work process b. Balancing work and private life
C4. Self presentation	v. Ability	8. Verbal career promotion
	g. Behavior	9. Presentation in work
	m. Motivation	10. Networking

Note: v = ability; g = behavior; m = motivation.

Questions and statements relating to the applicability of characteristics of the modern career on the respondents situation were included in the questionnaire. Moreover, the variables of mobility opportunities, dynamics of the current work environment, and career support from the workplace were assessed by the employer of the participating organizations.

The questions and statements were based on 5-point Likert-type scales, ranging from *totally disagree* to *totally agree* and from *(almost) never* to *every month or even more*.

Analyses

By means of a confirmatory factor analysis (LISREL 8), the structure of career competencies, as designed according to the opinions in the literature and from experts, was analyzed. The purpose of a factor analysis is to explain the relation between observed variables (questions in the questionnaire) by underlying latent variables (in this case, career competencies). By means of a confirmatory factor analysis, a model is tested that was developed beforehand. Several goodness-of-fit measures generated by LISREL evaluate how well the hypothesized model (Table 3) fits the observed data. The fit criteria, Akaike's Information Criterion (AIC), a modification of this criterion CAIC, and the Adjusted Goodness-of-Fit Index (AGFI) are used to compare the one and more factor models. The general rule is that a model with a low AIC or CAIC is preferred above a model with a higher index. The recommended AGFI of a

model that fits the data well is at least .8 (Chau, 1997). If the modalities and content aspect of a competency (Table 2) function as a unity (such as the hypothesis about the structure of a competency predicts), a one-factor model gives the best fit index. If, for a particular competency, a more factor model gives the best fit index, the construct of four career competencies needs reconsideration because the total set of competencies will exceed the four a priori competencies. To investigate whether career competencies are explained by characteristics of the modern career, regression analyses were carried out in which personal variables were controlled for.

Results

The results of the LISREL analysis showed that a distinction needs to be made between the ability component and the behavior component of a competency. Although definitions of a competency often include the terms *ability*, *behavior*, and *motivation*, no empirical evidence is found in this study to support the unity of these modalities. The results of the LISREL analysis indicated that the modalities ability and behavior on career development cannot be seen as a unity. A career competency needs to be defined in terms of ability or behavior. Motivation is more strongly related to behavior than it is to ability and is therefore combined with behavior. Next, the unity of content aspects of the competencies was investigated. The results showed that even the content aspects cannot be considered as a unity, although the content aspects of ability are more related to each other than the content aspects of behavior and motivation. Comparing the results of the LISREL analyses and of possible classifications (Table 2), we found that career development involves 12 factors instead of 4 competencies: (a) ability regarding career reflection, (b) work exploration, (c) career planning and control of learning process, (d) verbal career promotion, (e) networking, (f) behavior and motivation regarding reflection on capacities, (g) reflection on motives, (h) orientation on work, (i) career planning and control of work process, (j) control of learning process, (k) verbal career promotion, and (l) networking. Presentation in work (9 in Table 2) and behavior and motivation on orientation on work (4 in Table 2) are excluded from the model. Balancing work and private life (7b in Table 2) proved to be a separate factor that is no part of career development (factor loadings on career development: < .35 vs. factor loadings of remaining factors: .6 to .9). The 12 factors could be reduced to a more economical model of six factors that still met the standard of an AGFI index of .80 (cf. Chau, 1997; for further details, see Kuijpers, 2003).

The correlation coefficients among the content aspects of career development ability differ between .63 to .81. In contrast to conclusions on ability content aspects, it is undesirable to combine all behavior and motivation content aspects. Based on the correlation matrix, only the behavior and motivation content aspects (career planning and control of work process, control of learning process, and verbal career promotion) are combined into one factor: career control (correlations between .64 to .83). By combining the content aspects, the theoretical model of career development consisting of 12 factors is reduced to a practical model of 6 factors:

- Career development ability (the degree to which employees are capable of realizing personal goals and values in their working career)
- Career development behavior and motivation on reflection on capacities (considering capacities and work competencies already present that are important for a career)
- Career development behavior and motivation on reflection on motives (considering desires and values that are important for one's own individual career)
- Career development behavior and motivation on work exploration (looking at work and mobility with regard to career; central to this is the process of familiarizing oneself with the ways in which work competencies can be deployed)
- Career development behavior and motivation on career control (career-directed planning and influencing of learning and work processes; also, planning and negotiating the development and the deployment of work competencies for one's own career)
- Career development behavior and motivation on networking (building up contacts and maintaining them on the internal and external job market, aimed at career development)

The model that consists of these six factors defines the construct of career development. Based on the six factors, the relation between career development and career success is analyzed.

