# An empirical typology of hospital nurses' individual learning paths

Rob F. Poell [a,*], Ferd J. Van der Krogt [b,1]

[a] Dept. of Human Resource Studies, Tilburg University, PO Box 90153, 5000 LE, Tilburg, Netherlands
[b] Dept. of Education Studies, University of Nijmegen, PO Box 9104, 6500 HE, Nijmegen, Netherlands

## ARTICLE INFO

## SUMMARY

*Background:* A relatively new theoretical concept is proposed in this paper, namely, the individual learning path. Learning paths are created by individual employees and comprise a set of learning-relevant activities that are both coherent as a whole and meaningful to them.
*Objectives:* To explore the empirical basis of this theoretical concept.
*Design:* A qualitative study involving semi-structured interviews.
*Settings:* Two academic medical centers (university hospitals) and two general hospitals in the Netherlands.
*Participants:* A total of 89 nurses were involved in the study.
*Methods:* Semi-structured interviews were analyzed qualitatively; cluster analysis was then performed on quantified data from the interviews.
*Results:* Four types of learning path emerged, namely, the formal-external, self-directed, social–emotional, and information-oriented learning paths.
*Conclusions:* The relatively new theoretical concept of an individual learning path can be observed in practice and a number of different learning-path types can be distinguished. Nurses were found to create their own learning paths, that is, select a theme that is relevant primarily to themselves, conduct a variety of learning activities around this theme, participate in social contexts that might help them, and mobilize learning facilities provided by their organization. These activities go way beyond the notion of employees as self-directed learners merely in a didactic sense (establishing learning goals, choosing the right learning activities for these goals, evaluating to what extent their goals have been met as a result). The findings can be interpreted as evidence of employees acting strategically when it comes to their professional development. Providers of continuing professional education/development need to take this into account.

## Introduction

The notion of an individual learning path is relatively new and, henceforth, little is known as yet about its conceptualization and empirical basis (Poell and Van der Krogt, 2010). The learning path of an employee comprises a set of learning-relevant activities that are both coherent as a whole and meaningful to the employee. Coherence and meaning are created by the employee through engaging in new learning-relevant experiences and/or 'discovered' by the employee through reflection on past experiences in various organizational processes (Van der Krogt, 2007). Each employee thus creates his or her own learning path on the basis of experiences gained at work. In this way nurses can organize their own professional development.

Poell and Van der Krogt (in press) distinguish among three approaches to organizing professional development, the third of which fits well with the notion of an individual learning path. In the first approach, organizing professional development is viewed as a training issue. The key task here is developing and delivering training programs attuned to the employees in the organization. The focus is on the educators, who customize programs to their clients by taking into account nurses' training needs and preferences. The second approach looks at organizing professional development as a learning issue. Employees are here explicitly expected to engage in didactic self-direction when it comes to learning, not just in formal training contexts but also in terms of workplace learning. Educators may help nurses in determining their learning styles so as to act more in accordance with their learning preferences. Organizing professional development is regarded as a strategic issue in the third, micropolitical approach. The focus here is on employees' individual responsibility for their own professional development, work and career. Nurses may have other interests when it comes to learning than their managers and educators do, which they will attempt to realize by operating strategically. In this approach it is recognized that employees can influence not just HOW they learn (as in the second approach) but also WHAT they (want to) learn (Poell and Van der Krogt, in press). This key idea is echoed in the notion of an individual learning path.

* Corresponding author. Tel.: +31 13 466 2527; fax: +31 13 466 3002.
 *E-mail addresses:* R.Poell@uvt.nl (R.F. Poell), F.VanderKrogt@pwo.ru.nl
(F.J. Van der Krogt).
[1] Tel.: +31 24 361 2708; fax: +31 24 361 6211.

Individual employees can create learning paths in various ways (Poell, 2005). One option is drawing up and executing a personal development plan (cf. Fenwick, 2003; Beausaert, 2011; Janssen et al., 2012). Another possibility is conducting an individual learning project, that is, undertaking activities for a specific period of time with a view to learning about a particular theme relevant to the employee (cf. Clardy, 2000; Tough, 2003; Roberson and Merriam, 2005). A somewhat less structured approach is when an employee creates informal opportunities to gain learning-relevant experiences, for example, by joining or forming a community of practice (Wenger, 1998). Nurses from various hospitals could, for example, start a discussion group on the internet to investigate their joint interest in learning about specific diseases among a patient group. And, finally, to the extent that employees themselves engage in taking transfer-enhancing measures around formal training courses (Broad and Newstrom, 1992; Koslowski and Salas, 1997; Kyndt et al., 2011) that would also resemble the creation of a learning path. In the case of nurses attending training courses, an example of this would be for them to make sure that their manager and direct colleagues support them in applying newly acquired skills on the job.

