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## **Opportunities for Learning and Career Development after IVET: A latent profile analysis**

**Stalder, Barbara E.**

Bern University of Teacher Education, [barbara.stalder@phbern.ch](mailto:barbara.stalder@phbern.ch)

### **Abstract**

Drawing from research on formal, informal and nonformal learning this paper studies opportunities for learning and career development after initial VET of 762 employees in Switzerland. It is explored, a) whether typical career profiles exist that are characterised by different potentials for learning and career development; b) whether profile membership can be predicted by development-oriented work values and individual resources; and c) how employees in different profiles evaluate their career. Results from latent profile analyses suggested four profiles which differ regarding the opportunities to learn in work, to engage in further training and to advance in the organisation. Individual resources and especially the level of formal education predicted profile membership only weakly. Employees in high potential profiles were more satisfied with their job and career than employees in low potential profiles. The results advance a more integrated view about learning and development opportunities in the early professional career.

### **Keywords**

learning opportunities; career development; further training; advancement

### **1. Introduction**

For organisations and individuals, it has become crucial that employees learn continuously throughout their career (London, 2011). Engagement in higher education and continuous training and learning contributes to their productivity, enhances their employability, and prepares them for future jobs and positions (Noe, Clarke, & Klein, 2014). It is instrumental for positive career development and a core characteristic of a meaningful and sustainable career (De Vos, Van der Heijden, & Akkermans, 2018).

Organisations can promote and facilitate their staff's learning and development in a number of ways. First, they can support current employees to take up higher or further vocational or academic education in formal settings. Second, they can foster non-formal learning by offering short-term training courses, which aim at developing employees' job-specific vocational competencies. Third, they can promote learning in work, on-the-job and informally, through assigning their employees challenging tasks and high job autonomy. Finally, they can motivate employees to engage in formal, informal and non-formal learning by offering opportunities for advancement in the firm. In today's rapidly changing world, organisations need to invest more in non-formal, informal, and self-directed learning to remain competitive and to attract and retain talented employees (Allen, Bryant, & Vardaman, 2010; Sessa & London, 2006). Opportunities for learning and career development, and participation in learning activities vary considerably between organisations, occupations and workplaces (Billett, 2001). Kyndt and Baert (2013) showed, e.g., that employees participated more often in formal and informal learning if they worked in demanding jobs and bigger firms with established learning cultures and career support systems.



Whether a person can build a learning- and development-oriented career also depends on his or her individual resources and work values (Nägele & Stalder, 2019). Individuals with a high motivation to learn, higher levels of formal education, higher career aspirations, higher self-efficacy beliefs and a self-need for improvement and competence development are more likely to identify, create and use opportunities for learning at the workplace or outside (Kyndt & Baert, 2013; Nägele & Stalder, 2019). Learning corresponds to a basic need of individuals (Ryan & Deci, 2000), and it has been shown that employees are more satisfied, if their jobs and careers match their interests, aspirations and life situations (Spurk, Hirschi, & Dries, 2018).

Research has investigated typical career patterns including periods in education, employment, and unemployment (Kovalenko & Mortelmans, 2014), how socio-demographic variables predict career types (Biemann, Zacher, & Feldman, 2012), and how career types influence objective and subjective career outcomes (Schellenberg, Krauss, Hättich, & Häfeli, 2016). Most of these studies have focused on formal education while neglecting other types of learning opportunities. Other researchers have explored how learning opportunities in the workplace influence the attainment of higher professional and academic degrees (Nägele, Neuenschwander, & Rodcharoen, 2018), or how engagement in formal and non-formal education and training is related to career achievement and advancement (Ng, Eby, Sorensen, & Feldman, 2005). Most of these studies have been variable-oriented. Following Eye and Bogat (2006) I argue that it is necessary to use a person-oriented approach to advance a more integrated view about patterns of learning and career opportunities after IVET.