Variables of the Modern Career

This section presents the results of the regression analyses used to analyze the contribution of modern career variables to career competencies when controlling for relevant personal variables. The personal variables that were included are presented in Table 3. To elucidate mobility opportunities, a dynamic work environment, and career support at work, assessments by the respondent as well as by the employer have been included in the analyses. Although independent variables as well as dependent variables were described, the regression analyses do not allow firm conclusions about causality; the direction of the influence is not unequivocal. The table below displays only those variables that contribute significantly (.01 and .05 level) to explained variance.

Table 3
Multiple Regression Analyses With Personal- and
Situational-Linked Variables as Independent Variables and
Career Competencies as Dependent Variables

Variable	<i>B</i>	<i>SE B</i>	β	<i>R</i> ²
Career-actualization ability				.102
Function: managerial	.061	.030	.058*	
Career ambition: development	.035	.025	.039 <i>ns</i>	
Mobility opportunity (r)	.108	.027	.121***	
Career support at work (r)	.163	.026	.184***	
Moral career support privately	.116	.030	.115***	
Investment career support privately	.074	.027	.083**	
Reflection on capacities				.114
Gender (0 = <i>man</i> , 1 = <i>woman</i>)	.124	.059	.063*	
Age	-.010	.003	-.103**	
Function: managerial	.102	.062	.048 <i>ns</i>	
Career ambition: development	.194	.053	.107***	
Intentions for internal mobility	.131	.053	.072*	
Intentions for external mobility	.215	.054	.117***	
Dynamics of present job (r)	.152	.051	.084**	
Reflection on motives				.071
Gender (0 = <i>man</i> , 1 = <i>woman</i>)	.142	.044	.100**	
Age	.008	.002	.119**	
Function: operational	.035	.040	.027 <i>ns</i>	
Career ambition: being meaningful	.185	.042	.135***	
Development	.182	.042	.138***	
Intentions for internal mobility	.123	.039	.093**	
Work exploration				.037
Age	.009	.003	.117**	
Mobility opportunity (e)	.127	.052	.082*	
Intentions for external mobility	.102	.050	.066*	
Career support at work (r)	.097	.048	.064*	
Investment career support privately	.111	.050	.072*	
Career control				.113
Career ambition: high salary	.038	.035	.030 <i>ns</i>	
Development	.169	.032	.149***	
Mobility opportunity (e)	.068	.035	.060*	
Intentions for internal mobility	.122	.033	.108***	
Career support at work (r)	.191	.033	.169***	
Moral career support privately	.122	.038	.095**	
Investment career support privately	.120	.034	.106***	
Networking				.136
Function: operational	-.149	.044	-.097**	
Career ambition: development	.118	.043	.077**	
Mobility opportunity (r)	.210	.046	.136***	
Mobility opportunity (e)	.163	.047	.105**	
Intentions for external mobility	.171	.045	.109***	
Career support at work (r)	.234	.044	.152***	
Investment career support privately	.121	.046	.079**	

Note: r = respondent; e = employer.

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

Career Development Ability

Table 3 shows that the modern career variables of mobility opportunity, career support at work, and support in private life contribute to the ability of employees to develop their career. The greatest contribution is explained by career support at work ($\beta = .184$). A dynamic work environment seems to have no influence on the ability to develop one's career. A position as manager, a personal-linked variable, proves to contribute to the explained variance in career development ability. However, the ambition to develop oneself correlates no longer with the estimated ability when situational-linked variables are included in the analyses.

Reflection on Capacities

The results in Table 3 show that it is not mobility opportunity or changing jobs that make employees reflect on their capacities but rather change and expected change of work activity in the current work situation. Likewise, career support does not prove to affect career competencies. Of the personal variables, gender, age, and development ambition correlate positively with reflection on capacities. Women reflect more often on their capacities than men do. This also accounts for employees who pursue personal development. However, the standardized regression coefficient (B) shows that by every 10-year increase in age, the score on reflection on capacities decreases by .01. Having a managerial position contributes no longer to the score on reflection on capacities when situational-linked variables are included in the analyses.

