



## THE CONTRIBUTION OF FORMAL TRAINING AND INFORMAL LEARNING TO EMPLOYABILITY

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### Summary

*The employability of academic staff members is a growing concern, but yet an under-researched topic. This article is aimed at partly closing this research gap by investigating the employability of 139 academic staff members employed at the Open University of the Netherlands, with the use of an on-line survey. Attention was paid to the contribution of formal training and informal learning to the academic staff members' employability. The findings indicated that respondents' informal learning activities, like networking, contributed significantly to their employability, while the impact of their formal training appeared to be rather insignificant. Further, the study revealed the impact of employee and organizational characteristics on informal learning and employability. Age, salary, department and learning climate appeared to be strong predictors for informal learning, while the amount of promotions contributed highly positive to employability*

### Introduction

It goes without saying that lifetime employment within the same organisation is no longer a prerogative for many employees. Today, the notion of lifetime employability seems more appropriate for our understanding of employees' careers. The concept of lifetime employability implies that individual employees become more accountable for investments in their own human capital and hence in their own job security, learning and career development (Forrier and Sels, 2003). It is a misconception to assume that the shift towards lifetime employability only appear in the corporate world; also universities are confronted with shifting needs due to changing circumstances, emphasizing the importance of employability enhancement.

Though academic staff members' learning is a frequently studied topic in the context of their professional development (see for example, Knight, Tate and Yorke, 2006), to the best of our knowledge, the explicit link with employability has not been explored intensively. In this paper we examine the contribution of formal training and informal learning to staff members' employability. Both types of learning are affected by individual and organizational context characteristics, as was previously demonstrated in various studies conducted by, for example, Eraut (2004), Van der Heijden *et al.* (2009), Lohman (2005). Here we concentrate on the most conducive learning activities: (1) learning through performing the job, (2) learning

through networks, and (3) learning through more formal activities, like training and workshops.

“A job’s value as a nutrient for further professional development” is termed the *learning value* of the job for the employee (Boerlijst, Van der Heijden and Van Assen, p. 57). It is determined by the nature of the work as characterized by job assignments, and the degree of challenge and growth these assignments provide. More specifically, it deals with the extent to which professional knowledge and skills can be used and enlarged in one’s job position. Tasks belonging to academic staff job positions are indicators of jobs with a high learning value, for example, working with students, teaching, and opportunities for research and writing (Peterson and Wiesenber, 2004).

Another powerful generator for informal learning lies in *network participation*. A network includes multiple relationship ties of various strengths with other individuals, *within* one’s own university or *outside* one’s own university. This includes the individual’s developmental network, which consists of all relationship ties that provide career and psychosocial support, and of which the individual is aware, and it includes the part of the individuals’ network that consists of those relationship ties that assist career progression without the individual’s full knowledge or awareness (Higgins and Kram, 2001).

Janasz and Sullivan (2004) suggested that size and content of networks shift along university career paths with full professors as the ones with the most substantial networks. For many new academic staff members, colleagues are generally their main source for learning but heavy workloads not always tolerate intense collaborations, even with very close colleagues (see also Swennen & Van der Klink, 2009).

Though the work itself and available networks offer important and crucial opportunities for informal learning, this does not necessarily imply that formal training activities are perceived as less important. Teaching, coaching and student assessments are examples of competencies that seem to be quite appropriate to be build up by means of formal training activities (Knight *et al.*, 2006). Hodkinson and Taylor (2002) demonstrated in their study of induction experiences of new university lecturers that an ideal combination consisted of formal training opportunities together with informal learning activities like networking within the own faculty.

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 competencies’ (p. 453). Their definition is consistent with the definition of Forrier and Sels (2003, p. 106) and the conceptualization by Fugate, Kinicki and Ashforth (2004). Van der Heijde and Van der Heijden (2006) developed an employability measurement instrument which combines domain-specific expertise (Van der Heijden, 2000) with more generic competences. The instrument consists of the following four generic competences, as important dimensions of employability, alongside occupational expertise: 1) *anticipation and optimization*, i.e. preparing for and adapting to future changes in a personal and creative manner, and striving for the best possible results; 2) *personal flexibility*, i.e. the capacity to easily adapt to all kinds of changes in the internal and external labour market that do not pertain to one’s immediate job domain; 3) *corporate sense*, i.e. 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, etc.; and 4) *balance*, i.e. compromising between opposing employers’ interests as well as one’s own opposing work, career, and private interests (employee), and between employers’ and employees’ interests.