The aim of this exploratory study is to investigate the empirical basis of the relatively new theoretical concept of an individual learning path. It can be assumed theoretically that individual employees create their own learning paths; however, thus far there is no empirical evidence of their existence, nor do we know which different types, if any, of learning paths individual employees can create. If it turns out that employees create their own learning paths, this is highly relevant to professionals responsible for staff training and development, as they attempt to influence what and how employees learn. Empirical evidence of individual learning paths, however, is also relevant to employees themselves, as an awareness of such learning activities can enable them to operate more strategically (and not just didactically) regarding their own professional development. The current study attempts to identify the empirical basis of individual learning paths focusing on nurses. Nursing is an interesting field in this connection, as nurses develop and learn at work continually and their job offers them many different opportunities to do so (Berings et al., 2008; Jantzen, 2008; Munro, 2008). Van der Krogt (2007) proposed four different elements to describe an individual learning path, namely, the learning theme, the learning activities, the social learning context, and the learning facilities. With these elements as a starting point we put forward the following research question: *"Which types of individual learning path can be distinguished among nurses?"*

**Theoretical Framework and Expectations**

The first element of an individual learning path is the learning theme, that is, its subject. It indicates what the employee is learning about. Several categorizations of nurses' learning themes exist in literature. For example, Berings et al. (2007) on the basis of a qualitative analysis distinguished among five types of learning theme. The most important category was social–emotional skills, which refers to being empathic or assertive, for example, and to social contacts with patients and colleagues. The second category was technical–practical skills, for instance, removing drains and lifting patients. The third category was organizational skills, such as, task management, coordination, and contextual skills. For our current study we expected the same three categories of learning theme to be the dominant ones.

Learning activities (the second element of an individual learning path) refer to the ways in which employees learn, that is, the organizational nature of their learning (Simons, 2000). Again, in literature many categorizations can be found. Bolhuis and Simons (2001) distinguished among four ways of learning. First, there is learning from experience, where knowledge and skills are gathered through employees' experiences on the job and in the organization. Second,

employees can learn from social interaction, meaning learning from and with others. Third, there is learning from theory, where employees gain codified (systematized) knowledge in formal courses. And fourth, employees can learn from critical reflection, by asking themselves and others critical questions. Berings et al. (2007) showed that nurses learned mostly from experience and social interaction, followed by learning from theory. For our current study we expected the same order of dominant learning activities.

The third element of an individual learning path is the social context, which may consist of peers, educators, managers, et cetera (Bezuijen et al., 2010; Soekijad et al., 2011). Keeris (2006) showed that the most important aspects of the social learning context for nurses are managers, colleagues, patients, patients' family members, nursing/medical students, and physicians. This was also the expected order for our current study.

Fourth, learning facilities are the means of support from their organizational context experienced by employees in their individual learning path. Tjepkema (2003) distinguished between material support (time, money, room, courses, et cetera) and social support (from others). We expected nurses to experience more social support than material support, as they have very many contacts with others (Berings et al., 2007) but usually not as much discretion to guarantee the necessary material facilities (O'Neill, 1998; Gould et al., 2007).

We also expected the four elements of individual learning paths to be mutually related. For example, Yorks (2005) claimed that demonstrations are the most effective learning activities for developing interpersonal skills, whereas formal lectures and courses are more suited to gain new knowledge. Also, Berings et al. (2007) found that nurses used different types of learning activity for different learning themes. The social learning context is likely to be related to the learning activities used; for instance, learning from theory is a mostly individual process, whereas learning from social interaction obviously involves others in the environment. And as far as learning facilities are concerned, social support is more likely to occur when social interaction is a dominant type of learning activity, whereas material support seems indispensable for individual learning activities. The exact nature of the relationships between the four elements, however, remains to be seen from our current study.

**Methods**

*Research Design and Participants*

This is an exploratory study that uses cross-sectional interview data collected among nurses to identify various types of individual learning paths. A total of 89 nurses participated in the study, the majority of which (n = 75) were female. Nurse managers were excluded from the interviews. The participants worked in two academic medical centers (university hospitals) and two general hospitals in the Netherlands. They were evenly distributed across three types of department, namely, general medical wards, outpatient clinics, and intensive care units. In terms of medical disciplines, departments were selected that are represented in every hospital, such as, internal medicine. Departments were selected by the person in the hospital responsible for continuing nursing education; respondents were then selected by the manager of each department.

*Instruments*

Semi-structured interviews were used to interview the nurses, which lasted an hour on average. A total of six researchers were involved in conducting the interviews, always in pairs. The interviews were organized around the four elements of an individual learning paths described in the theoretical framework. Nurses were first asked to put forward the most important issue about which they had wanted to learn on the job in the past period (up to about a