Reflection on Motives

Reflection on motives is mainly explained by personal-linked variables; variables that represent a modern career prove no relationship with this career competency. Employees who reflect on their motives are mainly women, are older, and pursue meaningfulness or personal development in their work. The intention to change jobs outside the organization contributes the least to reflection on motives ($\beta = .093$).

Work Exploration

In contrast to reflection on motives, the career competency of work exploration is mainly explained by situational-linked variables. Employees who explore the content of work and the possibilities to change work are mainly employees who work in an area with good mobility opportunities (assessed by the employer) or who intend to change work within a year outside their organi-

zation. Also, career support proves to contribute to work exploration. This accounts for career support at work as well as support from the private situation to invest time or money in career development. Although work exploration is merely explained by situational-linked variables, age contributes the most ($\beta = .117$).

Career Control

Apart from working in a dynamic workplace, the variables of the modern career prove to contribute substantially to the competency of career control, especially the career support that employees experience at work ($\beta = .169$). Also, career support from the private situation is related to this career competency. The more support the employee experiences, the more the employee manages his work and learning process. Moreover, mobility opportunity and intentions to change work within the current employment situation contributes to career control. To pursue a high salary has no impact on the performance on career control, when controlled for situational-linked variables, but the contribution of the ambition for personal development remains.

Networking

Like career control, networking is mostly explained by the career support at work ($\beta = .152$). Support from the private situation to invest in career development also contributes to building and supporting a network for career development. Besides career support, mobility opportunity and the intentions to change work outside the organization relate to networking. The sole personal-linked variable that relates positively to networking is the ambition for personal development. Having an operational position in an organization contributes negatively to networking. This means that employees in an operational position are less occupied with networking than employees in a managing or staff position. The variables included in the regression analyses explain almost 14% of the variance.

Conclusion and Discussion

The first research question addressed in this article was “Which career competencies regarding career development can be identified and operationalized in an instrument that meets psychometric standards?” The results of the LISREL analysis show that six factors are relevant for career development. One of the factors is the ability for career development, and the other five factors concern behavior and motivation regarding career development: reflec-

tion on capacities, reflection on motives, work exploration, career control (of which verbal career promotion is a part), and networking. Career development ability is the self-assessment of one's ability; the other factors refer to the self-assessed behavior and motivation of the employee.

Second, the relationships between the identified career competency and characteristics of the modern career were analyzed. The research question was "Which characteristics of the modern career explain the use of career competencies over and above personal characteristics?" Variables regarding the modern career that prove to explain career development of employees are mobility perspective, career support at work, and career support in private life. In contrast to the expectations, however, a dynamic work environment does not contribute to the use of career competencies.

Career development is more affected by the variables of the modern career than by personal characteristics. Having a mobility perspective is an important predictor of ability on career development and networking. Moreover, when the employees work in an organization with good mobility opportunities (according to the employer), they tend to be more active on work exploration and career control. Intentions of the employee to make a career move within the organization contribute to the performance on reflection on capacities, motives, and career control. However, when employees face a change of work away from their current employment situation, they are more likely to reflect on their capacities and explore work opportunities and existing networks.

The premise that working in a dynamic environment contributes to active career development of employees, which is suggested in recent literature on careers, is not supported by the data. The only exception concerns the competency of reflection on capacities. Employees who currently work in a situation in which work tasks often change tend to reflect more on their capacities than employees who work in a more static work environment.

An important conclusion for the field of human resource management and development concerns the relation between career competencies and career support at the workplace. Employees who experience career support at work show more career competence than employees who experience less career support. Career support at work contributes to the ability to develop one's career as well as to behavior regarding work exploration, career control, and networking. So employees who are encouraged to manage their learning, work, and network from their career perspective actually use career competencies to do so. Although this was not specifically analyzed in this study, it is possible that the reasoning works the other way around: Employees who are more competent on career control and networking manage to arrange more

support at work. Either way, facilitating competent performance, by interventions or permission, promotes career competencies.

Also, the support from the private situation of the employee plays an important role in actualizing goals and motives in one's career. Employees who experience moral support from their private environment feel more able to develop their career and are more active in controlling their career. Support in the private situation positively affects career development ability and career control as well as work exploration and networking.

The main conclusion of this article concerns the support of the premises on the existing relationship between characteristics of a modern career and career competencies. Further applied research that seems to be relevant given our findings is considered particularly useful in the field of career development, organizational development, and education. Strengthening the conceptual framework that was developed to define and operationalize career competencies and empirical study of the construct validity of the instrument are more fundamental research areas that we are currently pursuing as a continuation of the study that was reported.