This study has been set up to explore the contribution of formal training and informal learning to employability, and to increase our insight into the impact of employee and organizational characteristics on training, learning and employability. As such, the main research question that is central in this contribution concerns the impact of formal training and informal learning on employability. Two additional research questions that are taken into account concern the participation of academic staff members in formal training and informal learning activities and the impact of employee and organizational characteristics on formal training, informal learning activities and employability.

## Methodology

An on-line survey has been submitted to academic staff members of the Open University of the Netherlands (Van der Heijden, Van der Klink and Meijs, 2006). All survey scales have been previously applied in a large international research project on employability in seven European countries, including the Netherlands (Scholarios *et al.*, 2008; Van der Heijden *et al.*, 2005).

The following *employee characteristics* (control factors) were included in the questionnaire: (1) gender (2) age, (3) marital status As regards the *job characteristics* the following factors were included: (1) job tenure, (2) job contract (full-time versus part-time), (3) salary and (4) *past career performance* which was measured by the number of promotions during the entire career at the university.

*Organizational context factors* comprised the learning climate as perceived by the individual employee. Two learning climate dimensions were included. (1) (lack of) time for learning, and (2) perceived team support. Items were scored on a five-point rating scale ranging from: (1) never true, to (5) always true.

*Formal training* was measured by asking respondents to fill in the number of days they attended training and/or development programmes in the past year, in the area of their current job/ adjacent areas. *Other formal training* was measured by the number of days respondents attended training and/or development programmes in the past year, in other areas.

Four *informal learning factors* were included.: (1) interaction with one's supervisor (2) learning value of the job (3) networking within one's own organization, and (4) networking outside one's own organization. All four factors were measured with existing scales using 5-point rating scales, except for learning value of the job where 6-point rating scales were used. Higher scores on these scales imply higher levels of learning.

For the measurement of *employability* 47 items divided across five scales were used: (1) 15 items for occupational expertise, (2) 8 items for anticipation and optimization, (3) 8 items for personal flexibility, (4) 7 items for corporate sense, and (5) 9 items for balance, respectively. All items were scored using six-point rating scales.

## Results

In total 139 academic staff members (74 men and 65 women) participated to the e-questionnaire (response rate 41.4%). Cronbach's alphas indicate that all scales can be regarded as internally consistent.

Preliminary analyses showed that the respondents' average age was 46 years ( $sd = 10.42$ ). Their organizational tenure was 10 years ( $sd = 6.06$ ). 72% of the respondents were older than 40, and 39% were over-fifty years old. The majority of the respondents had full-time job contracts (57%). 93 respondents held positions at faculties, 29 were employed at the educational research and development centre and 17 worked at a centre specialised in innovations in teacher education.

Our first research question concerned the respondents' participation in formal training and informal learning. Respondents attended about 4 days formal training related to their own job position, and about 3 days of training in other domains. Standard deviations indicate that training attendance among respondents varied strongly. The means of the informal learning variables indicate that respondents' participation in informal learning activities was not of paramount importance. Especially their networking activities outside their own university appeared to be rather insignificant.

Our second research question pertained to the impact of employee characteristics and organizational context factors upon formal training and informal learning. Regression analyses (method enter) were applied (see Table 1 in Appendix A) and One-way ANOVA tests were computed. With regard to formal training the results showed that other formal training was not related to any of the nine included variables, the amount of promotions