Using data of former IVET-learners, this paper explores, whether:

1. Typical career profiles are found that are characterised by different potentials for learning and career development;
2. Development-oriented work values and individual resources can predict profile membership;
3. Employees with specific career profiles differ in their career evaluation.

## 2. Method

*Data.* The analyses are based on a subsample of 742 employees (male 46.4%), who had finished an initial VET programme until 2005 and had participated in the written survey of the youth survey TREE<sup>1</sup> in 2014 and at least two out of the panel waves in 2005, 2007 and 2010 (Stalder, Meyer, & Hupka-Brunner, 2011).

*Measures.* Career profiles were built using three indicators that measured learning opportunities in the workplace, possibilities for further training, and opportunities for advancement to higher positions in 2007, 2010 and 2014 (Stalder et al., 2011). Development-oriented work values (e.g., to find it important to have a job with many opportunities to learn) and individual resources (self-efficacy, self-esteem, persistence, occupational commitment, educational level) were measured at the end of the apprenticeship (2003/2004) and in the first years of skilled work (2005/2006). The educational level was assessed by the cognitive requirements

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<sup>1</sup> The Swiss panel study TREE (Transitions from Education to Employment) is a social science data infrastructure mainly funded by the Swiss National Science Foundation (SNF) and located at the University of Berne.

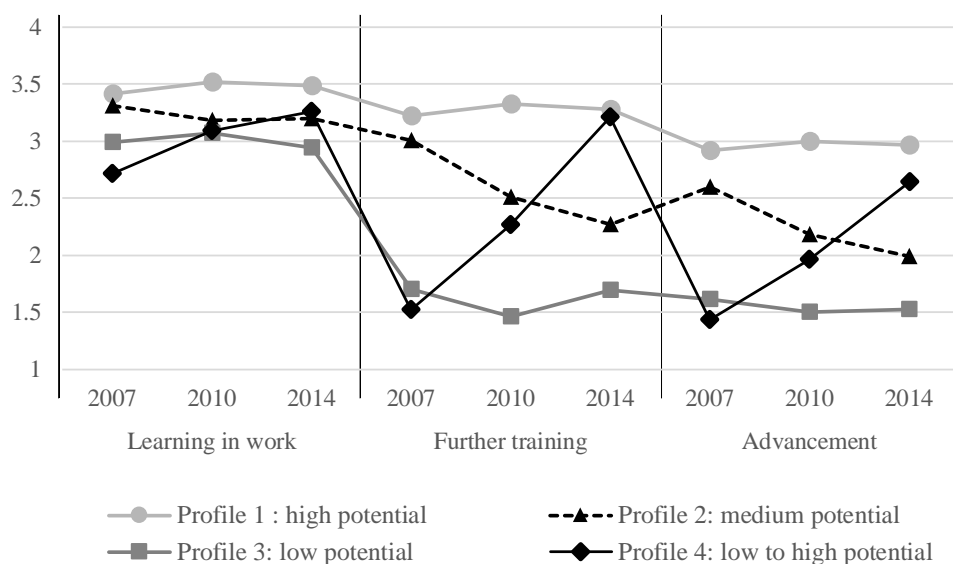
of the IVET diploma (Stalder, 2011) and the enrolment in higher professional or academic education.

*Analyses.* First, to group careers into an optimal number of profiles, latent profile analyses were run. Second, using logistic regressions, it was tested whether development-oriented work values and individual resources at the end of the IVET-programme (step 1) and in the first years of skilled work (step 2) predict profile membership. Gender was introduced as a control variable. Third, a multivariate general linear model was run to test whether profiles differ regarding job and career attitudes in 2014.