Note

1. This research question was posed to pursue substantive interest in the explanation of career competencies and at the same time was seen as bearing on the predictive validity of the newly developed instrument.

References

- Allegro, J. T. (1998). Flexibilisering van medewerkers en organisatie [Flexibilization of employees and organizations]. In B. van Gent & H. van der Zee (Eds.), *Competentie en arbeidsmarkt. Een multidisciplinaire visie op ontwikkelingen rond mens en werk* (pp. 117-130). 's-Gravenhage, Germany: Elsevier.
- Arbona, C. (2000). Annual review. Practice and research in career counseling and development. *The Career Development Quarterly*, *49*, 98-134.
- Arthur, M. B. (1994). The boundaryless career: A new perspective for organizational inquiry. *Journal of Organizational Behavior*, *15*, 295-306.
- Arthur, M. B., Inkson, K., & Pringle, J. K. (1999). *The new careers. Individual action and economic change*. London: Sage.
- Ball, B. (1997). Career management competencies—The individual perspective. *Career Development International*, *2*(2), 74-79.
- Boudreaux, M. A. (2001). Career development: What is its role in human resource development? In O. A. Aliaga (Ed.), *Academy of HRD 2001 conference proceedings* (pp. 805-812). Bowling Green, KY: Bowling Green State University.
- Bunk, G. P. (1994). Competentieontwikkeling in de Duitse beroepsopleidingen [Competency development in vocational training in Germany]. *Beroepsopleiding*, *1*, 8-15.

- Burke, R. J. (1995). Career development in a professional services firm. On-the-job experiences and continuous learning. *Journal of Management Development, 14*(1), 25-33.
- Chau, P. Y. K. (1997). Reexamining a model for evaluating information center success using a structural equation modeling approach. *Decision Science, 28*(2), 309-334.
- Defillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competency-based perspective. *Journal of Organizational Behavior, 15*, 307-324.
- Hall, D. T., & Mirvis, P. H. (1995). Careers as lifelong learning. In A. Howard (Ed.), *The changing nature of work* (pp. 323-361). San Francisco: Jossey-Bass.
- Harrison, R. (2000). Learner managed learning: Managing to learn or learning to manage? *International Journal of Lifelong Education, 19*(4), 312-321.
- Iellatchitch, A., Mayrhofer, W., & Meyer, M. (2003). Career fields: A small step towards a grand career theory? *International Journal of Human Resource Management, 14*(5), 728-750.
- Kakabadse, N., & Kakabadse, A. (2000). Enhancing career resilience: The new psychological contract. *Journal of Management Development, 19*(8), 700-703.
- Kuijpers, M. A. C. T. (2003). Loopbaanontwikkeling. Onderzoek naar 'Competenties' [Career development. Research into 'competencies']. Enschede, the Netherlands: Twente University Press.
- Meijers, F., & Wardekker, W. (2003). Career learning in a changing world: The role of emotions. *International Journal for the Advancement of Counselling, 24*, 149-167.
- Murphy, S. E. (2001). The role of mentoring support and self-management strategies on reported career outcomes. *Journal of Career Development, 27*(4), 229-246.
- Nabi, G. R. (2000). Motivational attributes and organizational experiences as predictors of career-enhancing strategies. *Career Development International, 5*(2), 91-98.
- Nordhaug, O. (1993). *Competence, training, and learning*. Oslo, Norway: Scandinavian University Press.
- Parry, S. B. (1998). Just what is a competency? (And why should you care?). *Training, 35*(6), 58-64.
- Savickas, M. L. (2003). Special issue: Career counseling in the next decade. *The Career Development Quarterly, 52*(10), 87-96.
- Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. New York: John Wiley.
- van der Heijden, B. I. J. M. (1998). *The measurement and development of professional expertise throughout the career*. Enschede, the Netherlands: Print Partners Ipskamp.

M. A. C. T. Kuijpers is a researcher and consultant at the Centre for the Innovation of Training in the Netherlands. She completed her PhD study on career competencies in March 2003 at the University of Twente. At present, she conducts research on career competencies and career learning environment in vocational educational training.

J. Scheerens is a professor of education and head of the Department of Educational Organization and Management at the University of Twente in the Netherlands. He has served as director of the Centre for Applied Research on Education as well as the scientific director of the Interuniversity Centre for Educational Research. His main publications are in the domains of educational effectiveness, international comparative education indicators, and school self-evaluation.