appeared to be the single predictor for formal job-related training ( $R^2 = .25$ ). With regard to informal learning team support appeared to be the only significant predictor for the learning value of the job ( $R^2 = .23$ ). Two significant predictors for quality of the interaction with supervisor were found, namely, salary ( $R^2 = .32$ ) and team support ( $R^2 = .62$ ). For both the networking variables, i.e. internal and external networking, age and salary appeared to be significant predictors ( $(R^2 = -.51$  (age) and  $R^2 = .27$  (salary), respectively, for networking within one's own organization; and  $R^2 = -.49$  (age) and  $R^2 = .34$  (salary), respectively, for networking outside one's own organization)). In addition, team support contributed to networking within one's own university ( $R^2 = .48$ ), and the amount of promotions contributed to networking outside one's own university ( $R^2 = .22$ ). Results of the NOVA tests with academic staff member's department as the independent variable, and formal training and informal learning as dependents showed that departments was not related to formal training but there were links with informal learning. Staff members that were employed at the faculties showed significantly lower scores compared to the staff members working at the two centres for the following three variables: (1) quality of interaction with supervisor ( $F = 3.91$ ,  $df$  138,  $p = .02$ ), (2) learning value of the job  $F = 3.60$ ,  $df$  138,  $p = .03$ ), and (3) networking within one's own university ( $F = 5.24$ ,  $df$  138,  $p = .01$ ).

The third research question that pertained to the impact of employee characteristics, organizational context factors, formal training and informal learning, on the one hand, upon employability, on the other hand, was investigated by means of regression analyses (see Table 2 in Appendix A).

No significant predictors were found for the dimension *occupational expertise*, and only one predictor was found for the dimension *balance* (time for learning). For the other three employability dimensions multiple predictors were found that explained considerable amounts of variance, ranging from .37 to .57. In total, five variables significantly predicted the scores of the employability dimension *anticipation and optimisation*. Two informal learning variables (learning value job, networking outside one's own organization) and formal job-related training, respectively, turned out to be meaningful predictors for this employability dimension. Four significant predictors were found for the employability dimension *personal flexibility*, but there was only one informal learning variable (networking outside own organization) that appeared to be a predictor for this dimension. For the employability dimension *corporate sense* in total four significant predictors were found, including two informal learning variables: learning value of the job, and networking within own organisation ( $R^2 = .36$ ), respectively. Taking into account the other variables that have been included in the regression analyses, our results indicate that in particular amount of promotions and job contract are significant and frequently found predictors of employability dimensions.

## Conclusions and discussion

This study concerns a first and modest exploration of the relationships between formal training and informal learning, on the one hand, and employability, on the other hand, within a university setting. It also attempts to determine the possible impact of employee and organizational context characteristics on formal training, informal learning and employability. So far the relationship between learning, both formal and informal, and employability is an under-researched area.

Our findings indicate that participation in formal training and informal learning seems to be quite modest which was also demonstrated in the study of Van der Klink *et al.*, 2009 that was conducted in the same university. For many employees their work duties do not require considerable learning efforts and most learning that occurs stems from minor adjustments in current tasks.

The fact that most respondents' networking participation, inside or outside their own university, is modest can be explained by taking into account the nature and the specificity of their job duties. Most respondents are basically performing teaching duties, delivering distance education using e-learning environments. The availability of relevant networks aimed at their specific field of expertise is relatively limited, and their work characteristics do not put pressure on them to participate in all kinds of networks. This outcome is in sharp

contrast with the considerable need to do so in case university staff members with profound research duties are concerned.

Findings indicate that several variables affect respondents' participation in formal training and informal learning. From the variables affecting participation in informal learning the following four appeared to be rather significant: age, salary, team support, and department. Our data suggests that there is a relatively strong negative effect of age on respondents' networking activities, implying that older staff members invest less effort in networking. The findings revealed the impact of department on informal learning. Respondents employed at the faculties report less informal learning than respondents working in both research centres. It is likely that the nature of respondents' job tasks, as previously indicated in this section, contribute to the presence of informal learning possibilities.

Learning appears to be related, to some degree, to respondents' employability. Formal training was not strongly linked with employability, while convincing evidence was found for the impact of informal learning upon employability, though not all informal learning activities contributed significantly. Especially the learning value of the job and the amount of networking participation appeared to be valuable in the light of one's employability.

Based on our findings we recommend to encourage academic staff members' informal learning which will require some creative pioneering work of the several stakeholders. Participation in networks, for example, can be increased by encouraging staff members to participate in innovative projects, and by means of participation in research activities that enable fruitful contacts with colleagues within or outside their own university. In addition, a more frequent rotation of course delivery between faculty members who mainly teach will prevent the development of a routine-based approach of the work tasks (see also Ackerlind, 2007).