### 3. Results

#### 3.1 Career profiles

Solutions with two to five profiles were compared. Based on the sample-sized adjusted Bayesian information criterion, the parametric bootstrapped likelihood ratio test, and the Vuong-Lo-Mendell-Rubin likelihood ratio test, the four-profile solution was chosen



*Note.*  $N_{P1}=342$ ,  $N_{P2}=203$ ,  $N_{P3}=84$ ,  $N_{P4}=113$ ; response scale: 1 (low) to 4 (high)

Figure 1 Career profiles with different potentials for learning and development

The profiles vary considerably regarding the learning opportunities in the workplace, and strongly in terms of possibilities of further training and advancement offered by the employer (Figure 1). Profile 1 (“high potential”, 46.1% of the workers) is marked by a high potential for learning and career development. Former IVET-learners worked in jobs and firms that offered many opportunities for learning in work, further training and advancement to higher positions. Profile 2 (“medium potential”, 27.4%) is characterised by similarly high learning opportunities in work but decreasing possibilities for further training and advancement between 2007 and 2014. Profile 3 (“low potential”, 11.3%) describes careers with very limited opportunities for further training and advancement in the company. Profile 4 (“low to high potential”, 15.2%) shows a low potential for learning and career development in 2007, with a substantial improvement in the years 2010 and 2014.

Many of the employees had taken up a job in another occupation (38%) or firm (79%) between 2007 and 2014. Workers in profile 4 had changed the occupation more often (59%)

than those with other profiles (P1: 38%, P2: 31%, P3: 28%), and nearly all of them (96%) had moved to another employer (P1, P2, P3: 76%). Until 2014, workers in profiles 1 (40%) and 2 (31%) had obtained more often a higher professional or academic degree than those in profile 3 (14%) or 4 (16%). High potential career profiles were more common for males (P1, 54%; females: 39%) while females had more often a low potential career (15%; male: 8%) or a low to high profile (18%; male: 12%).

### **3.2 Prediction of profile membership**

Individual resources at the end of the apprenticeship (step 1) could only weakly predict profile membership. When adding predictors from the first years in job (step 2), membership in profile 1 could be predicted by development-oriented work values, occupational commitment, self-efficacy and self-esteem. Workers were more likely to have a high-potential career, if they found it more important to have a job with many learning and advancement opportunities, were more committed, and reported higher levels of self-efficacy and self-esteem. Membership in profile 2 (medium potential) was only predicted by lower levels of self-efficacy, membership in profile 3 by a lower level of education (no tertiary education). Membership in profile 4 (low to high potential) was predicted by a lower occupational commitment at the end of the apprenticeship and lower development-oriented work values.

### **3.3 Evaluation of career**

Workers in the profiles differed strongly regarding their job- and career-related attitudes in 2014. Employees that had been in jobs with a high potential for learning and career development (profile 1) were more satisfied with their job and their career, and more committed towards their occupation and their organisation than those of the other profiles. Employees in low potential jobs (profile 3) were least committed and satisfied. Workers who had changed to a more favourable situation (profile 4) evaluated their career more positively than workers in profiles with an overall medium potential (profile 3).

## **4. Conclusion**

In today's complex and fast-changing world non-formal and informal learning has become vital for an individuals' positive career development (Sessa, 2006). Organisations need to support, facilitate and foster continuous learning and development of their staff; individuals need to recognise and seize opportunities for learning. This paper aimed at broadening the picture of career patterns in the early professional career of former IVET learners. The results show that most of them managed to secure a career with good learning opportunities in the workplace, while opportunities for non-formal learning and advancement seem to be limited. This might be typical for the careers of former IVET learners or the Swiss labour market (Schellenberg et al., 2016). Development-oriented work values and individual resources at the transition from IVET to the first years in job predicted later careers only moderately. This could indicate that careers can only be planned to a limited extent in advance and that career interests change greatly depending on the given opportunities (Billett, 2001). Further research might investigate, how changes in work values, individual resources and opportunities for learning and career development are interlinked, and how they jointly contribute to positive career outcomes.

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### **Biographical notes**

Dr Barbara Stalder is a Professor at the Institute of Upper Secondary Education at Bern University of Teacher Education, Switzerland. Her research interests focus on student engagement and learning, career development of VET-learners and career success over the life-course.