Though the present findings show the value of informal learning, some important remaining remarks need to be made. Our findings should not be interpreted as a plea to restrict human resource development policies to encouraging informal learning. There is a real danger that limiting learning to informal learning may lead to a situation in which employees learn to perform their current tasks better, but are not challenged anymore to learn how to adequately perform new tasks that may increase their employability for a broader range of jobs. It is not only the nature of the learning, formal or informal, but also its content that encourages employability. A human resource development strategy consisting of a mix of challenging formal and informal learning events is presumably the best way to serve employees' employability throughout their entire career.

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Table 1. Outcomes of the regression analyses (method enter) with employee characteristics and organizational context factors as predictors of formal training and informal learning<sup>a,b</sup>

Predictors	Dependents					
	Formal job-related training	Other formal training	Interaction with supervisor	Learning value job	Networking within organization	Networking outside organization
<i>Step 1</i>						
Gender	-.10	.13	-.03	.06	-.07	.00
Age	-.13	.20	-.06	-.17	-.51**	-.49**
Marital status (single versus married/co-habiting)	-.19	-.16	.05	-.03	.02	.02
<i>Step 2</i>						
Job tenure	.09	-.09	-.03	-.01	.25*	-.04
Job contract (full-time versus part-time)	-.06	.13	.04	.11	.03	.00
Salary	-.12	.09	.32**	.15	.27**	.34**
<i>Step 3</i>						
Promotions	.25*	.00	.00	.09	.17	.22*
<i>Step 4</i>						
Learning climate-time	-.16	-.07	-.04	-.18	.11	-.13
Learning climate-team	.09	.00	.62**	.23*	.48**	.03
Step 1 $\Delta R^2$	.04	.03	.01	.03	.07	.07
Step 2 $\Delta R^2$	.01	.03	.11	.05	.09	.12
Step 3 $\Delta R^2$	.03	.00	.01	.00	.01	.03
Step 4 $\Delta R^2$	.05	.00	.33	.11	.16	.02
Full model $R^2$	.13	.06	.47	.19	.33	.24
Overall F	2.04	.93	12.51	3.29	6.98	4.51

a. Standardized regression coefficients (Beta) shown for the *last* step in the regression b. \*p<.05 \*\*p<.01

Table 2. Hierarchical regression analyses (method enter) using employee characteristics, organizational context factors, formal training and informal learning as predictors, and employability dimensions as dependents<sup>a,b</sup>

<i>Predictors</i>	Dependents				
	Occupational expertise	Anticipation and Optimisation	Personal flexibility	Corporate sense	Balance
<i>Step 1</i>					
Gender	.03	.09	.18*	.01	.06
Age	.22	-.17	-.09	.04	.09
Marital Status (single versus married/co-habiting)	-.11	-.01	-.19	.01	.02
<i>Step 2</i>					
Job tenure	-.24	.02	-.04	-.04	.08
Job contract (full-time versus part-time)	.07	.17*	.18*	.15*	.10
Salary	.17	-.09	-.09	.20*	-.20
<i>Step 3</i>					
Promotions	.07	.32**	.39**	.26**	.11
<i>Step 4</i>					
Learning climate-time	-.11	-.07	-.12	.07	-.30**
Learning climate-team	-.19	-.15	-.22	-.10	-.08
<i>Step 5</i>					
Formal job-related training	.08	.16*	.08	-.06	.11
Other formal training	-.02	.12	-.03	-.05	.14
Interaction with one's supervisor	-.02	.00	.10	.01	.05
Learning value of the job	.08	.25**	.03	.29**	.09
Networking within own organisation	.07	.02	.11	.36**	-.01
Networking outside own organisation	.14	.22**	.23**	.14	.18
Step 1 $\Delta R^2$	.03	.04	.06	.03	.00
Step 2 $\Delta R^2$	.08	.08	.09	.25	.04
Step 3 $\Delta R^2$	.01	.12	.15	.08	.01
Step 4 $\Delta R^2$	.02	.02	.01	.01	.12
Step 5 $\Delta R^2$	.03	.14	.06	.20	.07
Full model $R^2$	.17	.40	.37	.57	.25
Overall F	1.68	5.44	4.88	10.81	2.67

a. Standardized regression coefficients (Beta) shown for the *last* step in the regression

b. \* $p < .05$

\*\* $p < .01$